NYC 9/11 Public Portal Document

Liberty Mutual /ATC

Industrial Hygiene Air Sample Results

December 9, 2001

Metals Samples

Station Type	Sample ID	Sample Zone	Job Description	Begin Date	End Date	Begin Time	End Time	Comment Worker	Analyte	Results	Units	OSHA PEL or ACGIH TLV	Action Level
Personal	0111340-WTCBOFA03	BOVIS	Grappler	11/28/2001	11/28/2001	8:19:00 AM	3:24:00 PM	Andre Sukram	Aluminum	<0.0027	mg/cu m	5	2.5
									Antimony	<0.0032	mg/cu m	0.5	0.25
									Arsenic	<0.00068	mg/cu m	0.01	0.005
									Beryllium	<0.0000013	mg/cu m	0.002	0.001
									Cadmium	<0.000028	mg/cu m	0.005	0.0025
									Calcium	0.012	mg/cu m	5	2.5
									Chromium	<0.00047	mg/cu m	0.5	0.25
									Cobalt	<0.00032	mg/cu m	0.05	0.0025
									Copper	0.000091	mg/cu m	0.1	0.05
									Iron	0.015	mg/cu m	10	5
									Lead	<0.00028	mg/cu m	0.05	0.03
									Magnesium	0.0017	mg/cu m	15	7.5
									Manganese	0.00018	mg/cu m	5	2.5
									Nickel	<0.00014	mg/cu m	1	0.5
									Selenium	<0.0025	mg/cu m	0.2	0.1
									Thallium	<0.0025	mg/cu m	0.1	0.05
									Tin	<0.0028	mg/cu m	2	1
									Titanium	<0.000058	mg/cu m	15	7.5
									Vanadium	<0.00044	mg/cu m	0.1	0.05
									Zinc	0.00076	mg/cu m	5	2.5
Personal	0111340-WTCBOFA04	BOVIS	Torchman	11/28/2001	11/28/2001	8:21:00 AM	3:34:00 PM	Tony Almeda	Aluminum	<0.0026	mg/cu m	5	2.5
									Antimony	<0.0032	mg/cu m	0.5	0.25
									Arsenic	<0.00067	mg/cu m	0.01	0.005
									Beryllium	<0.0000012	mg/cu m	0.002	0.001
									Cadmium	<0.000027	mg/cu m	0.005	0.0025
									Calcium	0.0042	mg/cu m	5	2.5

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Industrial Hygiene Air Sample Results

December 9, 2001

Station Type	Sample ID	Sample Zone	Job Description	Begin Date	End Date	Begin Time	End Time	Comment Worker	Analyte	Results	Units	OSHA PEL or ACGIH TLV	Action Level
Personal	0111340-WTCBOFA04	BOVIS	Torchman	11/28/2001	11/28/2001	8:21:00 AM	3:34:00 PM	Tony Almeda	Chromium	<0.00046	mg/cu m	0.5	0.25
									Cobalt	<0.00032	mg/cu m	0.05	0.0025
									Copper	<0.000076	mg/cu m	0.1	0.05
									Iron	0.0028	mg/cu m	10	5
									Lead	<0.00027	mg/cu m	0.05	0.03
									Magnesium	0.00086	mg/cu m	15	7.5
									Manganese	<0.000071	mg/cu m	5	2.5
									Nickel	<0.00014	mg/cu m	1	0.5
									Selenium	<0.0025	mg/cu m	0.2	0.1
									Thallium	<0.0025	mg/cu m	0.1	0.05
									Tin	<0.0027	mg/cu m	2	1
									Titanium	<0.000057	mg/cu m	15	7.5
									Vanadium	<0.00043	mg/cu m	0.1	0.05
									Zinc	0.00053	mg/cu m	5	2.5
Personal	0112009-WTCBORM02	BOVIS	Spotter	11/30/2001	12/1/2001	6:27:00 PM	3:32:00 AM	Joao Tamasio	Aluminum	<0.0027	mg/cu m	5	2.5
									Antimony	<0.0032	mg/cu m	0.5	0.25
									Arsenic	<0.00068	mg/cu m	0.01	0.005
									Beryllium	<0.0000013	mg/cu m	0.002	0.001
									Cadmium	<0.000028	mg/cu m	0.005	0.0025
									Calcium	0.041	mg/cu m	5	2.5
									Chromium	<0.00047	mg/cu m	0.5	0.25
									Cobalt	<0.00032	mg/cu m	0.05	0.0025
									Copper	0.00092	mg/cu m	0.1	0.05
									Iron	0.059	mg/cu m	10	5
									Lead	<0.00028	mg/cu m	0.05	0.03
									Magnesium	0.0049	mg/cu m	15	7.5
									Manganese	0.00062	mg/cu m	5	2.5
									Nickel	<0.00014	mg/cu m	1	0.5

