NYC 9/11 Public Portal Document

Prepared Exclusively For:

NYCDEP-Emergency Response & Tech Assmt.
96-05 Horace Harding Expressway
Corona , NY 11368
(718) 595-4650
MR. M. FAWZY, DIRECTOR

PEDNEAULT ASSOCIATES, INC.
1615 NINTH AVENUE, BOX 205, BOHEMIA, N.Y. 11716

LAB NUMBER: 01100376

PROJECT ID : WORLD TRADE CENTER 5- Boro Sampling

DATE RECEIVED		RELEASE DATE	REPORT DATE
10/19/01		10/21/01	10/21/01
COLLECT DATE:	**SAMPLE ID#:**	**MATRIX:**	**SAMPLE ORIGIN:**
10/18/01 7:30 PM	01100376-001	AIR\GAS	BROADWAY AVE & 31st ST. , QUEENS

PARAMETER	METHOD	RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G	0.02	mg/m3
Antimony (Sb)	OSHA ID 121/125G	0.58	mg/m3
Arsenic (As)	OSHA ID 121/125G	0.36	mg/m3
Barium (Ba)	OSHA ID 121/125G	<0.01	mg/m3
Beryllium (Be)	OSHA ID 121/125G	<0.01	mg/m3
Cadmium (Cd)	OSHA ID 121/125G	0.01	mg/m3
Calcium (Ca)	OSHA ID 121/125G	<0.01	mg/m3
Chromium (Cr)	OSHA ID 121/125G	0.01	mg/m3
Copper (Cu)	OSHA ID 121/125G	0.03	mg/m3
Iron (Fe)	~~OSHA ID 121/125G~~	0.45	mg/m3
Lead (Pb)	OSHA ID 121/125G	0.34	mg/m3
Magnesium (Mg)	OSHA ID 121/125G	<0.01	mg/m3
Manganese (Mn)	OSHA ID 121/125G	0.01	mg/m3
Mercury (Hg)	OSHA ID 121/245.5	<0.01	mg/m3
Nickel (Ni)	OSHA ID 121/125G	<0.01	mg/m3
Potassium (K)	OSHA ID 121/125G	<0.01	mg/m3
Selenium (Se)	OSHA ID 121/125G	0.35	mg/m3
Silver (Ag)	OSHA ID 121/125G	0.01	mg/m3
Sodium (Na)	OSHA ID 121/125G	<0.01	mg/m3
Thallium (Tl)	OSHA ID 121/125G	<0.01	mg/m3
Zinc (Zn)	OSHA ID 121/125G	<0.01	mg/m3

John Pedneault
Lab Director

Reported results are reflective of TOTAL, Metals @ 2L per min/15 min run.

NYS ELAP #10224
MWBE #46075

SUPPLEMENTAL II

CITY_21MC100_002834710

NYC-WTC_000220498

NYC 9/11 Public Portal Document

PEDNEAULT ASSOCIATES, INC.
631-467-8477

NYCDEP - WTC
5-BORO SAMPLING
METALS IN AIR

CALCULATION FOR OSHA ID121/125G-- METALS IN AIR VIA CASSETTE FILTER (37MM MILLIPORE) & MOBILE VACUUM PUMPS

A= Concentration of Analyte in sample solution (µg/ml) or (mg/L)
B=Concentration of Blank in sample solution (µg/ml) or (mg/L)
SSV= Sample Solution Volume ASSV= Analyte concentration x Sample Solution Volume
BSV=Blank Sample Volume BBSV=Blank concentration x Blank Sample Volume
RAB= Reagent Blank Concentration (µg/ml) or (mg/L)
RABSV= Reagent Blank Sample Volume
D= Dilution Factor (NONE)
NO GRAVIMETIC FACTORS
AV= Air Volume Sampled
AR=Analytical Result
ARR=Analytical Reportable Result in mg/m^3 (rounded off to 3-sigma)

$$AR = \frac{(A \times SSV) - (B \times BSV)}{AV}$$

For the Trip Blank Analytical Value:

$$AR = \frac{(B \times BSV) - (RAB \times RABSV)}{AV}$$

A (mg/L)	SSV (mL)	A x SSV = ASSV	B (mg/L)	BSV (mL)	B x BSV = BBSV	ASSV-BSSV = AR	AV Liters	AR/AV	ANALYTE	ARR mg/m^3
0.08	100	8	0.073	100	7.3	0.7	30	0.0233333	Aluminum- Al	**0.02**
0.184	100	18.4	0.011	100	1.1	17.3	30	0.5766667	Antimony-Sb	**0.58**
0.11	100	11	0.002	100	0.2	10.8	30	0.36	Arsenic-As	**0.36**
0.002	100	0.2	0.002	100	0.2	0	30	0	Barium-Ba	**<0.01**
0.002	100	0.2	0	100	0	0.2	30	0.0066667	Beryllium-Be	**<0.01**
0.004	100	0.4	0.001	100	0.1	0.3	30	0.01	Cadmium-Cd	**0.01**
0.256	100	25.6	0.273	100	27.3	-1.7	30	-0.0566667	Calcium-Ca	**<0.01**
0.008	100	0.8	0.005	100	0.5	0.3	30	0.01	Chromium-Cr	**0.01**
0.017	100	1.7	0.009	100	0.9	0.8	30	0.0266667	Copper-Cu	**0.03**
0.171	100	17.1	0.036	100	3.6	13.5	30	0.45	Iron-Fe	**0.45**
0.11	100	11	0.007	100	0.7	10.3	30	0.3433333	Lead-Pb	**0.34**
0.045	100	4.5	0.057	100	5.7	-1.2	30	-0.04	Magnesium-Mg	**<0.01**
0.008	100	0.8	0.005	100	0.5	0.3	30	0.01	Manganese-Mn	**0.01**
	100			100			30		Mercury-Hg	**<0.01**
0.001	100	0.1	-0.001	100	-0.1	0.2	30	0.0066667	Nickel-Nl	**<0.01**
0.085	100	8.5	0.091	100	9.1	-0.6	30	-0.02	Potassium-K	**<0.01**
0.104	100	10.4	-0.001	100	-0.1	10.5	30	0.35	Selenium-Se	**0.35**
0.001	100	0.1	-0.002	100	-0.2	0.3	30	0.01	Silver-Ag	**0.01**
1.266	100	126.6	1.417	100	141.7	-15.1	30	-0.5033333	Sodium-Na	**<0.01**
-0.001	100	-0.1	-0.001	100	-0.1	0	30	0	Thallium-Tl	**<0.01**
0.023	100	2.3	0.031	100	3.1	-0.8	30	-0.0266667	Zinc-Zn	**<0.01**

