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: 01100208

PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling

DATE RECEIVED		RELEASE DATE	REPORT DATE
10/10/01		10/10/01	10/10/01
COLLECT DATE:	**SAMPLE ID#:**	**MATRIX:**	**SAMPLE ORIGIN:**
10/9/01 7:15 PM	01100208-001	AIR\GAS	BROADWAY AVE & 31st ST. , QUEENS

PARAMETER	METHOD	RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G	0.10	mg/m3
Antimony (Sb)	OSHA ID 121/125G	1.10	mg/m3
Arsenic (As)	OSHA ID 121/125G	0.25	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	0.47	mg/m3
Chromium (Cr)	OSHA ID 121/125G	<0.01	mg/m3
Copper (Cu)	OSHA ID 121/125G	0.04	mg/m3
Iron (Fe)	OSHA ID 121/125G	0.56	mg/m3
Lead (Pb)	OSHA ID 121/125G	0.14	mg/m3
Magnesium (Mg)	OSHA ID 121/125G	0.08	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	0.16	mg/m3
Selenium (Se)	OSHA ID 121/125G	0.38	mg/m3
Silver (Ag)	OSHA ID 121/125G	0.01	mg/m3
Sodium (Na)	OSHA ID 121/125G	9.41	mg/m3
Thallium (Tl)	OSHA ID 121/125G	0.01	mg/m3
Zinc (Zn)	OSHA ID 121/125G	0.02	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_002850938

NYC-WTC_000367883

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
0.104	100	10.4	0.075	100	7.5	2.9	30	0.0966667	Aluminum- Al	**0.1**
0.385	100	38.5	0.056	100	5.6	32.9	30	1.0966667	Antimony-Sb	**1.1**
0.083	100	8.3	0.007	100	0.7	7.6	30	0.2533333	Arsenic-As	**0.25**
0.003	100	0.3	0	100	0	0.3	30	0.01	Barium-Ba	**0.01**
0.002	100	0.2	0	100	0	0.2	30	0.0066667	Beryllium-Be	**<0.01**
0.003	100	0.3	0	100	0	0.3	30	0.01	Cadmium-Cd	**0.01**
0.652	100	65.2	0.51	100	51	14.2	30	0.4733333	Calcium-Ca	**0.47**
0.017	100	1.7	0.019	100	1.9	-0.2	30	-0.0066667	Chromium-Cr	**<0.01**
0.022	100	2.2	0.01	100	1	1.2	30	0.04	Copper-Cu	**0.04**
0.246	100	24.6	0.079	100	7.9	16.7	30	0.5566667	Iron-Fe	**0.56**
0.018	100	1.8	-0.023	100	-2.3	4.1	30	0.1366667	Lead-Pb	**0.14**
0.106	100	10.6	0.082	100	8.2	2.4	30	0.08	Magnesium-Mg	**0.08**
0.015	100	1.5	0.033	100	3.3	-1.8	30	-0.06	Manganese-Mn	**<0.01**
	100			100			30		Mercury-Hg	**<0.01**
0.003	100	0.3	0.001	100	0.1	0.2	30	0.0066667	Nickel-NI	**<0.01**
0.112	100	11.2	0.065	100	6.5	4.7	30	0.1566667	Potassium-K	**0.16**
0.132	100	13.2	0.019	100	1.9	11.3	30	0.3766667	Selenium-Se	**0.38**
0.005	100	0.5	0.002	100	0.2	0.3	30	0.01	Silver-Ag	**0.01**
2.823	100	282.3	1.124		0	282.3	30	9.41	Sodium-Na	**9.41**
0.008	100	0.8	0.004	100	0.4	0.4	30	0.0133333	Thallium-Tl	**0.01**
0.03	100	3	0.023	100	2.3	0.7	30	0.0233333	Zinc-Zn	**0.02**

PED ID #01100208-001

NYCDEP - BROADWAY & 31ST QUEENS

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CITY_21MC100_002850939

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:** 01100208
Corona , NY 11368	**PROJECT ID :** WORLD TRADE CENTER-5 Boro Sampling
(718) 595-4650	
MR. M. FAWZY, DIRECTOR	

DATE RECEIVED	RELEASE DATE	REPORT DATE
10/10/01	10/10/01	10/10/01

COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:
10/9/01 7:55 PM	01100208-002	AIR\GAS	138th St. & 3rd AVENUE, BRONX