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Station Type	Sample ID	Sample Zone	Job Description	Begin Date	End Date	Begin Time	End Time	Comment Worker	Analyte	Results	Units	OSHA PEL or ACGIH TLV	Action Level
Personal	0112009-WTCBORM02	BOVIS	Spotter	11/30/2001	12/1/2001	8:27:00 PM	3:32:00 AM	Joao Tamasio	Selenium	<0.0025	mg/cu m	0.2	0.1
									Thallium	<0.0025	mg/cu m	0.1	0.05
									Tin	<0.0028	mg/cu m	2	1
									Titanium	0.00032	mg/cu m	15	7.5
									Vanadium	<0.00044	mg/cu m	0.1	0.05
									Zinc	0.005	mg/cu m	5	2.5
Solvent Vapor Samples (VOCs)													
Personal	0112010-WTCBOAF02	BOVIS	Torchman	11/29/2001	11/29/2001	8:17:00 AM	3:21:00 PM	Andrew Millman	Benzene	<0.0012	ppm	1	0.5
									Ethyl Benzene	<0.00087	ppm	100	50
									Toluene	<0.0010	ppm	200	100
									Xylene	<0.0020	ppm	100	
Personal	0112010-WTCBOCJ03	BOVIS	Burner	11/29/2001	11/29/2001	8:20:00 AM	3:21:00 PM	Benjamin Jones	Benzene	<0.0012	ppm	1	0.5
									Ethyl Benzene	<0.00088	ppm	100	
									Toluene	0.0038	ppm	50	
									Xylene	<0.0020	ppm	100	
Polycyclic Aromatic Hydrocarbon (PAH) Samples													
Personal	0111335-WTCBOCD02	BOVIS	Torchman	11/28/2001	11/29/2001	8:35:00 PM	3:40:00 AM	Randy Sookoo	Acenaphthene	<0.00049	mg/cu m	0.2 (Total PAHs)	
									Acenaphthylene	<0.00026	mg/cu m	0.2 (Total PAHs)	
									Anthracene	0.00001	mg/cu m	0.2 (Total PAHs)	
									Benz(a)anthracene	<0.000025	mg/cu m	0.2 (Total PAHs)	
									Benz(b)fluoranthene	<0.000022	mg/cu m	0.2 (Total PAHs)	
									Benzo(a)Pyrene	<0.000025	mg/cu m	0.2 (Total PAHs)	
									Benzo(ghi)Perylene	<0.000060	mg/cu m	0.2 (Total PAHs)	
									Benzo(k)Fluoranthene	<0.000026	mg/cu m	0.2 (Total PAHs)	

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Station Type	Sample ID	Sample Zone	Job Description	Begin Date	End Date	Begin Time	End Time	Comment Worker	Analyte	Results	Units	OSHA PEL or ACGIH TLV	Action Level
									Chrysene	<0.000019	mg/cu m	0.2 (Total PAHs)	
Personal	0111335-WTCBOCD02	BOVIS	Torchman	11/28/2001	11/29/2001	8:35:00 PM	3:40:00 AM	Randy Sookoo	Dibenzo(a,h)anthracene	<0.00011	mg/cu m	0.2 (Total PAHs)	
									Fluoranthene	<0.000053	mg/cu m	0.2 (Total PAHs)	
									Fluorene	0.000072	mg/cu m	0.2 (Total PAHs)	
									Indeno(1,2,3-cd)pyrene	<0.000020	mg/cu m	0.2 (Total PAHs)	
									Naphthalene	0.00078	mg/cu m	0.2 (Total PAHs)	
Personal	0111335-WTCBOCD02	BOVIS	Torchman	11/28/2001	11/29/2001	8:35:00 PM	3:40:00 AM	Randy Sookoo	Phenanthrene	0.00015	mg/cu m	0.2 (Total PAHs)	
									Pyrene	<0.000064	mg/cu m	0.2 (Total PAHs)	
Personal	0112003-WTCBOCD03	BOVIS	Grappler Operator	11/29/2001	11/30/2001	8:30:00 PM	3:40:00 AM	Brad Calucci	Acenaphthene	<0.00050	mg/cu m	0.2 (Total PAHs)	
									Acenaphthylene	<0.00026	mg/cu m	0.2 (Total PAHs)	
									Anthracene	0.00005	mg/cu m	0.2 (Total PAHs)	
									Benz(a)anthracene	<0.000025	mg/cu m	0.2 (Total PAHs)	
									Benz(b)fluoranthene	<0.000022	mg/cu m	0.2 (Total PAHs)	
									Benzo(a)Pyrene	<0.000025	mg/cu m	0.2 (Total PAHs)	
									Benzo(ghi)Perylene	<0.000061	mg/cu m	0.2 (Total PAHs)	
									Benzo(k)Fluoranthene	<0.000026	mg/cu m	0.2 (Total PAHs)	
									Chrysene	<0.000019	mg/cu m	0.2 (Total PAHs)	
									Dibenzo(a,h)anthracene	<0.00011	mg/cu m	0.2 (Total PAHs)	
									Fluoranthene	<0.000053	mg/cu m	0.2 (Total PAHs)	
									Fluorene	0.00027	mg/cu m	0.2 (Total PAHs)	
									Indeno(1,2,3-cd)pyrene	<0.000021	mg/cu m	0.2 (Total PAHs)	
									Naphthalene	0.0047	mg/cu m	0.2 (Total PAHs)	
									Phenanthrene	0.00059	mg/cu m	0.2 (Total PAHs)	
									Pyrene	<0.000064	mg/cu m	0.2 (Total PAHs)	
Personal	0112006-WTCBOAF02	BOVIS	Loader	11/29/2001	11/29/2001	8:11:00 AM	3:13:00 PM	John Noce	Acenaphthene	<0.00052	mg/cu m	0.2 (Total PAHs)	