LAB ID #01100376-001

NYCDEP - BROADWAY & 31ST QUEENS

c:/JEM FILES/NYCDEP-HAZMAT/M01100376.xls

CITY_21MC100_002834711

Prepared Exclusively For:
NYCDEP-Emergency Response & Tech Assmt.
96-05 Horace Harding Expressway
Corona , NY 11368
(718) 595-4650
MR. M. FAWZY, DIRECTOR

PEDNEAULT ASSOCIATES, INC.
1615 NINTH AVENUE, BOX 205, BOHEMIA, N.Y. 11716

LAB NUMBER: 01100376

PROJECT ID : WORLD TRADE CENTER 5- Boro Sampling

DATE RECEIVED	RELEASE DATE	REPORT DATE
10/19/01	10/21/01	10/21/01

COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:
10/18/01 8:20 PM	01100376-002	AIR\GAS	138th St. & 3rd AVENUE, BRONX

PARAMETER	METHOD	RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G	0.04	mg/m3
Antimony (Sb)	OSHA ID 121/125G	0.10	mg/m3
Arsenic (As)	OSHA ID 121/125G	0.07	mg/m3
Barium (Ba)	OSHA ID 121/125G	<0.01	mg/m3
Beryllium (Be)	OSHA ID 121/125G	<0.01	mg/m3
Cadmium (Cd)	OSHA ID 121/125G	<0.01	mg/m3
Calcium (Ca)	OSHA ID 121/125G	0.75	mg/m3
Chromium (Cr)	OSHA ID 121/125G	0.01	mg/m3
Copper (Cu)	OSHA ID 121/125G	0.05	mg/m3
Iron (Fe)	OSHA ID 121/125G	0.10	mg/m3
Lead (Pb)	OSHA ID 121/125G	0.01	mg/m3
Magnesium (Mg)	OSHA ID 121/125G	0.14	mg/m3
Manganese (Mn)	OSHA ID 121/125G	0.01	mg/m3
Mercury (Hg)	OSHA ID 121/245.5	<0.01	mg/m3
Nickel (Ni)	OSHA ID 121/125G	0.02	mg/m3
Potassium (K)	OSHA ID 121/125G	<0.01	mg/m3
Selenium (Se)	OSHA ID 121/125G	0.07	mg/m3
Silver (Ag)	OSHA ID 121/125G	<0.01	mg/m3
Sodium (Na)	OSHA ID 121/125G	0.07	mg/m3
Thallium (Tl)	OSHA ID 121/125G	<0.01	mg/m3
Zinc (Zn)	OSHA ID 121/125G	0.10	mg/m3

John Pedneault
Lab Director

Reported results are reflective of TOTAL, Metals @ 2L per min/15 min run.

NYS ELAP #10224
MWBE #46075

SUPPLEMENTAL II

NYC 9/11 Public Portal Document

PEDNEAULT ASSOCIATES, INC.
631-467-8477

NYCDEP - WTC
5-BORO SAMPLING
METALS IN AIR

CALCULATION FOR OSHA ID121/125G-- METALS IN AIR VIA CASSETTE FILTER (37MM MILLIPORE) & MOBILE VACUUM PUMPS

A= Concentration of Analyte in sample solution (µg/ml) or (mg/L)
B=Concentration of Blank in sample solution (µg/ml) or (mg/L)
SSV= Sample Solution Volume ASSV= Analyte concentration x Sample Solution Volume
BSV=Blank Sample Volume BBSV=Blank concentration x Blank Sample Volume
RAB= Reagent Blank Concentration (µg/ml) or (mg/L)
RABSV= Reagent Blank Sample Volume
D= Dilution Factor (NONE)
NO GRAVIMETIC FACTORS
AV= Air Volume Sampled
AR=Analytical Result
ARR=Analytical Reportable Result in mg/m^3 (rounded off to 3-sigma)

$$AR = \frac{(A \times SSV) - (B \times BSV)}{AV}$$

For the Trip Blank Analytical Value:

$$AR = \frac{(B \times BSV) - (RAB \times RABSV)}{AV}$$

A (mg/L)	SSV (mL)	AX SSV= ASSV	B (mg/L)	BSV (mL)	B X BSV = BBSV	ASSV-BSSV = AR	AV Liters	AR/AV	ANALYTE	ARR mg/m^3
0.086	100	8.6	0.073	100	7.3	1.3	30	0.0433333	Aluminum- Al	**0.04**
0.041	100	4.1	0.011	100	1.1	3	30	0.1	Antimony-Sb	**0.1**
0.022	100	2.2	0.002	100	0.2	2	30	0.0666667	Arsenic-As	**0.07**
0.004	100	0.4	0.002	100	0.2	0.2	30	0.0066667	Barium-Ba	**<0.01**
0.001	100	0.1	0	100	0	0.1	30	0.0033333	Beryllium-Be	**<0.01**
0.001	100	0.1	0.001	100	0.1	0	30	0	Cadmium-Cd	**<0.01**
0.499	100	49.9	0.273	100	27.3	22.6	30	0.7533333	Calcium-Ca	**0.75**
0.008	100	0.8	0.005	100	0.5	0.3	30	0.01	Chromium-Cr	**0.01**
0.024	100	2.4	0.009	100	0.9	1.5	30	0.05	Copper-Cu	**0.05**
0.066	100	6.6	0.036	100	3.6	3	30	0.1	Iron-Fe	**0.1**
0.011	100	1.1	0.007	100	0.7	0.4	30	0.0133333	Lead-Pb	**0.01**
0.098	100	9.8	0.057	100	5.7	4.1	30	0.1366667	Magnesium-Mg	**0.14**
0.008	100	0.8	0.005	100	0.5	0.3	30	0.01	Manganese-Mn	**0.01**
	100			100			30		Mercury-Hg	**<0.01**
0.004	100	0.4	-0.001	100	-0.1	0.5	30	0.0166667	Nickel-NI	**0.02**
0.084	100	8.4	0.091	100	9.1	-0.7	30	-0.0233333	Potassium-K	**<0.01**
0.019	100	1.9	-0.001	100	-0.1	2	30	0.0666667	Selenium-Se	**0.07**
0	100	0	-0.002	100	-0.2	0.2	30	0.0066667	Silver-Ag	**<0.01**
1.439	100	143.9	1.417	100	141.7	2.2	30	0.0733333	Sodium-Na	**0.07**
-0.001	100	-0.1	-0.001	100	-0.1	0	30	0	Thallium-Tl	**<0.01**
0.06	100	6	0.031	100	3.1	2.9	30	0.0966667	Zinc-Zn	**0.1**

