

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: 01100166 PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling
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DATE RECEIVED		RELEASE DATE		REPORT DATE
10/6/01		10/8/01		10/8/01
COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:	
10/5/01 7:35 PM	01100166-001	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		0.68	mg/m3
Arsenic (As)	OSHA ID 121/125G		0.16	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		0.25	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		0.24	mg/m3
Lead (Pb)	OSHA ID 121/125G		0.05	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		0.15	mg/m3
Selenium (Se)	OSHA ID 121/125G		0.18	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_002834990

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

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
0.095	100	9.5	0.107	100	10.7	-1.2	30	-0.04	Aluminum-Al	<0.01
0.214	100	21.4	0.01	100	1	20.4	30	0.68	Antimony-Sb	0.68
0.041	100	4.1	-0.008	100	-0.8	4.9	30	0.1633333	Arsenic-As	0.16
0.006	100	0.6	0.004	100	0.4	0.2	30	0.0066667	Barium-Ba	<0.01
0.001	100	0.1	-0.001	100	-0.1	0.2	30	0.0066667	Beryllium-Be	<0.01
0.003	100	0.3	0.001	100	0.1	0.2	30	0.0066667	Cadmium-Cd	<0.01
0.516	100	51.6	0.442	100	44.2	7.4	30	0.2466667	Calcium-Ca	0.25
0.017	100	1.7	0.017	100	1.7	0	30	0	Chromium-Cr	<0.01
0.026	100	2.6	0.014	100	1.4	1.2	30	0.04	Copper-Cu	0.04
0.125	100	12.5	0.053	100	5.3	7.2	30	0.24	Iron-Fe	0.24
0.02	100	2	0.006	100	0.6	1.4	30	0.0466667	Lead-Pb	0.05
0.084	100	8.4	0.081	100	8.1	0.3	30	0.01	Magnesium-Mg	0.01
0.019	100	1.9	0.031	100	3.1	-1.2	30	-0.04	Manganese-Mn	<0.01
	100			100			30		Mercury-Hg	<0.01
0.003	100	0.3	0.002	100	0.2	0.1	30	0.0033333	Nickel-Ni	<0.01
0.215	100	21.5	0.169	100	16.9	4.6	30	0.1533333	Potassium-K	0.15
0.088	100	8.8	0.033	100	3.3	5.5	30	0.1833333	Selenium-Se	0.18
0.001	100	0.1	0.002	100	0.2	-0.1	30	-0.0033333	Silver-Ag	<0.01
3.221	100	322.1	3.378	100	337.8	-15.7	30	-0.5233333	Sodium-Na	<0.01
-0.001	100	-0.1	-0.005	100	-0.5	0.4	30	0.0133333	Thallium-Tl	0.01
0.024	100	2.4	0.02	100	2	0.4	30	0.0133333	Zinc-Zn	0.01

PED ID #01100166-001

NYCDEP - BROADWAY & 31ST QUEENS

c:/JEM FILES/NYCDEP-HAZMAT/m01100166.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: 01100166

PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling

DATE RECEIVED		RELEASE DATE		REPORT DATE
10/6/01		10/8/01		10/8/01
COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:	
10/5/01 8:20 PM	01100166-002	AIR/GAS	138th St. & 3rd AVENUE, BRONX	
PARAMETER	METHOD		RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G		0.01	mg/m3
Antimony (Sb)	OSHA ID 121/125G		0.32	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		0.19	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		0.10	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		0.08	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_002834992

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/m³ (rounded off to 3-sigma)

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

For the Trip Blank Analytical Value:

