

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: 01100185**PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling**

DATE RECEIVED		RELEASE DATE	REPORT DATE	
10/8/01		10/9/01	10/9/01	
COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:	
10/8/01 5:30 PM	01100185-001	AIR/GAS	BROADWAY AVE & 31st ST. , QUEENS	
PARAMETER	METHOD		RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G		<0.01	mg/m3
Antimony (Sb)	OSHA ID 121/125G		1.27	mg/m3
Arsenic (As)	OSHA ID 121/125G		0.29	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		0.19	mg/m3
Chromium (Cr)	OSHA ID 121/125G		0.04	mg/m3
Copper (Cu)	OSHA ID 121/125G		0.04	mg/m3
Iron (Fe)	OSHA ID 121/125G		0.34	mg/m3
Lead (Pb)	OSHA ID 121/125G		0.06	mg/m3
Magnesium (Mg)	OSHA ID 121/125G		0.10	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		0.32	mg/m3
Silver (Ag)	OSHA ID 121/125G		<0.01	mg/m3
Sodium (Na)	OSHA ID 121/125G		0.70	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.

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 NYS ELAP #10224
 MWBE #46075

SUPPLEMENTAL II

CITY_21MC100_002851391

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 GRAVIMETRIC FACTORS

AV= Air Volume Sampled

AR=Analytical Result

IARR=Analytical Reportable Result in mg/m³ (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-BBSV = AR	AV Liters	AR/AV	ANALYTE	ARR mg/m ³
0.066	100	6.6	0.083	100	8.3	-1.7	30	-0.0566667	Aluminum- Al	<0.01
0.437	100	43.7	0.057	100	5.7	38	30	1.2666667	Antimony-Sb	1.27
0.062	100	6.2	-0.024	100	-2.4	8.6	30	0.2866667	Arsenic-As	0.29
0.003	100	0.3	0.003	100	0.3	0	30	0	Barium-Ba	<0.01
0.002	100	0.2	0	100	0	0.2	30	0.0066667	Beryllium-Be	<0.01
0.003	100	0.3	0	100	0	0.3	30	0.01	Cadmium-Cd	0.01
0.57	100	57	0.513	100	51.3	5.7	30	0.19	Calcium-Ca	0.19
0.024	100	2.4	0.012	100	1.2	1.2	30	0.04	Chromium-Cr	0.04
0.012	100	1.2	0.001	100	0.1	1.1	30	0.0366667	Copper-Cu	0.04
0.136	100	13.6	0.034	100	3.4	10.2	30	0.34	Iron-Fe	0.34
0.017	100	1.7	0	100	0	1.7	30	0.0566667	Lead-Pb	0.06
0.11	100	11	0.08	100	8	3	30	0.1	Magnesium-Mg	0.1
0.013	100	1.3	0.015	100	1.5	-0.2	30	-0.0066667	Manganese-Mn	<0.01
	100			100			30		Mercury-Hg	<0.01
0.002	100	0.2	-0.004	100	-0.4	0.6	30	0.02	Nickel-Ni	0.02
0.048	100	4.8	0.056	100	5.6	-0.8	30	-0.0266667	Potassium-K	<0.01
0.047	100	4.7	-0.048	100	-4.8	9.5	30	0.3166667	Selenium-Se	0.32
0.002	100	0.2	0.016	100	1.6	-1.4	30	-0.0466667	Silver-Ag	<0.01
2.112	100	211.2	1.901	100	190.1	21.1	30	0.7033333	Sodium-Na	0.7
-0.008	100	-0.8	-0.009	100	-0.9	0.1	30	0.0033333	Thallium-Tl	<0.01
0.02	100	2	0.014	100	1.4	0.6	30	0.02	Zinc-Zn	0.02