LAB ID #01100376-002

NYCDEP - 138TH & 3RD AVENUE BRONX

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CITY_21MC100_002834713

NYC 9/11 Public Portal Document

Prepared Exclusively For:

NYCDEP-Emergency Response & Tech Assmt.
96-05 Horace Harding Expressway
Corona , NY 11368
(718) 595-4650
MR. M. FAWZY, DIRECTOR

PEDNEAULT ASSOCIATES, INC.
1615 NINTH AVENUE, BOX 205, BOHEMIA, N.Y. 11716

LAB NUMBER: 01100376

PROJECT ID : WORLD TRADE CENTER 5- Boro Sampling

DATE RECEIVED	RELEASE DATE	REPORT DATE
10/19/01	10/21/01	10/21/01

COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:
10/18/01 8:50 PM	01100376-003	AIR\GAS	CENTAL PARK N. & LENOX , MANHATTAN

PARAMETER	METHOD	RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G	0.08	mg/m3
Antimony (Sb)	OSHA ID 121/125G	0.20	mg/m3
Arsenic (As)	OSHA ID 121/125G	0.18	mg/m3
Barium (Ba)	OSHA ID 121/125G	<0.01	mg/m3
Beryllium (Be)	OSHA ID 121/125G	<0.01	mg/m3
Cadmium (Cd)	OSHA ID 121/125G	<0.01	mg/m3
Calcium (Ca)	OSHA ID 121/125G	0.42	mg/m3
Chromium (Cr)	OSHA ID 121/125G	0.02	mg/m3
Copper (Cu)	OSHA ID 121/125G	<0.01	mg/m3
Iron (Fe)	OSHA ID 121/125G	0.44	mg/m3
Lead (Pb)	OSHA ID 121/125G	0.03	mg/m3
Magnesium (Mg)	OSHA ID 121/125G	0.09	mg/m3
Manganese (Mn)	OSHA ID 121/125G	0.03	mg/m3
Mercury (Hg)	OSHA ID 121/245.5	<0.01	mg/m3
Nickel (Ni)	OSHA ID 121/125G	<0.01	mg/m3
Potassium (K)	OSHA ID 121/125G	0.17	mg/m3
Selenium (Se)	OSHA ID 121/125G	0.29	mg/m3
Silver (Ag)	OSHA ID 121/125G	<0.01	mg/m3
Sodium (Na)	OSHA ID 121/125G	1.62	mg/m3
Thallium (Tl)	OSHA ID 121/125G	0.02	mg/m3
Zinc (Zn)	OSHA ID 121/125G	<0.01	mg/m3

John Pedneault
Lab Director

Reported results are reflective of TOTAL, Metals @ 2L per min/15 min run.

NYS ELAP #10224
MWBE #46075

SUPPLEMENTAL II

CITY_21MC100_002834714

NYC-WTC_000220502

NYC 9/11 Public Portal Document

PEDNEAULT ASSOCIATES, INC.
631-467-8477

NYCDEP - WTC
5-BORO SAMPLING
METALS IN AIR

CALCULATION FOR OSHA ID121/125G-- METALS IN AIR VIA CASSETTE FILTER (37MM MILLIPORE) & MOBILE VACUUM PUMPS

A= Concentration of Analyte in sample solution (µg/ml) or (mg/L)
B=Concentration of Blank in sample solution (µg/ml) or (mg/L)
SSV= Sample Solution Volume ASSV= Analyte concentration x Sample Solution Volume
BSV=Blank Sample Volume BBSV=Blank concentration x Blank Sample Volume
RAB= Reagent Blank Concentration (µg/ml) or (mg/L)
RABSV= Reagent Blank Sample Volume
D= Dilution Factor (NONE)
NO GRAVIMETIC FACTORS
AV= Air Volume Sampled
AR=Analytical Result
ARR=Analytical Reportable Result in mg/m^3 (rounded off to 3-sigma)

$$AR = \frac{(A \times SSV) - (B \times BSV)}{AV}$$

For the Trip Blank Analytical Value:

$$AR = \frac{(B \times BSV) - (RAB \times RABSV)}{AV}$$

A (mg/L)	SSV (mL)	A X SSV = ASSV	B (mg/L)	BSV (mL)	B X BSV = BBSV	ASSV-BSSV = AR	AV Liters	AR/AV =	ANALYTE	ARR mg/m^3
0.096	100	9.6	0.073	100	7.3	2.3	30	0.0766667	Aluminum- Al	**0.08**
0.071	100	7.1	0.011	100	1.1	6	30	0.2	Antimony-Sb	**0.2**
0.055	100	5.5	0.002	100	0.2	5.3	30	0.1766667	Arsenic-As	**0.18**
0.002	100	0.2	0.002	100	0.2	0	30	0	Barium-Ba	**<0.01**
0.001	100	0.1	0	100	0	0.1	30	0.0033333	Beryllium-Be	**<0.01**
0.002	100	0.2	0.001	100	0.1	0.1	30	0.0033333	Cadmium-Cd	**<0.01**
0.4	100	40	0.273	100	27.3	12.7	30	0.4233333	Calcium-Ca	**0.42**
0.01	100	1	0.005	100	0.5	0.5	30	0.0166667	Chromium-Cr	**0.02**
0.011	100	1.1	0.009	100	0.9	0.2	30	0.0066667	Copper-Cu	**<0.01**
0.167	100	16.7	0.036	100	3.6	13.1	30	0.4366667	Iron-Fe	**0.44**
0.017	100	1.7	0.007	100	0.7	1	30	0.0333333	Lead-Pb	**0.03**
0.084	100	8.4	0.057	100	5.7	2.7	30	0.09	Magnesium-Mg	**0.09**
0.013	100	1.3	0.005	100	0.5	0.8	30	0.0266667	Manganese-Mn	**0.03**
	100			100			30		Mercury-Hg	**<0.01**
0.001	100	0.1	-0.001	100	-0.1	0.2	30	0.0066667	Nickel-NI	**<0.01**
0.142	100	14.2	0.091	100	9.1	5.1	30	0.17	Potassium-K	**0.17**
0.086	100	8.6	-0.001	100	-0.1	8.7	30	0.29	Selenium-Se	**0.29**
-0.001	100	-0.1	-0.002	100	-0.2	0.1	30	0.0033333	Silver-Ag	**<0.01**
1.904	100	190.4	1.417	100	141.7	48.7	30	1.6233333	Sodium-Na	**1.62**
0.004	100	0.4	-0.001	100	-0.1	0.5	30	0.0166667	Thallium-Tl	**0.02**
0.026	100	2.6	0.031	100	3.1	-0.5	30	-0.0166667	Zinc-Zn	**<0.01**