PARAMETER	METHOD	RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G	0.08	mg/m3
Antimony (Sb)	OSHA ID 121/125G	0.34	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	<0.01	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	0.15	mg/m3
Lead (Pb)	OSHA ID 121/125G	0.06	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	0.08	mg/m3
Selenium (Se)	OSHA ID 121/125G	0.08	mg/m3
Silver (Ag)	OSHA ID 121/125G	<0.01	mg/m3
Sodium (Na)	OSHA ID 121/125G	4.12	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
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
0.1	100	10	0.075	100	7.5	2.5	30	0.0833333	Aluminum- Al	**0.08**
0.158	100	15.8	0.056	100	5.6	10.2	30	0.34	Antimony-Sb	**0.34**
0.028	100	2.8	0.007	100	0.7	2.1	30	0.07	Arsenic-As	**0.07**
0.002	100	0.2	0	100	0	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	100	0	0.1	30	0.0033333	Cadmium-Cd	**<0.01**
0.514	100	51.4	0.51	100	51	0.4	30	0.0133333	Calcium-Ca	**<0.01**
0.016	100	1.6	0.019	100	1.9	-0.3	30	-0.01	Chromium-Cr	**<0.01**
0.013	100	1.3	0.01	100	1	0.3	30	0.01	Copper-Cu	**0.01**
0.124	100	12.4	0.079	100	7.9	4.5	30	0.15	Iron-Fe	**0.15**
-0.005	100	-0.5	-0.023	100	-2.3	1.8	30	0.06	Lead-Pb	**0.06**
0.079	100	7.9	0.082	100	8.2	-0.3	30	-0.01	Magnesium-Mg	**<0.01**
0.02	100	2	0.033	100	3.3	-1.3	30	-0.0433333	Manganese-Mn	**<0.01**
	100			100			30		Mercury-Hg	**<0.01**
0.002	100	0.2	0.001	100	0.1	0.1	30	0.0033333	Nickel-Nl	**<0.01**
0.089	100	8.9	0.065	100	6.5	2.4	30	0.08	Potassium-K	**0.08**
0.042	100	4.2	0.019	100	1.9	2.3	30	0.0766667	Selenium-Se	**0.08**
0.003	100	0.3	0.002	100	0.2	0.1	30	0.0033333	Silver-Ag	**<0.01**
2.359	100	235.9	1.124	100	112.4	123.5	30	4.1166667	Sodium-Na	**4.12**
0.002	100	0.2	0.004	100	0.4	-0.2	30	-0.0066667	Thallium-Tl	**<0.01**
0.025	100	2.5	0.023	100	2.3	0.2	30	0.0066667	Zinc-Zn	**<0.01**

PED ID #01100208-002

NYCDEP - 138TH & 3RD AVENUE BRONX

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CITY_21MC100_002850941

NYC-WTC_000367886

NYC 9/11 Public Portal Document

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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: 01100208

PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling

DATE RECEIVED	RELEASE DATE	REPORT DATE
10/10/01	10/10/01	10/10/01

COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:
10/9/01 8:20 PM	01100208-003	AIR\GAS	CENTAL PARK N. & LENOX , MANHATTAN

PARAMETER	METHOD	RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G	0.09	mg/m3
Antimony (Sb)	OSHA ID 121/125G	0.29	mg/m3
Arsenic (As)	OSHA ID 121/125G	0.17	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	0.80	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	0.04	mg/m3
Magnesium (Mg)	OSHA ID 121/125G	0.21	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	0.31	mg/m3
Selenium (Se)	OSHA ID 121/125G	0.33	mg/m3
Silver (Ag)	OSHA ID 121/125G	0.01	mg/m3
Sodium (Na)	OSHA ID 121/125G	7.51	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_002850942