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Station Type	Sample ID	Sample Zone	Job Description	Begin Date	End Date	Begin Time	End Time	Comment Worker	Analyte	Results	Units	OSHA PEL or ACGIH TLV	Action Level
									Acenaphthylene	<0.00027	mg/cu m	0.2 (Total PAHs)	
									Anthracene	<0.0000059	mg/cu m	0.2 (Total PAHs)	
									Benz(a)anthracene	<0.000026	mg/cu m	0.2 (Total PAHs)	
									Benz(b)fluoranthene	<0.000023	mg/cu m	0.2 (Total PAHs)	
Personal	0112006-WTCBOAF02	BOVIS	Loader	11/29/2001	11/29/2001	8:11:00 AM	3:13:00 PM	John Noce	Benzo(a)Pyrene	<0.000028	mg/cu m	0.2 (Total PAHs)	
									Benzo(ghi)Perylene	<0.000063	mg/cu m	0.2 (Total PAHs)	
									Benzo(k)Fluoranthene	<0.000027	mg/cu m	0.2 (Total PAHs)	
									Chrysene	<0.000020	mg/cu m	0.2 (Total PAHs)	
									Dibenzo(a,h)anthracene	<0.00011	mg/cu m	0.2 (Total PAHs)	
									Fluoranthene	<0.000055	mg/cu m	0.2 (Total PAHs)	
									Fluorene	<0.000041	mg/cu m	0.2 (Total PAHs)	
Personal	0112006-WTCBOAF02	BOVIS	Loader	11/29/2001	11/29/2001	8:11:00 AM	3:13:00 PM	John Noce	Indeno(1,2,3-cd)pyrene	<0.000021	mg/cu m	0.2 (Total PAHs)	
									Naphthalene	0.00099	mg/cu m	0.2 (Total PAHs)	
									Phenanthrene	0.000059	mg/cu m	0.2 (Total PAHs)	
									Pyrene	<0.000066	mg/cu m	0.2 (Total PAHs)	
Asbestos Samples													
Personal	0112008-WTCBOCD04	BOVIS	Grappler Operator	11/27/2001	11/28/2001	8:43:00 PM	4:18:00 AM	William Scotto	Asbestos	0.015	fibers/cc	0.1	0.01
Personal	0112038-WTCBORM03	BOVIS	Spotter in Depress	12/2/2001	12/3/2001	8:25:00 PM	3:32:00 AM	Manuel Valente	Asbestos	0.0047	fibers/cc	0.1	0.01
Personal	0112039-WTCBORM04	BOVIS	Grappler Operator	12/2/2001	12/3/2001	8:15:00 PM	3:18:00 AM	Daniel Oconnor	Asbestos	<0.0029	fibers/cc	0.1	0.01
Personal	0112040-WTCBODE04	BOVIS	Spotter on Surface	12/1/2001	12/1/2001	8:07:00 AM	3:00:00 PM	Evie Junior	Asbestos	0.0069	fibers/cc	0.1	0.01
Personal	0112041-WTCBOFA02	BOVIS	Equipment Operatc	12/3/2001	12/3/2001	8:03:00 AM	3:20:00 PM	Gary Mangiapia	Asbestos	<0.0028	fibers/cc	0.1	0.01
Silica and Dust Samples													
Personal	0112014-WTCBOAF02	BOVIS	Equipment Operatc	11/30/2001	11/30/2001	8:00:00 AM	3:39:00 PM	Joseph A. Depic	Cristobalite	<0.011	mg/cu m	0.05	