LAB ID #01100376-003

NYCDEP - CENTRAL PK NO & LENOX-NYC

CITY_21MC100_002834715

NYC 9/11 Public Portal Document

Prepared Exclusively For:	*PEDNEAULT ASSOCIATES, INC.*
NYCDEP-Emergency Response & Tech Assmt.	*1615 NINTH AVENUE, BOX 205, BOHEMIA, N.Y. 11716*
96-05 Horace Harding Expressway	**LAB NUMBER:** 01100376
Corona , NY 11368	**PROJECT ID :** WORLD TRADE CENTER 5- Boro Sampling
(718) 595-4650	
MR. M. FAWZY, DIRECTOR	

DATE RECEIVED	RELEASE DATE	REPORT DATE
10/19/01	10/21/01	10/21/01

COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:
10/18/01 10:00 PM	01100376-004	AIR\GAS	BERRY ST. & NORTH 11th ST, BROOKLYN

PARAMETER	METHOD	RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G	0.01	mg/m3
Antimony (Sb)	OSHA ID 121/125G	0.09	mg/m3
Arsenic (As)	OSHA ID 121/125G	0.05	mg/m3
Barium (Ba)	OSHA ID 121/125G	0.02	mg/m3
Beryllium (Be)	OSHA ID 121/125G	<0.01	mg/m3
Cadmium (Cd)	OSHA ID 121/125G	<0.01	mg/m3
Calcium (Ca)	OSHA ID 121/125G	0.22	mg/m3
Chromium (Cr)	OSHA ID 121/125G	0.01	mg/m3
Copper (Cu)	OSHA ID 121/125G	0.01	mg/m3
Iron (Fe)	OSHA ID 121/125G	0.05	mg/m3
Lead (Pb)	OSHA ID 121/125G	<0.01	mg/m3
Magnesium (Mg)	OSHA ID 121/125G	0.03	mg/m3
Manganese (Mn)	OSHA ID 121/125G	0.01	mg/m3
Mercury (Hg)	OSHA ID 121/245.5	<0.01	mg/m3
Nickel (Ni)	OSHA ID 121/125G	<0.01	mg/m3
Potassium (K)	OSHA ID 121/125G	0.02	mg/m3
Selenium (Se)	OSHA ID 121/125G	0.11	mg/m3
Silver (Ag)	OSHA ID 121/125G	<0.01	mg/m3
Sodium (Na)	OSHA ID 121/125G	0.96	mg/m3
Thallium (Tl)	OSHA ID 121/125G	0.03	mg/m3
Zinc (Zn)	OSHA ID 121/125G	<0.01	mg/m3

John Pedneault
Lab Director

Reported results are reflective of TOTAL, Metals @ 2L per min/15 min run.

NYS ELAP #10224
MWBE #46075

SUPPLEMENTAL II

CITY_21MC100_002834716

NYC-WTC_000220504

NYC 9/11 Public Portal Document

PEDNEAULT ASSOCIATES, INC.
631-467-8477

NYCDEP - WTC
5-BORO SAMPLING
METALS IN AIR

CALCULATION FOR OSHA ID121/125G-- METALS IN AIR VIA CASSETTE FILTER (37MM MILLIPORE) & MOBILE VACUUM PUMPS

A= Concentration of Analyte in sample solution (µg/ml) or (mg/L)
B=Concentration of Blank in sample solution (µg/ml) or (mg/L)
SSV= Sample Solution Volume ASSV= Analyte concentration x Sample Solution Volume
BSV=Blank Sample Volume BBSV=Blank concentration x Blank Sample Volume
RAB= Reagent Blank Concentration (µg/ml) or (mg/L)
RABSV= Reagent Blank Sample Volume
D= Dilution Factor (NONE)
NO GRAVIMETIC FACTORS
AV= Air Volume Sampled
AR=Analytical Result
ARR=Analytical Reportable Result in mg/m^3 (rounded off to 3-sigma)

$$AR = \frac{(A \times SSV) - (B \times BSV)}{AV}$$

For the Trip Blank Analytical Value:

$$AR = \frac{(B \times BSV) - (RAB \times RABSV)}{AV}$$

A (mg/L)	SSV (mL)	A x SSV = ASSV	B (mg/L)	BSV (mL)	B x BSV = BBSV	ASSV-BSSV = AR	AV Liters	AR/AV	ANALYTE	ARR mg/m^3
0.076	100	7.6	0.073	100	7.3	0.3	30	0.01	Aluminum- Al	**0.01**
0.038	100	3.8	0.011	100	1.1	2.7	30	0.09	Antimony-Sb	**0.09**
0.018	100	1.8	0.002	100	0.2	1.6	30	0.0533333	Arsenic-As	**0.05**
0.007	100	0.7	0.002	100	0.2	0.5	30	0.0166667	Barium-Ba	**0.02**
0.001	100	0.1	0	100	0	0.1	30	0.0033333	Beryllium-Be	**<0.01**
0.001	100	0.1	0.001	100	0.1	0	30	0	Cadmium-Cd	**<0.01**
0.339	100	33.9	0.273	100	27.3	6.6	30	0.22	Calcium-Ca	**0.22**
0.008	100	0.8	0.005	100	0.5	0.3	30	0.01	Chromium-Cr	**0.01**
0.012	100	1.2	0.009	100	0.9	0.3	30	0.01	Copper-Cu	**0.01**
0.05	100	5	0.036	100	3.6	1.4	30	0.0466667	Iron-Fe	**0.05**
0.008	100	0.8	0.007	100	0.7	0.1	30	0.0033333	Lead-Pb	**<0.01**
0.065	100	6.5	0.057	100	5.7	0.8	30	0.0266667	Magnesium-Mg	**0.03**
0.009	100	0.9	0.005	100	0.5	0.4	30	0.0133333	Manganese-Mn	**0.01**
	100			100			30		Mercury-Hg	**<0.01**
0	100	0	-0.001	100	-0.1	0.1	30	0.0033333	Nickel-NI	**<0.01**
0.098	100	9.8	0.091	100	9.1	0.7	30	0.0233333	Potassium-K	**0.02**
0.032	100	3.2	-0.001	100	-0.1	3.3	30	0.11	Selenium-Se	**0.11**
-0.001	100	-0.1	-0.002	100	-0.2	0.1	30	0.0033333	Silver-Ag	**<0.01**
1.706	100	170.6	1.417	100	141.7	28.9	30	0.9633333	Sodium-Na	**0.96**
0.007	100	0.7	-0.001	100	-0.1	0.8	30	0.0266667	Thallium-Tl	**0.03**
0.028	100	2.8	0.031	100	3.1	-0.3	30	-0.01	Zinc-Zn	**<0.01**