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

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
0.111	100	11.1	0.107	100	10.7	0.4	30	0.0133333	Aluminum- Al	0.01
0.106	100	10.6	0.01	100	1	9.6	30	0.32	Antimony-Sb	0.32
0.011	100	1.1	-0.008	100	-0.8	1.9	30	0.0633333	Arsenic-As	0.06
0.005	100	0.5	0.004	100	0.4	0.1	30	0.0033333	Barium-Ba	<0.01
-0.001	100	-0.1	-0.001	100	-0.1	0	30	0	Beryllium-Be	<0.01
0.002	100	0.2	0.001	100	0.1	0.1	30	0.0033333	Cadmium-Cd	<0.01
0.498	100	49.8	0.442	100	44.2	5.6	30	0.1866667	Calcium-Ca	0.19
0.022	100	2.2	0.017	100	1.7	0.5	30	0.0166667	Chromium-Cr	0.02
0.019	100	1.9	0.014	100	1.4	0.5	30	0.0166667	Copper-Cu	0.02
0.082	100	8.2	0.053	100	5.3	2.9	30	0.0966667	Iron-Fe	0.1
0.008	100	0.8	0.006	100	0.6	0.2	30	0.0066667	Lead-Pb	<0.01
0.086	100	8.6	0.081	100	8.1	0.5	30	0.0166667	Magnesium-Mg	0.02
0.012	100	1.2	0.031	100	3.1	-1.9	30	-0.0633333	Manganese-Mn	<0.01
	100			100			30		Mercury-Hg	<0.01
0.004	100	0.4	0.002	100	0.2	0.2	30	0.0066667	Nickel-Ni	<0.01
0.192	100	19.2	0.169	100	16.9	2.3	30	0.0766667	Potassium-K	0.08
0.036	100	3.6	0.033	100	3.3	0.3	30	0.01	Selenium-Se	0.01
0.001	100	0.1	0.002	100	0.2	-0.1	30	-0.0033333	Silver-Ag	<0.01
3.25	100	325	3.378	100	337.8	-12.8	30	-0.4266667	Sodium-Na	<0.01
-0.008	100	-0.8	-0.005	100	-0.5	-0.3	30	-0.01	Thallium-Tl	<0.01
0.018	100	1.8	0.02	100	2	-0.2	30	-0.0066667	Zinc-Zn	<0.01

PED ID #01100166-002

NYCDEP - 138TH & 3RD AVENUE BRONX

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DATE RECEIVED		RELEASE DATE		REPORT DATE
10/6/01		10/8/01		10/8/01
COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:	
10/5/01 8:50 PM	01100166-003	AIR\GAS	CENTAL PARK N. & LENOX, MANHATTAN	
PARAMETER	METHOD		RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G		<0.01	mg/m3
Antimony (Sb)	OSHA ID 121/125G		0.27	mg/m3
Arsenic (As)	OSHA ID 121/125G		0.12	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		1.13	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		0.07	mg/m3
Lead (Pb)	OSHA ID 121/125G		0.03	mg/m3
Magnesium (Mg)	OSHA ID 121/125G		0.20	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		0.24	mg/m3
Silver (Ag)	OSHA ID 121/125G		0.02	mg/m3
Sodium (Na)	OSHA ID 121/125G		9.48	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_002834994

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
0.104	100	10.4	0.107	100	10.7	-0.3	30	-0.01	Aluminum-Al	<0.01
0.091	100	9.1	0.01	100	0.1	8.1	30	0.27	Antimony-Sb	0.27
0.028	100	2.8	-0.008	100	-0.8	3.6	30	0.12	Arsenic-As	0.12
0.006	100	0.6	0.004	100	0.4	0.2	30	0.0066667	Barium-Ba	<0.01
0	100	0	-0.001	100	-0.1	0.1	30	0.0033333	Beryllium-Be	<0.01
0.003	100	0.3	0.001	100	0.1	0.2	30	0.0066667	Cadmium-Cd	<0.01
0.781	100	78.1	0.442	100	44.2	33.9	30	1.13	Calcium-Ca	1.13
0.023	100	2.3	0.017	100	1.7	0.6	30	0.02	Chromium-Cr	0.02
0.016	100	1.6	0.014	100	1.4	0.2	30	0.0066667	Copper-Cu	<0.01
0.074	100	7.4	0.053	100	5.3	2.1	30	0.07	Iron-Fe	0.07
0.016	100	1.6	0.006	100	0.6	1	30	0.0333333	Lead-Pb	0.03
0.141	100	14.1	0.081	100	8.1	6	30	0.2	Magnesium-Mg	0.2
0.032	100	3.2	0.031	100	3.1	0.1	30	0.0033333	Manganese-Mn	<0.01
	100			100			30		Mercury-Hg	<0.01
0.005	100	0.5	0.002	100	0.2	0.3	30	0.01	Nickel-Ni	0.01
0.217	100	21.7	0.169	100	16.9	4.8	30	0.16	Potassium-K	0.16
0.104	100	10.4	0.033	100	3.3	7.1	30	0.2366667	Selenium-Se	0.24
0.007	100	0.7	0.002	100	0.2	0.5	30	0.0166667	Silver-Ag	0.02
6.223	100	622.3	3.378	100	337.8	284.5	30	9.4833333	Sodium-Na	9.48
-0.006	100	-0.6	-0.005	100	-0.5	-0.1	30	-0.0033333	Thallium-Tl	<0.01
0.026	100	2.6	0.02	100	2	0.6	30	0.02	Zinc-Zn	0.02