PED ID #01100185-001

NYCDEP - BROADWAY & 31ST QUEENS

<i>Prepared Exclusively For:</i> 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: 01100185 PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling
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DATE RECEIVED		RELEASE DATE		REPORT DATE
10/8/01		10/9/01		10/9/01
COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:	
10/8/01 6:00 PM	01100185-002	AIR\GAS	138th St. & 3rd AVENUE, BRONX	
PARAMETER	METHOD		RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G		0.17	mg/m3
Antimony (Sb)	OSHA ID 121/125G		0.38	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		0.32	mg/m3
Chromium (Cr)	OSHA ID 121/125G		0.02	mg/m3
Copper (Cu)	OSHA ID 121/125G		0.02	mg/m3
Iron (Fe)	OSHA ID 121/125G		0.27	mg/m3
Lead (Pb)	OSHA ID 121/125G		<0.01	mg/m3
Magnesium (Mg)	OSHA ID 121/125G		0.18	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		0.05	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		0.14	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.

SUPPLEMENTAL II

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NYS ELAP #10224
MWBE #46075

CITY_21MC100_002851393

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 GRAVIMETRIC FACTORS
IAV= Air Volume Sampled
IAR=Analytical Result
IARR=Analytical Reportable Result in mg/m³ (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 - BBSV = AR	AV, Liters	AR/AV	ANALYTE	ARR mg/m ³
0.133	100		13.3	0.083	100		8.3	5	30	0.1666667	Aluminum-Al	0.17
0.172	100		17.2	0.057	100		5.7	11.5	30	0.3833333	Antimony-Sb	0.38
0.002	100		0.2	-0.024	100		-2.4	2.6	30	0.0866667	Arsenic-As	0.09
0.002	100		0.2	0.003	100		0.3	-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	100		0	0.1	30	0.0033333	Cadmium-Cd	<0.01
0.61	100		61	0.513	100		51.3	9.7	30	0.3233333	Calcium-Ca	0.32
0.018	100		1.8	0.012	100		1.2	0.6	30	0.02	Chromium-Cr	0.02
0.008	100		0.8	0.001	100		0.1	0.7	30	0.0233333	Copper-Cu	0.02
0.114	100		11.4	0.034	100		3.4	8	30	0.2666667	Iron-Fe	0.27
0.002	100		0.2	0	100		0	0.2	30	0.0066667	Lead-Pb	<0.01
0.134	100		13.4	0.08	100		8	5.4	30	0.18	Magnesium-Mg	0.18
0.019	100		1.9	0.015	100		1.5	0.4	30	0.0133333	Manganese-Mn	0.01
	100				100				30		Mercury-Hg	<0.01
-0.004	100		-0.4	-0.004	100		-0.4	0	30	0	Nickel-Ni	<0.01
0.07	100		7	0.056	100		5.6	1.4	30	0.0466667	Potassium-K	0.05
-0.016	100		-1.6	-0.048	100		-4.8	3.2	30	0.1066667	Selenium-Se	0.11
0.002	100		0.2	0.016	100		1.6	-1.4	30	-0.0466667	Silver-Ag	<0.01
1.943	100		194.3	1.901	100		190.1	4.2	30	0.14	Sodium-Na	0.14
-0.011	100		-1.1	-0.009	100		-0.9	-0.2	30	-0.0066667	Thallium-Tl	<0.01
0.019	100		1.9	0.014	100		1.4	0.5	30	0.0166667	Zinc-Zn	0.02

PED ID #01100185-002

NYCDEP - 138TH & 3RD AVENUE BRONX

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MR. M. FAWZY, DIRECTOR

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

LAB NUMBER: 01100185

PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling

DATE RECEIVED		RELEASE DATE		REPORT DATE
10/8/01		10/9/01		10/9/01
COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:	
10/8/01 6:30 PM	01100185-003	AIR\GAS	CENTAL PARK N. & LENOX, MANHATTAN	
PARAMETER	METHOD		RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G		0.07	mg/m3
Antimony (Sb)	OSHA ID 121/125G		0.23	mg/m3
Arsenic (As)	OSHA ID 121/125G		0.14	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		0.36	mg/m3
Lead (Pb)	OSHA ID 121/125G		0.16	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		0.09	mg/m3
Selenium (Se)	OSHA ID 121/125G		0.24	mg/m3
Silver (Ag)	OSHA ID 121/125G		<0.01	mg/m3
Sodium (Na)	OSHA ID 121/125G		0.45	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.