LAB ID #01100376-004

NYCDEP - BERRY & NORTH BROOKLYN

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CITY_21MC100_002834717

NYC 9/11 Public Portal Document

Prepared Exclusively For:

NYCDEP-Emergency Response & Tech Assmt.
96-05 Horace Harding Expressway
Corona , NY 11368
(718) 595-4650
MR. M. FAWZY, DIRECTOR

PEDNEAULT ASSOCIATES, INC.
1615 NINTH AVENUE, BOX 205, BOHEMIA, N.Y. 11716

LAB NUMBER: 01100376

PROJECT ID : WORLD TRADE CENTER 5- Boro Sampling

DATE RECEIVED		RELEASE DATE	REPORT DATE
10/19/01		10/21/01	10/21/01
COLLECT DATE:	**SAMPLE ID#:**	**MATRIX:**	**SAMPLE ORIGIN:**
10/18/01 10:35 PM	01100376-005	AIR\GAS	ATLANTIC AVE. & SMITH ST., BROOKLYN

PARAMETER	METHOD	RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G	0.02	mg/m3
Antimony (Sb)	OSHA ID 121/125G	0.02	mg/m3
Arsenic (As)	OSHA ID 121/125G	0.02	mg/m3
Barium (Ba)	OSHA ID 121/125G	<0.01	mg/m3
Beryllium (Be)	OSHA ID 121/125G	<0.01	mg/m3
Cadmium (Cd)	OSHA ID 121/125G	<0.01	mg/m3
Calcium (Ca)	OSHA ID 121/125G	0.11	mg/m3
Chromium (Cr)	OSHA ID 121/125G	<0.01	mg/m3
Copper (Cu)	OSHA ID 121/125G	<0.01	mg/m3
Iron (Fe)	OSHA ID 121/125G	<0.01	mg/m3
Lead (Pb)	OSHA ID 121/125G	<0.01	mg/m3
Magnesium (Mg)	OSHA ID 121/125G	<0.01	mg/m3
Manganese (Mn)	OSHA ID 121/125G	0.02	mg/m3
Mercury (Hg)	OSHA ID 121/245.5	<0.01	mg/m3
Nickel (Ni)	OSHA ID 121/125G	<0.01	mg/m3
Potassium (K)	OSHA ID 121/125G	1.65	mg/m3
Selenium (Se)	OSHA ID 121/125G	<0.01	mg/m3
Silver (Ag)	OSHA ID 121/125G	<0.01	mg/m3
Sodium (Na)	OSHA ID 121/125G	<0.01	mg/m3
Thallium (Tl)	OSHA ID 121/125G	<0.01	mg/m3
Zinc (Zn)	OSHA ID 121/125G	<0.01	mg/m3

John Pedneault
Lab Director

Reported results are reflective of TOTAL, Metals @ 2L per min/15 min run.

NYS ELAP #10224
MWBE #46075

SUPPLEMENTAL II

CITY_21MC100_002834718

NYC-WTC_000220506

NYC 9/11 Public Portal Document

PEDNEAULT ASSOCIATES, INC.
631-467-8477

NYCDEP - WTC
5-BORO SAMPLING
METALS IN AIR

CALCULATION FOR OSHA ID121/125G-- METALS IN AIR VIA CASSETTE FILTER (37MM MILLIPORE) & MOBILE VACUUM PUMPS

A= Concentration of Analyte in sample solution (µg/ml) or (mg/L)
B=Concentration of Blank in sample solution (µg/ml) or (mg/L)
SSV= Sample Solution Volume ASSV= Analyte concentration x Sample Solution Volume
BSV=Blank Sample Volume BBSV=Blank concentration x Blank Sample Volume
RAB= Reagent Blank Concentration (µg/ml) or (mg/L)
RABSV= Reagent Blank Sample Volume
D= Dilution Factor (NONE)
NO GRAVIMETIC FACTORS
AV= Air Volume Sampled
AR=Analytical Result
ARR=Analytical Reportable Result in mg/m^3 (rounded off to 3-sigma)

$$AR = \frac{(A \times SSV) - (B \times BSV)}{AV}$$

For the Trip Blank Analytical Value:

$$AR = \frac{(B \times BSV) - (RAB \times RABSV)}{AV}$$

A (mg/L)	SSV (mL)	A x SSV = ASSV	B (mg/L)	BSV (mL)	B x BSV = BBSV	ASSV-BSSV = AR	AV Liters	AR/AV	ANALYTE	ARR mg/m³
0.078	100	7.8	0.073	100	7.3	0.5	30	0.0166667	Aluminum- Al	0.02
0.016	100	1.6	0.011	100	1.1	0.5	30	0.0166667	Antimony-Sb	0.02
0.007	100	0.7	0.002	100	0.2	0.5	30	0.0166667	Arsenic-As	0.02
0.002	100	0.2	0.002	100	0.2	0	30	0	Barium-Ba	<0.01
0	100	0	0	100	0	0	30	0	Beryllium-Be	<0.01
0	100	0	0.001	100	0.1	-0.1	30	-0.0033333	Cadmium-Cd	<0.01
0.306	100	30.6	0.273	100	27.3	3.3	30	0.11	Calcium-Ca	0.11
0.003	100	0.3	0.005	100	0.5	-0.2	30	-0.0066667	Chromium-Cr	<0.01
0.011	100	1.1	0.009	100	0.9	0.2	30	0.0066667	Copper-Cu	<0.01
0.017	100	1.7	0.036	100	3.6	-1.9	30	-0.0633333	Iron-Fe	<0.01
0	100	0	0.007	100	0.7	-0.7	30	-0.0233333	Lead-Pb	<0.01
0.059	100	5.9	0.057	100	5.7	0.2	30	0.0066667	Magnesium-Mg	<0.01
0.012	100	1.2	0.005	100	0.5	0.7	30	0.0233333	Manganese-Mn	0.02
	100			100			30		Mercury-Hg	<0.01
0	100	0	-0.001	100	-0.1	0.1	30	0.0033333	Nickel-Nl	<0.01
0.586	100	58.6	0.091	100	9.1	49.5	30	1.65	Potassium-K	1.65
-0.006	100	-0.6	-0.001	100	-0.1	-0.5	30	-0.0166667	Selenium-Se	<0.01
-0.002	100	-0.2	-0.002	100	-0.2	0	30	0	Silver-Ag	<0.01
0.85	100	85	1.417	100	141.7	-56.7	30	-1.89	Sodium-Na	<0.01
0	100	0	-0.001	100	-0.1	0.1	30	0.0033333	Thallium-Tl	<0.01
0.018	100	1.8	0.031	100	3.1	-1.3	30	-0.0433333	Zinc-Zn	<0.01