PED ID #01100166-003

NYCDEP - CENTRAL PK NO & LENOX-NYC

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DATE RECEIVED		RELEASE DATE		REPORT DATE
10/6/01		10/8/01		10/8/01
COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:	
10/5/01 9:45 PM	01100166-004	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		<0.01	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		0.36	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		0.32	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		0.06	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		0.19	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.

SUPPLEMENTAL II

Page 32 of 240
NYS ELAP #10224
MWBE #46075

CITY_21MC100_002834996

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
0.095	100	9.5	0.107	100	10.7	-1.2	30	-0.04	Aluminum-Al	<0.01
-0.012	100	-1.2	0.01	100	1	-2.2	30	-0.0733333	Antimony-Sb	<0.01
0.003	100	0.3	-0.008	100	-0.8	1.1	30	0.0366667	Arsenic-As	0.04
0.002	100	0.2	0.004	100	0.4	-0.2	30	-0.0066667	Barium-Ba	<0.01
-0.001	100	-0.1	-0.001	100	-0.1	0	30	0	Beryllium-Be	<0.01
0.002	100	0.2	0.001	100	0.1	0.1	30	0.0033333	Cadmium-Cd	<0.01
0.549	100	54.9	0.442	100	44.2	10.7	30	0.3566667	Calcium-Ca	0.36
0.024	100	2.4	0.017	100	1.7	0.7	30	0.0233333	Chromium-Cr	0.02
0.02	100	2	0.014	100	1.4	0.6	30	0.02	Copper-Cu	0.02
0.148	100	14.8	0.053	100	5.3	9.5	30	0.3166667	Iron-Fe	0.32
0.008	100	0.8	0.006	100	0.6	0.2	30	0.0066667	Lead-Pb	<0.01
0.089	100	8.9	0.081	100	8.1	0.8	30	0.0266667	Magnesium-Mg	0.03
0.034	100	3.4	0.031	100	3.1	0.3	30	0.01	Manganese-Mn	0.01
	100			100			30		Mercury-Hg	<0.01
0.004	100	0.4	0.002	100	0.2	0.2	30	0.0066667	Nickel-Ni	<0.01
0.188	100	18.8	0.169	100	16.9	1.9	30	0.0633333	Potassium-K	0.06
0.056	100	5.6	0.033	100	3.3	2.3	30	0.0766667	Selenium-Se	0.08
0.001	100	0.1	0.002	100	0.2	-0.1	30	-0.0033333	Silver-Ag	<0.01
3.434	100	343.4	3.378	100	337.8	5.6	30	0.1866667	Sodium-Na	0.19
-0.008	100	-0.8	-0.005	100	-0.5	-0.3	30	-0.01	Thallium-Tl	<0.01
0.029	100	2.9	0.02	100	2	0.9	30	0.03	Zinc-Zn	0.03

PED ID #01100166-004

NYCDEP - BERRY & NORTH BROOKLYN

c:/JEM FILES/NYCDEP-HAZMAT/m01100166.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: 01100166

PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling

DATE RECEIVED		RELEASE DATE		REPORT DATE
10/6/01		10/8/01		10/8/01
COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:	
10/5/01 10:10 PM	01100166-005	AIR/GAS	ATLANTIC AVE. & SMITH ST., BROOKLYN	
PARAMETER	METHOD		RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G		0.03	mg/m3
Antimony (Sb)	OSHA ID 121/125G		0.10	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		0.02	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		0.02	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_002834998