SUPPLEMENTAL II

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 MWBE #46075

CITY_21MC100_002851395

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 GRAVIMETRIC FACTORS
AV= Air Volume Sampled
AR=Analytical Result
IARR=Analytical Reportable Result in mg/m³ (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-BBSV	AR	AV Liters	AR/AV	ANALYTE	ARR mg/m ³
0.104	100	10.4	10.4	0.083	100	8.3	8.3	2.1	30	0.07	0.07	Aluminum-Al	0.07
0.126	100	12.6	12.6	0.057	100	5.7	5.7	6.9	30	0.23	0.23	Antimony-Sb	0.23
0.019	100	1.9	1.9	-0.024	100	-2.4	-2.4	4.3	30	0.1433333	0.14	Arsenic-As	0.14
0.003	100	0.3	0.3	0.003	100	0.3	0.3	0	30	0	<0.01	Barium-Ba	<0.01
0	100	0	0	0	100	0	0	0	30	0	<0.01	Beryllium-Be	<0.01
0.002	100	0.2	0.2	0	100	0	0	0.2	30	0.0066667	<0.01	Cadmium-Cd	<0.01
0.483	100	48.3	48.3	0.513	100	51.3	51.3	-3	30	-0.1	<0.01	Calcium-Ca	<0.01
0.012	100	1.2	1.2	0.012	100	1.2	1.2	0	30	0	<0.01	Chromium-Cr	<0.01
0.004	100	0.4	0.4	0.001	100	0.1	0.1	0.3	30	0.01	0.01	Copper-Cu	0.01
0.141	100	14.1	14.1	0.034	100	3.4	3.4	10.7	30	0.3566667	0.36	Iron-Fe	0.36
0.048	100	4.8	4.8	0	100	0	0	4.8	30	0.16	0.16	Lead-Pb	0.16
0.082	100	8.2	8.2	0.08	100	8	8	0.2	30	0.0066667	<0.01	Magnesium-Mg	<0.01
0.021	100	2.1	2.1	0.015	100	1.5	1.5	0.6	30	0.02	0.02	Manganese-Mn	0.02
	100				100				30		<0.01	Mercury-Hg	<0.01
-0.003	100	-0.3	-0.3	-0.004	100	-0.4	-0.4	0.1	30	0.0033333	<0.01	Nickel-Ni	<0.01
0.082	100	8.2	8.2	0.056	100	5.6	5.6	2.6	30	0.0866667	0.09	Potassium-K	0.09
0.024	100	2.4	2.4	-0.048	100	-4.8	-4.8	7.2	30	0.24	0.24	Selenium-Se	0.24
0.001	100	0.1	0.1	0.016	100	1.6	1.6	-1.5	30	-0.05	<0.01	Silver-Ag	<0.01
2.035	100	203.5	203.5	1.901	100	190.1	190.1	13.4	30	0.4466667	0.45	Sodium-Na	0.45
-0.008	100	-0.8	-0.8	-0.009	100	-0.9	-0.9	0.1	30	0.0033333	<0.01	Thallium-Tl	<0.01
0.019	100	1.9	1.9	0.014	100	1.4	1.4	0.5	30	0.0166667	0.02	Zinc-Zn	0.02

PED ID #01100185-003

NYCDEP - CENTRAL PK NO & LENOX-NYC

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DATE RECEIVED		RELEASE DATE		REPORT DATE
10/8/01		10/9/01		10/9/01
COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:	
10/8/01 7:20 PM	01100185-004	AIR/GAS	BERRY ST. & NORTH 11th ST, BROOKLYN	
PARAMETER	METHOD		RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G		0.02	mg/m3
Antimony (Sb)	OSHA ID 121/125G		0.07	mg/m3
Arsenic (As)	OSHA ID 121/125G		0.06	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		0.02	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		0.06	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.