LAB ID #01100376-005

NYCDEP -ATLANTIC AV & SMITH STR. BROOKLYN

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CITY_21MC100_002834719

NYC 9/11 Public Portal Document

Prepared Exclusively For:	*PEDNEAULT ASSOCIATES, INC.*
NYCDEP-Emergency Response & Tech Assmt.	*1615 NINTH AVENUE, BOX 205, BOHEMIA, N.Y. 11716*
96-05 Horace Harding Expressway	**LAB NUMBER:** 01100376
Corona , NY 11368	**PROJECT ID :** WORLD TRADE CENTER 5- Boro Sampling
(718) 595-4650	
MR. M. FAWZY, DIRECTOR	

DATE RECEIVED	RELEASE DATE	REPORT DATE
10/19/01	10/21/01	10/21/01

COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:
10/18/01 11:35 PM	01100376-006	AIR\GAS	BAY ST & VICTORY BLVD., STATEN ISLAND

PARAMETER	METHOD	RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G	0.02	mg/m3
Antimony (Sb)	OSHA ID 121/125G	0.05	mg/m3
Arsenic (As)	OSHA ID 121/125G	0.02	mg/m3
Barium (Ba)	OSHA ID 121/125G	<0.01	mg/m3
Beryllium (Be)	OSHA ID 121/125G	<0.01	mg/m3
Cadmium (Cd)	OSHA ID 121/125G	<0.01	mg/m3
Calcium (Ca)	OSHA ID 121/125G	0.50	mg/m3
Chromium (Cr)	OSHA ID 121/125G	0.01	mg/m3
Copper (Cu)	OSHA ID 121/125G	0.02	mg/m3
Iron (Fe)	OSHA ID 121/125G	0.26	mg/m3
Lead (Pb)	OSHA ID 121/125G	<0.01	mg/m3
Magnesium (Mg)	OSHA ID 121/125G	0.07	mg/m3
Manganese (Mn)	OSHA ID 121/125G	0.05	mg/m3
Mercury (Hg)	OSHA ID 121/245.5	<0.01	mg/m3
Nickel (Ni)	OSHA ID 121/125G	0.01	mg/m3
Potassium (K)	OSHA ID 121/125G	0.04	mg/m3
Selenium (Se)	OSHA ID 121/125G	0.03	mg/m3
Silver (Ag)	OSHA ID 121/125G	0.01	mg/m3
Sodium (Na)	OSHA ID 121/125G	0.78	mg/m3
Thallium (Tl)	OSHA ID 121/125G	<0.01	mg/m3
Zinc (Zn)	OSHA ID 121/125G	0.03	mg/m3

John Pedneault
Lab Director

Reported results are reflective of TOTAL, Metals @ 2L per min/15 min run.

NYS ELAP #10224
MWBE #46075

SUPPLEMENTAL II

CITY_21MC100_002834720

NYC-WTC_000220508

NYC 9/11 Public Portal Document

PEDNEAULT ASSOCIATES, INC.
631-467-8477

NYCDEP - WTC
5-BORO SAMPLING
METALS IN AIR

CALCULATION FOR OSHA ID121/125G-- METALS IN AIR VIA CASSETTE FILTER (37MM MILLIPORE) & MOBILE VACUUM PUMPS

A= Concentration of Analyte in sample solution (µg/ml) or (mg/L)
B=Concentration of Blank in sample solution (µg/ml) or (mg/L)
SSV= Sample Solution Volume ASSV= Analyte concentration x Sample Solution Volume
BSV=Blank Sample Volume BBSV=Blank concentration x Blank Sample Volume
RAB= Reagent Blank Concentration (µg/ml) or (mg/L)
RABSV= Reagent Blank Sample Volume
D= Dilution Factor (NONE)
NO GRAVIMETIC FACTORS
AV= Air Volume Sampled
AR=Analytical Result
ARR=Analytical Reportable Result in mg/m^3 (rounded off to 3-sigma)

$$AR = \frac{(A \times SSV) - (B \times BSV)}{AV}$$

For the Trip Blank Analytical Value:

$$AR = \frac{(B \times BSV) - (RAB \times RABSV)}{AV}$$

A (mg/L)	SSV (mL)	A X SSV = ASSV	B (mg/L)	BSV (mL)	B X BSV = BBSV	ASSV -BSSV = AR	AV Liters	AR/AV	ANALYTE	ARR mg/m³
0.08	100	8	0.073	100	7.3	0.7	30	0.0233333	Aluminum- Al	0.02
0.025	100	2.5	0.011	100	1.1	1.4	30	0.0466667	Antimony-Sb	0.05
0.008	100	0.8	0.002	100	0.2	0.6	30	0.02	Arsenic-As	0.02
0.003	100	0.3	0.002	100	0.2	0.1	30	0.0033333	Barium-Ba	<0.01
0.001	100	0.1	0	100	0	0.1	30	0.0033333	Beryllium-Be	<0.01
0.001	100	0.1	0.001	100	0.1	0	30	0	Cadmium-Cd	<0.01
0.419	100	41.9	0.273	100	27.3	14.6	30	0.4866667	Calcium-Ca	0.5
0.008	100	0.8	0.005	100	0.5	0.3	30	0.01	Chromium-Cr	0.01
0.014	100	1.4	0.009	100	0.9	0.5	30	0.0166667	Copper-Cu	0.02
0.115	100	11.5	0.036	100	3.6	7.9	30	0.2633333	Iron-Fe	0.26
0.006	100	0.6	0.007	100	0.7	-0.1	30	-0.0033333	Lead-Pb	<0.01
0.077	100	7.7	0.057	100	5.7	2	30	0.0666667	Magnesium-Mg	0.07
0.019	100	1.9	0.005	100	0.5	1.4	30	0.0466667	Manganese-Mn	0.05
	100			100			30		Mercury-Hg	<0.01
0.002	100	0.2	-0.001	100	-0.1	0.3	30	0.01	Nickel-NI	0.01
0.102	100	10.2	0.091	100	9.1	1.1	30	0.0366667	Potassium-K	0.04
0.008	100	0.8	-0.001	100	-0.1	0.9	30	0.03	Selenium-Se	0.03
0.002	100	0.2	-0.002	100	-0.2	0.4	30	0.0133333	Silver-Ag	0.01
1.651	100	165.1	1.417	100	141.7	23.4	30	0.78	Sodium-Na	0.78
-0.001	100	-0.1	-0.001	100	-0.1	0	30	0	Thallium-Tl	<0.01
0.041	100	4.1	0.031	100	3.1	1	30	0.0333333	Zinc-Zn	0.03