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

IAARR=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
0.117	100	11.7	0.107	100	10.7	1	30	0.0333333	Aluminum- Al	0.03
0.041	100	4.1	0.01	100	1	3.1	30	0.1033333	Antimony-Sb	0.1
-0.001	100	-0.1	-0.008	100	-0.8	0.7	30	0.0233333	Arsenic-As	0.02
0.003	100	0.3	0.004	100	0.4	-0.1	30	-0.0033333	Barium-Ba	<0.01
-0.001	100	-0.1	-0.001	100	-0.1	0	30	0	Beryllium-Be	<0.01
0.002	100	0.2	0.001	100	0.1	0.1	30	0.0033333	Cadmium-Cd	<0.01
0.474	100	47.4	0.442	100	44.2	3.2	30	0.1066667	Calcium-Ca	0.11
0.019	100	1.9	0.017	100	1.7	0.2	30	0.0066667	Chromium-Cr	<0.01
0.014	100	1.4	0.014	100	1.4	0	30	0	Copper-Cu	<0.01
0.05	100	5	0.053	100	5.3	-0.3	30	-0.01	Iron-Fe	<0.01
0.008	100	0.8	0.006	100	0.6	0.2	30	0.0066667	Lead-Pb	<0.01
0.087	100	8.7	0.081	100	8.1	0.6	30	0.02	Magnesium-Mg	0.02
0.03	100	3	0.031	100	3.1	-0.1	30	-0.0033333	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
0.176	100	17.6	0.169	100	16.9	0.7	30	0.0233333	Potassium-K	0.02
0.034	100	3.4	0.033	100	3.3	0.1	30	0.0033333	Selenium-Se	<0.01
0	100	0	0.002	100	0.2	-0.2	30	-0.0066667	Silver-Ag	<0.01
3.061	100	306.1	3.378	100	337.8	-31.7	30	-1.0566667	Sodium-Na	<0.01
-0.003	100	-0.3	-0.005	100	-0.5	0.2	30	0.0066667	Thallium-Tl	<0.01
0.016	100	1.6	0.02	100	2	-0.4	30	-0.0133333	Zinc-Zn	<0.01

PED ID #01100166-005

NYCDEP -ATLANTIC AV & SMITH STR. BROOKLYN

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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: 01100166
PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling

DATE RECEIVED		RELEASE DATE		REPORT DATE
10/6/01		10/8/01		10/8/01
COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:	
10/5/01 10:55 PM	01100166-006	AIR/GAS	BAY ST & VICTORY BLVD., STATEN ISLAND	
PARAMETER	METHOD		RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G		0.05	mg/m3
Antimony (Sb)	OSHA ID 121/125G		0.03	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		1.44	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		0.46	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		0.03	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		4.08	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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 MWBE #46075

CITY_21MC100_002835000

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
0.121	100	12.1	0.107	100	10.7	1.4	30	0.0466667	Aluminum- Al	0.05
0.02	100	2	0.01	100	1	1	30	0.0333333	Antimony-Sb	0.03
0	100	0	-0.008	100	-0.8	0.8	30	0.0266667	Arsenic-As	0.03
0.003	100	0.3	0.004	100	0.4	-0.1	30	-0.0033333	Barium-Ba	<0.01
-0.001	100	-0.1	-0.001	100	-0.1	0	30	0	Beryllium-Be	<0.01
0.001	100	0.1	0.001	100	0.1	0	30	0	Cadmium-Cd	<0.01
0.873	100	87.3	0.442	100	44.2	43.1	30	1.4366667	Calcium-Ca	1.44
0.017	100	1.7	0.017	100	1.7	0	30	0	Chromium-Cr	<0.01
0.013	100	1.3	0.014	100	1.4	-0.1	30	-0.0033333	Copper-Cu	<0.01
0.054	100	5.4	0.053	100	5.3	0.1	30	0.0033333	Iron-Fe	<0.01
0.003	100	0.3	0.006	100	0.6	-0.3	30	-0.01	Lead-Pb	<0.01
0.219	100	21.9	0.081	100	8.1	13.8	30	0.46	Magnesium-Mg	0.46
0.015	100	1.5	0.031	100	3.1	-1.6	30	-0.0533333	Manganese-Mn	<0.01
	100			100			30		Mercury-Hg	<0.01
0.003	100	0.3	0.002	100	0.2	0.1	30	0.0033333	Nickel-Ni	<0.01
0.178	100	17.8	0.169	100	16.9	0.9	30	0.03	Potassium-K	0.03
0.019	100	1.9	0.033	100	3.3	-1.4	30	-0.0466667	Selenium-Se	<0.01
0	100	0	0.002	100	0.2	-0.2	30	-0.0066667	Silver-Ag	<0.01
4.603	100	460.3	3.378	100	337.8	122.5	30	4.0833333	Sodium-Na	4.08
-0.005	100	-0.5	-0.005	100	-0.5	0	30	0	Thallium-Tl	<0.01
0.018	100	1.8	0.02	100	2	-0.2	30	-0.0066667	Zinc-Zn	<0.01