SUPPLEMENTAL II

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NYS ELAP #10224
MWBE #46075

CITY_21MC100_002851397

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 GRAVIMETRIC FACTORS
AV= Air Volume Sampled
AR=Analytical Result
IARR=Analytical Reportable Result in mg/m³ (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-BBSV = AR	AV Liters	AR/AV	ANALYTE	ARR mg/m ³
0.09	100	9	0.083	100	8.3	0.7	30	0.0233333	Aluminum-Al	0.02
0.077	100	7.7	0.057	100	5.7	2	30	0.0666667	Antimony-Sb	0.07
-0.006	100	-0.6	-0.024	100	-2.4	1.8	30	0.06	Arsenic-As	0.06
0.003	100	0.3	0.003	100	0.3	0	30	0	Barium-Ba	<0.01
0.001	100	0.1	0	100	0	0.1	30	0.0033333	Beryllium-Be	<0.01
0.001	100	0.1	0	100	0	0.1	30	0.0033333	Cadmium-Cd	<0.01
0.371	100	37.1	0.513	100	51.3	-14.2	30	-0.4733333	Calcium-Ca	<0.01
0.015	100	1.5	0.012	100	1.2	0.3	30	0.01	Chromium-Cr	0.01
0.002	100	0.2	0.001	100	0.1	0.1	30	0.0033333	Copper-Cu	<0.01
0.041	100	4.1	0.034	100	3.4	0.7	30	0.0233333	Iron-Fe	0.02
0	100	0	0	100	0	0	30	0	Lead-Pb	<0.01
0.062	100	6.2	0.08	100	8	-1.8	30	-0.06	Magnesium-Mg	<0.01
0.018	100	1.8	0.015	100	1.5	0.3	30	0.01	Manganese-Mn	0.01
	100			100			30		Mercury-Hg	<0.01
-0.004	100	-0.4	-0.004	100	-0.4	0	30	0	Nickel-Ni	<0.01
0.073	100	7.3	0.056	100	5.6	1.7	30	0.0566667	Potassium-K	0.06
-0.037	100	-3.7	-0.048	100	-4.8	1.1	30	0.0366667	Selenium-Se	0.04
0	100	0	0.016	100	1.6	-1.6	30	-0.0533333	Silver-Ag	<0.01
1.785	100	178.5	1.901	100	190.1	-11.6	30	-0.3866667	Sodium-Na	<0.01
-0.005	100	-0.5	-0.009	100	-0.9	0.4	30	0.0133333	Thallium-Tl	0.01
0.015	100	1.5	0.014	100	1.4	0.1	30	0.0033333	Zinc-Zn	<0.01

PED ID #01100185-004

NYCDEP - BERRY & NORTH BROOKLYN

C:\MEMFILES\NYCDEP\HAZMAT\001100185-004

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: 01100185 PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling
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DATE RECEIVED 10/8/01		RELEASE DATE 10/9/01		REPORT DATE 10/9/01
COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:	
10/8/01 7:45 PM	01100185-005	AIR\GAS	ATLANTIC AVE. & SMITH ST., BROOKLYN	
PARAMETER	METHOD		RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G		<0.01	mg/m3
Antimony (Sb)	OSHA ID 121/125G		0.10	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		0.52	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		0.71	mg/m3
Lead (Pb)	OSHA ID 121/125G		0.01	mg/m3
Magnesium (Mg)	OSHA ID 121/125G		0.11	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		0.03	mg/m3
Potassium (K)	OSHA ID 121/125G		0.03	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		2.39	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.