NYC-WTC_000367887

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
0.103	100	10.3	0.075	100	7.5	2.8	30	0.0933333	Aluminum- Al	**0.09**
0.142	100	14.2	0.056	100	5.6	8.6	30	0.2866667	Antimony-Sb	**0.29**
0.059	100	5.9	0.007	100	0.7	5.2	30	0.1733333	Arsenic-As	**0.17**
0.001	100	0.1	0	100	0	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**
0.002	100	0.2	0	100	0	0.2	30	0.0066667	Cadmium-Cd	**<0.01**
0.75	100	75	0.51	100	51	24	30	0.8	Calcium-Ca	**0.8**
0.018	100	1.8	0.019	100	1.9	-0.1	30	-0.0033333	Chromium-Cr	**<0.01**
0.014	100	1.4	0.01	100	1	0.4	30	0.0133333	Copper-Cu	**0.01**
0.077	100	7.7	0.079	100	7.9	-0.2	30	-0.0066667	Iron-Fe	**<0.01**
-0.011	100	-1.1	-0.023	100	-2.3	1.2	30	0.04	Lead-Pb	**0.04**
0.146	100	14.6	0.082	100	8.2	6.4	30	0.2133333	Magnesium-Mg	**0.21**
0.015	100	1.5	0.033	100	3.3	-1.8	30	-0.06	Manganese-Mn	**<0.01**
	100			100			30		Mercury-Hg	**<0.01**
0.002	100	0.2	0.001	100	0.1	0.1	30	0.0033333	Nickel-Ni	**<0.01**
0.158	100	15.8	0.065	100	6.5	9.3	30	0.31	Potassium-K	**0.31**
0.118	100	11.8	0.019	100	1.9	9.9	30	0.33	Selenium-Se	**0.33**
0.005	100	0.5	0.002	100	0.2	0.3	30	0.01	Silver-Ag	**0.01**
3.377	100	337.7	1.124	100	112.4	225.3	30	7.51	Sodium-Na	**7.51**
0.005	100	0.5	0.004	100	0.4	0.1	30	0.0033333	Thallium-Tl	**<0.01**
0.023	100	2.3	0.023	100	2.3	0	30	0	Zinc-Zn	**<0.01**

PED ID #01100208-003

NYCDEP - CENTRAL PK NO & LENOX-NYC

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CITY_21MC100_002850943

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: 01100208

PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling

DATE RECEIVED	RELEASE DATE	REPORT DATE
10/10/01	10/10/01	10/10/01

COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:
10/9/01 9:25 PM	01100208-004	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	0.24	mg/m3
Arsenic (As)	OSHA ID 121/125G	0.09	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	0.27	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	<0.01	mg/m3
Lead (Pb)	OSHA ID 121/125G	0.04	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	0.15	mg/m3
Silver (Ag)	OSHA ID 121/125G	<0.01	mg/m3
Sodium (Na)	OSHA ID 121/125G	5.29	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_002850944

NYC-WTC_000367889

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
0.07	100	7	0.075	100	7.5	-0.5	30	-0.0166667	Aluminum- Al	**<0.01**
0.128	100	12.8	0.056	100	5.6	7.2	30	0.24	Antimony-Sb	**0.24**
0.034	100	3.4	0.007	100	0.7	2.7	30	0.09	Arsenic-As	**0.09**
0.001	100	0.1	0	100	0	0.1	30	0.0033333	Barium-Ba	**<0.01**
0	100	0	0	100	0	0	30	0	Beryllium-Be	**<0.01**
0.002	100	0.2	0	100	0	0.2	30	0.0066667	Cadmium-Cd	**<0.01**
0.592	100	59.2	0.51	100	51	8.2	30	0.2733333	Calcium-Ca	**0.27**
0.022	100	2.2	0.019	100	1.9	0.3	30	0.01	Chromium-Cr	**0.01**
0.02	100	2	0.01	100	1	1	30	0.0333333	Copper-Cu	**0.03**
0.066	100	6.6	0.079	100	7.9	-1.3	30	-0.0433333	Iron-Fe	**<0.01**
-0.012	100	-1.2	-0.023	100	-2.3	1.1	30	0.0366667	Lead-Pb	**0.04**
0.091	100	9.1	0.082	100	8.2	0.9	30	0.03	Magnesium-Mg	**0.03**
0.015	100	1.5	0.033	100	3.3	-1.8	30	-0.06	Manganese-Mn	**<0.01**
	100			100			30		Mercury-Hg	**<0.01**
0.002	100	0.2	0.001	100	0.1	0.1	30	0.0033333	Nickel-NI	**<0.01**
0.07	100	7	0.065	100	6.5	0.5	30	0.0166667	Potassium-K	**0.02**
0.064	100	6.4	0.019	100	1.9	4.5	30	0.15	Selenium-Se	**0.15**
0.003	100	0.3	0.002	100	0.2	0.1	30	0.0033333	Silver-Ag	**<0.01**
2.712	100	271.2	1.124	100	112.4	158.8	30	5.2933333	Sodium-Na	**5.29**
-0.002	100	-0.2	0.004	100	0.4	-0.6	30	-0.02	Thallium-Tl	**<0.01**
0.024	100	2.4	0.023	100	2.3	0.1	30	0.0033333	Zinc-Zn	**<0.01**