LAB ID #01100376-006

NYCDEP - BAY STR & VICTORY BLVD. SI

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CITY_21MC100_002834721

NYC 9/11 Public Portal Document

Prepared Exclusively For:	*PEDNEAULT ASSOCIATES, INC.*
NYCDEP-Emergency Response & Tech Assmt.	*1615 NINTH AVENUE, BOX 205, BOHEMIA, N.Y. 11716*
96-05 Horace Harding Expressway	**LAB NUMBER:** 01100376
Corona , NY 11368	**PROJECT ID :** WORLD TRADE CENTER 5- Boro Sampling
(718) 595-4650	
MR. M. FAWZY, DIRECTOR	

DATE RECEIVED	RELEASE DATE	REPORT DATE
10/19/01	10/21/01	10/21/01

COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:
10/18/01 7:30 PM	01100376-007	AIR\GAS	DUP/BROADWAY AVE & 31st ST. , QUEENS

PARAMETER	METHOD	RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G	0.04	mg/m3
Antimony (Sb)	OSHA ID 121/125G	0.06	mg/m3
Arsenic (As)	OSHA ID 121/125G	0.03	mg/m3
Barium (Ba)	OSHA ID 121/125G	<0.01	mg/m3
Beryllium (Be)	OSHA ID 121/125G	<0.01	mg/m3
Cadmium (Cd)	OSHA ID 121/125G	<0.01	mg/m3
Calcium (Ca)	OSHA ID 121/125G	0.42	mg/m3
Chromium (Cr)	OSHA ID 121/125G	0.01	mg/m3
Copper (Cu)	OSHA ID 121/125G	0.02	mg/m3
Iron (Fe)	OSHA ID 121/125G	0.31	mg/m3
Lead (Pb)	OSHA ID 121/125G	1.15	mg/m3
Magnesium (Mg)	OSHA ID 121/125G	0.07	mg/m3
Manganese (Mn)	OSHA ID 121/125G	0.02	mg/m3
Mercury (Hg)	OSHA ID 121/245.5	<0.01	mg/m3
Nickel (Ni)	OSHA ID 121/125G	<0.01	mg/m3
Potassium (K)	OSHA ID 121/125G	0.06	mg/m3
Selenium (Se)	OSHA ID 121/125G	0.05	mg/m3
Silver (Ag)	OSHA ID 121/125G	0.01	mg/m3
Sodium (Na)	OSHA ID 121/125G	2.41	mg/m3
Thallium (Tl)	OSHA ID 121/125G	<0.01	mg/m3
Zinc (Zn)	OSHA ID 121/125G	<0.01	mg/m3

John Pedneault
Lab Director

Reported results are reflective of TOTAL, Metals @ 2L per min/15 min run.

NYS ELAP #10224
MWBE #46075

SUPPLEMENTAL II

CITY_21MC100_002834722

NYC-WTC_000220510

NYC 9/11 Public Portal Document

PEDNEAULT ASSOCIATES, INC.
631-467-8477

NYCDEP - WTC
5-BORO SAMPLING
METALS IN AIR

CALCULATION FOR OSHA ID121/125G– METALS IN AIR VIA CASSETTE FILTER (37MM MILLIPORE) & MOBILE VACUUM PUMPS

A= Concentration of Analyte in sample solution (µg/ml) or (mg/L)
B=Concentration of Blank in sample solution (µg/ml) or (mg/L)
SSV= Sample Solution Volume ASSV= Analyte concentration x Sample Solution Volume
BSV=Blank Sample Volume BBSV=Blank concentration x Blank Sample Volume
RAB= Reagent Blank Concentration (µg/ml) or (mg/L)
RABSV= Reagent Blank Sample Volume
D= Dilution Factor (NONE)
NO GRAVIMETIC FACTORS TB= TRIP/FIELD BLANK
AV= Air Volume Sampled
AR=Analytical Result
ARR=Analytical Reportable Result in mg/m^3 (rounded off to 3-sigma)

$$AR = \frac{(A \times SSV) - (B \times BSV)}{AV}$$

For the Trip Blank Analytical Value:

$$AR = \frac{(B \times BSV) - (RAB \times RABSV)}{AV}$$

A (mg/L)	SSV (mL)	A X SSV = ASSV	B (mg/L)	BSV (mL)	B X BSV = BBSV	ASSV-BSSV = AR	AV Liters	AR/AV	ANALYTE	ARR mg/m^3
0.084	100	8.4	0.073	100	7.3	1.1	30	0.0366667	Aluminum- Al	**0.04**
0.03	100	3	0.011	100	1.1	1.9	30	0.0633333	Antimony-Sb	**0.06**
0.011	100	1.1	0.002	100	0.2	0.9	30	0.03	Arsenic-As	**0.03**
0.002	100	0.2	0.002	100	0.2	0	30	0	Barium-Ba	**<0.01**
0	100	0	0	100	0	0	30	0	Beryllium-Be	**<0.01**
0.001	100	0.1	0.001	100	0.1	0	30	0	Cadmium-Cd	**<0.01**
0.399	100	39.9	0.273	100	27.3	12.6	30	0.42	Calcium-Ca	**0.42**
0.008	100	0.8	0.005	100	0.5	0.3	30	0.01	Chromium-Cr	**0.01**
0.016	100	1.6	0.009	100	0.9	0.7	30	0.0233333	Copper-Cu	**0.02**
0.129	100	12.9	0.036	100	3.6	9.3	30	0.31	Iron-Fe	**0.31**
0.353	100	35.3	0.007	100	0.7	34.6	30	1.1533333	Lead-Pb	**1.15**
0.078	100	7.8	0.057	100	5.7	2.1	30	0.07	Magnesium-Mg	**0.07**
0.012	100	1.2	0.005	100	0.5	0.7	30	0.0233333	Manganese-Mn	**0.02**
	100			100			30		Mercury-Hg	**<0.01**
0.001	100	0.1	-0.001	100	-0.1	0.2	30	0.0066667	Nickel-NI	**<0.01**
0.11	100	11	0.091	100	9.1	1.9	30	0.0633333	Potassium-K	**0.06**
0.015	100	1.5	-0.001	100	-0.1	1.6	30	0.0533333	Selenium-Se	**0.05**
0.002	100	0.2	-0.002	100	-0.2	0.4	30	0.0133333	Silver-Ag	**0.01**
2.142	100	214.2	1.417	100	141.7	72.5	30	2.4166667	Sodium-Na	**2.41**
-0.004	100	-0.4	-0.001	100	-0.1	-0.3	30	-0.01	Thallium-Tl	**<0.01**
0.024	100	2.4	0.031	100	3.1	-0.7	30	-0.0233333	Zinc-Zn	**<0.01**