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 MWBE #46075

SUPPLEMENTAL II

CITY_21MC100_002851399

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 GRAVIMETRIC FACTORS
AV= Air Volume Sampled
AR=Analytical Result
ARR=Analytical Reportable Result in mg/m³ (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 - BBSV = AR	AV Liters	AR/AV	ANALYTE	ARR mg/m ³
0.072	100	7.2	0.083	100	8.3	-1.1	30	-0.0366667	Aluminum-Al	<0.01
0.088	100	8.8	0.057	100	5.7	3.1	30	0.1033333	Antimony-Sb	0.1
-0.016	100	-1.6	-0.024	100	-2.4	0.8	30	0.0266667	Arsenic-As	0.03
0.003	100	0.3	0.003	100	0.3	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	100	0	0.1	30	0.0033333	Cadmium-Cd	<0.01
0.67	100	67	0.513	100	51.3	15.7	30	0.5233333	Calcium-Ca	0.52
0.015	100	1.5	0.012	100	1.2	0.3	30	0.01	Chromium-Cr	0.01
0.005	100	0.5	0.001	100	0.1	0.4	30	0.0133333	Copper-Cu	0.01
0.246	100	24.6	0.034	100	3.4	21.2	30	0.7066667	Iron-Fe	0.71
0.004	100	0.4	0	100	0	0.4	30	0.0133333	Lead-Pb	0.01
0.112	100	11.2	0.08	100	8	3.2	30	0.1066667	Magnesium-Mg	0.11
0.016	100	1.6	0.015	100	1.5	0.1	30	0.0033333	Manganese-Mn	<0.01
	100			100			30		Mercury-Hg	<0.01
0.004	100	0.4	-0.004	100	-0.4	0.8	30	0.0266667	Nickel-Ni	0.03
0.066	100	6.6	0.056	100	5.6	1	30	0.0333333	Potassium-K	0.03
-0.035	100	-3.5	-0.048	100	-4.8	1.3	30	0.0433333	Selenium-Se	0.04
0	100	0	0.016	100	1.6	-1.6	30	-0.0533333	Silver-Ag	<0.01
2.618	100	261.8	1.901	100	190.1	71.7	30	2.39	Sodium-Na	2.39
-0.011	100	-1.1	-0.009	100	-0.9	-0.2	30	-0.0066667	Thallium-Tl	<0.01
0.017	100	1.7	0.014	100	1.4	0.3	30	0.01	Zinc-Zn	0.01

PED ID #01100185-005

NYCDEP -ATLANTIC AV & SMITH STR. BROOKLYN

<i>Prepared Exclusively For:</i> 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: 01100185 PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling
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DATE RECEIVED		RELEASE DATE		REPORT DATE
10/8/01		10/9/01		10/9/01
COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:	
10/8/01 9:00 PM	01100185-006	AIR/GAS	BAY ST & VICTORY BLVD., STATEN ISLAND	
PARAMETER	METHOD		RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G		0.03	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		0.16	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		0.02	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.

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MWBE #46075

SUPPLEMENTAL II

CITY_21MC100_002851401

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 GRAVIMETRIC FACTORS
AV= Air Volume Sampled
AR=Analytical Result
IARR=Analytical Reportable Result in mg/m³ (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-BBSV = AR	AV Liters	AR/AV	ANALYTE	ARR mg/m ³
0.092	100	9.2	0.083	100	8.3	0.9	30	0.03	Aluminum-Al	0.03
0.047	100	4.7	0.057	100	5.7	-1	30	-0.0333333	Antimony-Sb	<0.01
-0.016	100	-1.6	-0.024	100	-2.4	0.8	30	0.0266667	Arsenic-As	0.03
0.003	100	0.3	0.003	100	0.3	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	100	0	0	100	0	0	30	0	Cadmium-Cd	<0.01
0.416	100	41.6	0.513	100	51.3	-9.7	30	-0.3233333	Calcium-Ca	<0.01
0.012	100	1.2	0.012	100	1.2	0	30	0	Chromium-Cr	<0.01
0.002	100	0.2	0.001	100	0.1	0.1	30	0.0033333	Copper-Cu	<0.01
0.081	100	8.1	0.034	100	3.4	4.7	30	0.1566667	Iron-Fe	0.16
0	100	0	0	100	0	0	30	0	Lead-Pb	<0.01
0.078	100	7.8	0.08	100	8	-0.2	30	-0.0066667	Magnesium-Mg	<0.01
0.019	100	1.9	0.015	100	1.5	0.4	30	0.0133333	Manganese-Mn	0.01
	100			100			30		Mercury-Hg	<0.01
-0.004	100	-0.4	-0.004	100	-0.4	0	30	0	Nickel-Ni	<0.01
0.063	100	6.3	0.056	100	5.6	0.7	30	0.0233333	Potassium-K	0.02
-0.057	100	-5.7	-0.048	100	-4.8	-0.9	30	-0.03	Selenium-Se	<0.01
0	100	0	0.016	100	1.6	-1.6	30	-0.0533333	Silver-Ag	<0.01
1.796	100	179.6	1.901	100	190.1	-10.5	30	-0.35	Sodium-Na	<0.01
-0.007	100	-0.7	-0.009	100	-0.9	0.2	30	0.0066667	Thallium-Tl	<0.01
0.016	100	1.6	0.014	100	1.4	0.2	30	0.0066667	Zinc-Zn	<0.01