PED ID #01100208-004

NYCDEP - BERRY & NORTH BROOKLYN

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CITY_21MC100_002850945

NYC-WTC_000367890

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:** 01100208
Corona , NY 11368	**PROJECT ID :** WORLD TRADE CENTER-5 Boro Sampling
(718) 595-4650	
MR. M. FAWZY, DIRECTOR	

DATE RECEIVED	**RELEASE DATE**	**REPORT DATE**
10/10/01	10/10/01	10/10/01

COLLECT DATE:	**SAMPLE ID#:**	**MATRIX:**	**SAMPLE ORIGIN:**
10/9/01 10:05 PM	01100208-005	AIR\GAS	ATLANTIC AVE. & SMITH ST., BROOKLYN

PARAMETER	METHOD	RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G	0.12	mg/m3
Antimony (Sb)	OSHA ID 121/125G	0.01	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	<0.01	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	0.02	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	0.10	mg/m3
Selenium (Se)	OSHA ID 121/125G	0.04	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_002850946

NYC-WTC_000367891

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
0.111	100	11.1	0.075	100	7.5	3.6	30	0.12	Aluminum- Al	**0.12**
0.059	100	5.9	0.056	100	5.6	0.3	30	0.01	Antimony-Sb	**0.01**
0.015	100	1.5	0.007	100	0.7	0.8	30	0.0266667	Arsenic-As	**0.03**
0.001	100	0.1	0	100	0	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	100	0	0	100	0	0	30	0	Cadmium-Cd	**<0.01**
0.493	100	49.3	0.51	100	51	-1.7	30	-0.0566667	Calcium-Ca	**<0.01**
0.016	100	1.6	0.019	100	1.9	-0.3	30	-0.01	Chromium-Cr	**<0.01**
0.013	100	1.3	0.01	100	1	0.3	30	0.01	Copper-Cu	**0.01**
0.059	100	5.9	0.079	100	7.9	-2	30	-0.0666667	Iron-Fe	**<0.01**
-0.025	100	-2.5	-0.023	100	-2.3	-0.2	30	-0.0066667	Lead-Pb	**<0.01**
0.088	100	8.8	0.082	100	8.2	0.6	30	0.02	Magnesium-Mg	**0.02**
0.031	100	3.1	0.033	100	3.3	-0.2	30	-0.0066667	Manganese-Mn	**<0.01**
	100			100			30		Mercury-Hg	**<0.01**
0.002	100	0.2	0.001	100	0.1	0.1	30	0.0033333	Nickel-NI	**<0.01**
0.096	100	9.6	0.065	100	6.5	3.1	30	0.1033333	Potassium-K	**0.1**
0.031	100	3.1	0.019	100	1.9	1.2	30	0.04	Selenium-Se	**0.04**
0.003	100	0.3	0.002	100	0.2	0.1	30	0.0033333	Silver-Ag	**<0.01**
0.97	100	97	1.124	100	112.4	-15.4	30	-0.5133333	Sodium-Na	**<0.01**
0	100	0	0.004	100	0.4	-0.4	30	-0.0133333	Thallium-Tl	**<0.01**
0.027	100	2.7	0.023	100	2.3	0.4	30	0.0133333	Zinc-Zn	**0.01**

PED ID #01100208-005

NYCDEP -ATLANTIC AV & SMITH STR. BROOKLYN

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CITY_21MC100_002850947

NYC-WTC_000367892

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: 01100208

PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling

DATE RECEIVED	RELEASE DATE	REPORT DATE
10/10/01	10/10/01	10/10/01

COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:
10/9/01 10:50 PM	01100208-006	AIR\GAS	BAY ST & VICTORY BLVD., STATEN ISLAND

PARAMETER	METHOD	RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G	0.12	mg/m3
Antimony (Sb)	OSHA ID 121/125G	0.12	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	0.33	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	0.73	mg/m3
Lead (Pb)	OSHA ID 121/125G	<0.01	mg/m3
Magnesium (Mg)	OSHA ID 121/125G	0.06	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	0.16	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	3.56	mg/m3
Thallium (Tl)	OSHA ID 121/125G	<0.01	mg/m3
Zinc (Zn)	OSHA ID 121/125G	0.05	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_002850948