LAB ID #01100376-007

NYCDEP - DUPLICATE OF #01100376-001

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CITY_21MC100_002834723

Prepared Exclusively For:	*PEDNEAULT ASSOCIATES, INC.*
NYCDEP-Emergency Response & Tech Assmt.	*1615 NINTH AVENUE, BOX 205, BOHEMIA, N.Y. 11716*
96-05 Horace Harding Expressway	**LAB NUMBER:** 01100376
Corona , NY 11368	**PROJECT ID :** WORLD TRADE CENTER 5- Boro Sampling
(718) 595-4650	
MR. M. FAWZY, DIRECTOR	

DATE RECEIVED	RELEASE DATE	REPORT DATE
10/19/01	10/21/01	10/21/01

COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:
10/18/01 5:00 PM	01100376-008	AIR\GAS	TRIP BLANKS

PARAMETER	METHOD	RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G	<0.01	mg/m3
Antimony (Sb)	OSHA ID 121/125G	<0.01	mg/m3
Arsenic (As)	OSHA ID 121/125G	<0.01	mg/m3
Barium (Ba)	OSHA ID 121/125G	<0.01	mg/m3
Beryllium (Be)	OSHA ID 121/125G	<0.01	mg/m3
Cadmium (Cd)	OSHA ID 121/125G	<0.01	mg/m3
Calcium (Ca)	OSHA ID 121/125G	<0.01	mg/m3
Chromium (Cr)	OSHA ID 121/125G	0.01	mg/m3
Copper (Cu)	OSHA ID 121/125G	<0.01	mg/m3
Iron (Fe)	OSHA ID 121/125G	<0.01	mg/m3
Lead (Pb)	OSHA ID 121/125G	<0.01	mg/m3
Magnesium (Mg)	OSHA ID 121/125G	<0.01	mg/m3
Manganese (Mn)	OSHA ID 121/125G	<0.01	mg/m3
Mercury (Hg)	OSHA ID 121/245.5	<0.01	mg/m3
Nickel (Ni)	OSHA ID 121/125G	<0.01	mg/m3
Potassium (K)	OSHA ID 121/125G	<0.01	mg/m3
Selenium (Se)	OSHA ID 121/125G	<0.01	mg/m3
Silver (Ag)	OSHA ID 121/125G	<0.01	mg/m3
Sodium (Na)	OSHA ID 121/125G	<0.01	mg/m3
Thallium (Tl)	OSHA ID 121/125G	0.01	mg/m3
Zinc (Zn)	OSHA ID 121/125G	<0.01	mg/m3

John Pedneault
Lab Director

Reported results are reflective of TOTAL, Metals @ 2L per min/15 min run.

NYS ELAP #10224
MWBE #46075

SUPPLEMENTAL II

NYC 9/11 Public Portal Document

PEDNEAULT ASSOCIATES, INC.
631-467-8477

NYCDEP - WTC
5-BORO SAMPLING
METALS IN AIR

CALCULATION FOR OSHA ID121/125G-- METALS IN AIR VIA CASSETTE FILTER (37MM MILLIPORE) & MOBILE VACUUM PUMPS

A= Concentration of Analyte in sample solution (µg/ml) or (mg/L)
B=Concentration of Blank in sample solution (µg/ml) or (mg/L)
SSV= Sample Solution Volume ASSV= Analyte concentration x Sample Solution Volume
BSV=Blank Sample Volume BBSV=Blank concentration x Blank Sample Volume
RAB= Reagent Blank Concentration (µg/ml) or (mg/L)
RABSV= Reagent Blank Sample Volume
D= Dilution Factor (NONE)
NO GRAVIMETIC FACTORS TB= TRIP/FIELD BLANK
AV= Air Volume Sampled
AR=Analytical Result
ARR=Analytical Reportable Result in mg/m^3 (rounded off to 3-sigma)

$$AR = \frac{(A \times SSV) - (B \times BSV)}{AV}$$

For the Trip Blank Analytical Value:

$$AR = \frac{(B \times BSV) - (RAB \times RABSV)}{AV}$$

TB (mg/L)	BSV (mL)	TB x TBSV = BBSV	RAB (mg/L)	RABSV (mL)	RAB x RABBSV = RABBSV	TB-RAB = AR	AV Liters	AR/AV	ANALYTE	ARR mg/m³
0.073	100	7.3	0.087	100	8.7	-1.4	30	-0.0466667	Aluminum- Al	<0.01
0.011	100	1.1	0.141	100	14.1	-13	30	-0.4333333	Antimony-Sb	<0.01
0.002	100	0.2	0.069	100	6.9	-6.7	30	-0.2233333	Arsenic-As	<0.01
0.002	100	0.2	0.002	100	0.2	0	30	0	Barium-Ba	<0.01
0	100	0	0.002	100	0.2	-0.2	30	-0.0066667	Beryllium-Be	<0.01
0.001	100	0.1	0.004	100	0.4	-0.3	30	-0.01	Cadmium-Cd	<0.01
0.273	100	27.3	0.461	100	46.1	-18.8	30	-0.6266667	Calcium-Ca	<0.01
0.005	100	0.5	0.002	100	0.2	0.3	30	0.01	Chromium-Cr	0.01
0.009	100	0.9	0.027	100	2.7	-1.8	30	-0.06	Copper-Cu	<0.01
0.036	100	3.6	0.111	100	11.1	-7.5	30	-0.25	Iron-Fe	<0.01
0.007	100	0.7	0.021	100	2.1	-1.4	30	-0.0466667	Lead-Pb	<0.01
0.057	100	5.7	0.112	100	11.2	-5.5	30	-0.1833333	Magnesium-Mg	<0.01
0.005	100	0.5	0.008	100	0.8	-0.3	30	-0.01	Manganese-Mn	<0.01
	100			100			30		Mercury-Hg	<0.01
-0.001	100	-0.1	0	100	0	-0.1	30	-0.0033333	Nickel-NI	<0.01
0.091	100	9.1	0.115	100	11.5	-2.4	30	-0.08	Potassium-K	<0.01
-0.001	100	-0.1	0.068	100	6.8	-6.9	30	-0.23	Selenium-Se	<0.01
-0.002	100	-0.2	-0.001	100	-0.1	-0.1	30	-0.0033333	Silver-Ag	<0.01
1.417	100	141.7	2.107	100	210.7	-69	30	-2.3	Sodium-Na	<0.01
-0.001	100	-0.1	-0.005	100	-0.5	0.4	30	0.0133333	Thallium-Tl	0.01
0.031	100	3.1	0.029	100	2.9	0.2	30	0.0066667	Zinc-Zn	<0.01

LAB ID #01100376-008

NYCDEP - TRIP/FIELD BLANK

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