PED ID #01100166-006

NYCDEP - BAY STR & VICTORY BLVD. SI

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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: 01100166

PROJECT ID : WORLD TRADE CENTER-5 Boro Sampling

DATE RECEIVED		RELEASE DATE		REPORT DATE
10/6/01		10/8/01		10/8/01
COLLECT DATE:	SAMPLE ID#:	MATRIX:	SAMPLE ORIGIN:	
10/5/01 5:00 PM	01100166-007	AIR/GAS	TRIP BLANKS	
PARAMETER	METHOD		RESULT	UNITS
Aluminum (Al)	OSHA ID 121/125G		0.02	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.

SUPPLEMENTAL II

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 MWBE #46075

CITY_21MC100_002835002

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
 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:

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

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
0.107	100	10.7	0.101	100	10.1	0.6	30	0.02	Aluminum-Al	0.02
0.01	100	1	0.17	100	17	-16	30	-0.5333333	Antimony-Sb	<0.01
-0.008	100	-0.8	0.021	100	2.1	-2.9	30	-0.0966667	Arsenic-As	<0.01
0.004	100	0.4	0.003	100	0.3	0.1	30	0.0033333	Barium-Ba	<0.01
-0.001	100	-0.1	-0.001	100	-0.1	0	30	0	Beryllium-Be	<0.01
0.001	100	0.1	0.003	100	0.3	-0.2	30	-0.0066667	Cadmium-Cd	<0.01
0.442	100	44.2	0.464	100	46.4	-2.2	30	-0.0733333	Calcium-Ca	<0.01
0.017	100	1.7	0.009	100	0.9	0.8	30	0.0266667	Chromium-Cr	0.03
0.014	100	1.4	0.018	100	1.8	-0.4	30	-0.0133333	Copper-Cu	<0.01
0.053	100	5.3	0.728	100	72.8	-67.5	30	-2.25	Iron-Fe	<0.01
0.006	100	0.6	0.017	100	1.7	-1.1	30	-0.0366667	Lead-Pb	<0.01
0.081	100	8.1	0.085	100	8.5	-0.4	30	-0.0133333	Magnesium-Mg	<0.01
0.031	100	3.1	0.045	100	4.5	-1.4	30	-0.0466667	Manganese-Mn	<0.01
	100			100			30		Mercury-Hg	<0.01
0.002	100	0.2	0.002	100	0.2	0	30	0	Nickel-Ni	<0.01
0.169	100	16.9	0.165	100	16.5	0.4	30	0.0133333	Potassium-K	0.01
0.033	100	3.3	0.075	100	7.5	-4.2	30	-0.14	Selenium-Se	<0.01
0.002	100	0.2	0	100	0	0.2	30	0.0066667	Silver-Ag	<0.01
3.378	100	337.8	3.839	100	383.9	-46.1	30	-1.5366667	Sodium-Na	<0.01
-0.005	100	-0.5	-0.006	100	-0.6	0.1	30	0.0033333	Thallium-Tl	<0.01
0.02	100	2	0.023	100	2.3	-0.3	30	-0.01	Zinc-Zn	<0.01

PED ID #01100166-007

NYCDEP - TRIP/FIELD BLANK