NYC-WTC_000367893

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
0.111	100	11.1	0.075	100	7.5	3.6	30	0.12	Aluminum- Al	**0.12**
0.091	100	9.1	0.056	100	5.6	3.5	30	0.1166667	Antimony-Sb	**0.12**
0.007	100	0.7	0.007	100	0.7	0	30	0	Arsenic-As	**<0.01**
0.001	100	0.1	0	100	0	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	100	0	0	100	0	0	30	0	Cadmium-Cd	**<0.01**
0.61	100	61	0.51	100	51	10	30	0.3333333	Calcium-Ca	**0.33**
0.023	100	2.3	0.019	100	1.9	0.4	30	0.0133333	Chromium-Cr	**0.01**
0.012	100	1.2	0.01	100	1	0.2	30	0.0066667	Copper-Cu	**<0.01**
0.297	100	29.7	0.079	100	7.9	21.8	30	0.7266667	Iron-Fe	**0.73**
-0.023	100	-2.3	-0.023	100	-2.3	0	30	0	Lead-Pb	**<0.01**
0.1	100	10	0.082	100	8.2	1.8	30	0.06	Magnesium-Mg	**0.06**
0.029	100	2.9	0.033	100	3.3	-0.4	30	-0.0133333	Manganese-Mn	**<0.01**
	100			100			30		Mercury-Hg	**<0.01**
0.001	100	0.1	0.001	100	0.1	0	30	0	Nickel-NI	**<0.01**
0.112	100	11.2	0.065	100	6.5	4.7	30	0.1566667	Potassium-K	**0.16**
0.04	100	4	0.019	100	1.9	2.1	30	0.07	Selenium-Se	**0.07**
0.002	100	0.2	0.002	100	0.2	0	30	0	Silver-Ag	**<0.01**
2.191	100	219.1	1.124	100	112.4	106.7	30	3.5566667	Sodium-Na	**3.56**
-0.002	100	-0.2	0.004	100	0.4	-0.6	30	-0.02	Thallium-Tl	**<0.01**
0.038	100	3.8	0.023	100	2.3	1.5	30	0.05	Zinc-Zn	**0.05**

01100208-006

NYCDEP - BAY STR & VICTORY BLVD. SI

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CITY_21MC100_002850949

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: 01100208

PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling

DATE RECEIVED	RELEASE DATE	REPORT DATE
10/10/01	10/10/01	10/10/01

COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:
10/9/01 5:00 PM	01100208-007	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	0.03	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/m^3
0.075	100	7.5	0.091	100	9.1	-1.6	30	-0.0533333	Aluminum- Al	**<0.01**
0.056	100	5.6	0.231	100	23.1	-17.5	30	-0.5833333	Antimony-Sb	**<0.01**
0.007	100	0.7	0.047	100	4.7	-4	30	-0.1333333	Arsenic-As	**<0.01**
0	100	0	0.001	100	0.1	-0.1	30	-0.0033333	Barium-Ba	**<0.01**
0	100	0	0.001	100	0.1	-0.1	30	-0.0033333	Beryllium-Be	**<0.01**
0	100	0	0.002	100	0.2	-0.2	30	-0.0066667	Cadmium-Cd	**<0.01**
0.51	100	51	0.571	100	57.1	-6.1	30	-0.2033333	Calcium-Ca	**<0.01**
0.019	100	1.9	0.01	100	1	0.9	30	0.03	Chromium-Cr	**0.03**
0.01	100	1	0.017	100	1.7	-0.7	30	-0.0233333	Copper-Cu	**<0.01**
0.079	100	7.9	0.14	100	14	-6.1	30	-0.2033333	Iron-Fe	**<0.01**
-0.023	100	-2.3	-0.012	100	-1.2	-1.1	30	-0.0366667	Lead-Pb	**<0.01**
0.082	100	8.2	0.078	100	7.8	0.4	30	0.0133333	Magnesium-Mg	**0.01**
0.033	100	3.3	0.036	100	3.6	-0.3	30	-0.01	Manganese-Mn	**<0.01**
	100			100			30		Mercury-Hg	**<0.01**
0.001	100	0.1	0.002	100	0.2	-0.1	30	-0.0033333	Nickel-NI	**<0.01**
0.065	100	6.5	0.078	100	7.8	-1.3	30	-0.0433333	Potassium-K	**<0.01**
0.019	100	1.9	0.067	100	6.7	-4.8	30	-0.16	Selenium-Se	**<0.01**
0.002	100	0.2	0.002	100	0.2	0	30	0	Silver-Ag	**<0.01**
1.124	100	112.4	2.328	100	232.8	-120.4	30	-4.0133333	Sodium-Na	**<0.01**
0.004	100	0.4	0.002	100	0.2	0.2	30	0.0066667	Thallium-Tl	**<0.01**
0.023	100	2.3	0.027	100	2.7	-0.4	30	-0.0133333	Zinc-Zn	**<0.01**