PED ID #01100185-006

NYCDEP - BAY STR & VICTORY BLVD. SI

c:/JEM FILES/NYCDEP-HAZMAT/m01100185.xls

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: 01100185

PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling

DATE RECEIVED		RELEASE DATE		REPORT DATE
10/8/01		10/9/01		10/9/01
COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:	
10/8/01 4:00 PM	01100185-007	AIR\GAS	TRIP BLANKS	
PARAMETER	METHOD		RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G		0.03	mg/m3
Antimony (Sb)	OSHA ID 121/125G		0.03	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		0.22	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		<0.01	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		<0.01	mg/m3
Selenium (Se)	OSHA ID 121/125G		0.02	mg/m3
Silver (Ag)	OSHA ID 121/125G		0.05	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.

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 MWBE #46075

SUPPLEMENTAL II

CITY_21MC100_002851403

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 GRAVIMETRIC FACTORS TB= TRIP/FIELD BLANK
 AV= Air Volume Sampled
 AR=Analytical Result
 IARR=Analytical Reportable Result in mg/m³ (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 RABSV = RABBSV	TB-RAB = AR	AV Liters	AR/AV	ANALYTE	ARR mg/m ³
0.083	100	8.3	0.073	100	7.3	1	30	0.0333333	Aluminum-Al	0.03
0.057	100	5.7	0.049	100	4.9	0.8	30	0.0266667	Antimony-Sb	0.03
-0.024	100	-2.4	-0.023	100	-2.3	-0.1	30	-0.0033333	Arsenic-As	<0.01
0.003	100	0.3	0.002	100	0.2	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
0.513	100	51.3	0.446	100	44.6	6.7	30	0.2233333	Calcium-Ca	0.22
0.012	100	1.2	0.005	100	0.5	0.7	30	0.0233333	Chromium-Cr	0.02
0.001	100	0.1	0.002	100	0.2	-0.1	30	-0.0033333	Copper-Cu	<0.01
0.034	100	3.4	0.104	100	10.4	-7	30	-0.2333333	Iron-Fe	<0.01
0	100	0	0	100	0	0	30	0	Lead-Pb	<0.01
0.08	100	8	0.075	100	7.5	0.5	30	0.0166667	Magnesium-Mg	0.02
0.015	100	1.5	0.014	100	1.4	0.1	30	0.0033333	Manganese-Mn	<0.01
	100			100			30		Mercury-Hg	<0.01
-0.004	100	-0.4	-0.005	100	-0.5	0.1	30	0.0033333	Nickel-Ni	<0.01
0.056	100	5.6	0.073	100	7.3	-1.7	30	-0.0566667	Potassium-K	<0.01
-0.048	100	-4.8	-0.055	100	-5.5	0.7	30	0.0233333	Selenium-Se	0.02
0.016	100	1.6	0	100	0	1.6	30	0.0533333	Silver-Ag	0.05
1.901	100	190.1	2.082	100	208.2	-18.1	30	-0.6033333	Sodium-Na	<0.01
-0.009	100	-0.9	-0.01	100	-1	0.1	30	0.0033333	Thallium-Tl	<0.01
0.014	100	1.4	0.017	100	1.7	-0.3	30	-0.01	Zinc-Zn	<0.01

PED ID #01100185-007

NYCDEP - TRIP/FIELD BLANK