PED ID #01100208-007

NYCDEP - TRIP/FIELD BLANK

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CITY_21MC100_002850951

NYC-WTC_000367896

NYC 9/11 Public Portal Document

Prepared Exclusively For:

NYCDEP-Emergency Response & Tech Assmt.
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PEDNEAULT ASSOCIATES, INC.
1615 NINTH AVENUE, BOX 205, BOHEMIA, N.Y. 11716

LAB NUMBER: 01100208

PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling

DATE RECEIVED		RELEASE DATE	REPORT DATE
10/10/01		10/10/01	10/10/01
COLLECT DATE:	**SAMPLE ID#:**	**MATRIX:**	**SAMPLE ORIGIN:**
10/9/01 9:25 PM	01100208-008	AIR\GAS	BERRY & N 11th ST/DUPLICATE

PARAMETER	METHOD	RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G	<0.01	mg/m3
Antimony (Sb)	OSHA ID 121/125G	0.08	mg/m3
Arsenic (As)	OSHA ID 121/125G	0.04	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	0.52	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	0.09	mg/m3
Silver (Ag)	OSHA ID 121/125G	<0.01	mg/m3
Sodium (Na)	OSHA ID 121/125G	1.12	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_002850952

NYC-WTC_000367897

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
0.072	100	7.2	0.075	100	7.5	-0.3	30	-0.01	Aluminum- Al	**<0.01**
0.081	100	8.1	0.056	100	5.6	2.5	30	0.0833333	Antimony-Sb	**0.08**
0.02	100	2	0.007	100	0.7	1.3	30	0.0433333	Arsenic-As	**0.04**
0.001	100	0.1	0	100	0	0.1	30	0.0033333	Barium-Ba	**<0.01**
0	100	0	0	100	0	0	30	0	Beryllium-Be	**<0.01**
0	100	0	0	100	0	0	30	0	Cadmium-Cd	**<0.01**
0.462	100	46.2	0.51	100	51	-4.8	30	-0.16	Calcium-Ca	**<0.01**
0.023	100	2.3	0.019	100	1.9	0.4	30	0.0133333	Chromium-Cr	**0.01**
0.006	100	0.6	0.01	100	1	-0.4	30	-0.0133333	Copper-Cu	**<0.01**
0.235	100	23.5	0.079	100	7.9	15.6	30	0.52	Iron-Fe	**0.52**
-0.019	100	-1.9	-0.023	100	-2.3	0.4	30	0.0133333	Lead-Pb	**0.01**
0.082	100	8.2	0.082	100	8.2	0	30	0	Magnesium-Mg	**<0.01**
0.027	100	2.7	0.033	100	3.3	-0.6	30	-0.02	Manganese-Mn	**<0.01**
	100			100			30		Mercury-Hg	**<0.01**
0.001	100	0.1	0.001	100	0.1	0	30	0	Nickel-NI	**<0.01**
0.056	100	5.6	0.065	100	6.5	-0.9	30	-0.03	Potassium-K	**<0.01**
0.046	100	4.6	0.019	100	1.9	2.7	30	0.09	Selenium-Se	**0.09**
0.003	100	0.3	0.002	100	0.2	0.1	30	0.0033333	Silver-Ag	**<0.01**
1.459	100	145.9	1.124	100	112.4	33.5	30	1.1166667	Sodium-Na	**1.12**
-0.003	100	-0.3	0.004	100	0.4	-0.7	30	-0.0233333	Thallium-Tl	**<0.01**
0.019	100	1.9	0.023	100	2.3	-0.4	30	-0.0133333	Zinc-Zn	**<0.01**

PED ID #01100208-008

NYCDEP - DUPLICATE OF #01100208-004

c:\HEM FILES\NYCDEP HAZMAT\m01100208.xls

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