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December 9, 2001

Station Type	Sample ID	Sample Zone	Job Description	Begin Date	End Date	Begin Time	End Time	Comment Worker	Analyte	Results	Units	OSHA PEL or ACGIH TLV	Action Level
									Quartz	<0.011	mg/cu m	0.05	
									Respirable Dust	0.11	mg/cu m	3	
Personal	0112014-WTCBOAF03	BOVIS	Torch Cutter on Su	11/30/2001	11/30/2001	8:05:00 AM	3:00:00 PM	Juan Pierno	Cristobalite	<0.013	mg/cu m	0.05	
									Quartz	<0.013	mg/cu m	0.05	
									Respirable Dust	0.22	mg/cu m	3	

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Station Type	Sample ID	Sample Zone	Job Description	Begin Date	End Date	Begin Time	End Time	Comment Worker	Analyte	Results	Units	OSHA PEL or ACGIH TLV	Action Level
Personal	0112042-WTCBORM02	BOVIS	Spotter in Depress	12/2/2001	12/3/2001	8:18:00 PM	3:25:00 AM	No Name Report	Cristobalite	<0.012	mg/cu m	0.05	
									Quartz	<0.012	mg/cu m	0.05	
									Respirable Dust	<0.059	mg/cu m	3	
Personal	0112043-WTCBORM02	BOVIS	Spotter in Depress	12/1/2001	12/2/2001	8:27:00 PM	3:40:00 AM	Mario Nunes	Cristobalite	<0.012	mg/cu m	0.05	
									Quartz	0.018	mg/cu m	0.05	
									Respirable Dust	0.3	mg/cu m	3	
Personal	0112044-WTCBODE03	BOVIS	Torch Cutter on Su	12/1/2001	12/1/2001	8:10:00 AM	3:02:00 PM	Juan Pinero	Cristobalite	<0.013	mg/cu m	0.05	
									Quartz	<0.013	mg/cu m	0.05	
									Respirable Dust	0.12	mg/cu m	3	

Acid Gas Samples

Personal	0112013-WTCBOCJ03	BOVIS	Burner in Depressi	11/29/2001	11/29/2001	8:20:00 AM	3:22:00 PM	Benjamin Jones	Hydrobromic Acid	<0.00027	ppm	3	
									Hydrochloric Acid	<0.0018	ppm	5	
									Hydrofluoric Acid as Fluoride	<0.0011	ppm	3	
									Nitric Acid	<0.00070	ppm	2	
									Phosphoric Acid	<0.0018	mg/cu m	1	
									Sulfuric Acid	<0.0027	mg/cu m	1	

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Carbon Monoxide Results (11/28 to 12/7)

STATION TYPE	SAMPLE ID	SAMPLE ZONE	JOB DESCRIPTION	WORKER NAME	BEGIN DATE	END DATE	BEGIN TIME	END TIME	SAMPLE COMMENT	ANALYTE	TWA (ppm)	15 min. MAX (ppm)	INSTANTA N-EOUS MAX (ppm)	OSHA PEL (ppm)	NIOSH CEILING (ppm)
Personal	7-5946	BOVIS	Spotter in Depression in 2 WTC Area	Nelson Cruz	12/7/2001	12/8/2001	20:58	3:52	Quest Safelog 100 - #2	Carbon Monoxide	0	0	2	50	200
Personal	6-3473	BOVIS	Spotter in Depression in 2 WTC Area	Angelo DeStefano	12/6/2001	12/7/2001	8:20	13:50	Quest Safelog 100 - #1	Carbon Monoxide	0	1	5	50	200
Personal	6-8576	BOVIS	Grappler in Depression	Mark Franco	12/6/2001				Quest Safelog 100 - #1 Volded Sample	Carbon Monoxide				50	200
Personal	5-1341	BOVIS	Truck Washer - Working West of WTC 2.	Mario Nunes	12/5/2001	12/6/2001	20:59	4:03	Quest Safelog 100 - #1	Carbon Monoxide	0	2	8	50	200
Personal	2-3468	BOVIS	Spotter in Depression.	James Hubbard	12/2/2001	12/2/2001	8:17	15:37	Quest Safelog 100 - #1	Carbon Monoxide	0	7	15	50	200
Personal	1-1827	BOVIS	Crane Operator/Engineer	Giacinto Mirto	12/1/2001	12/2/2001	8:22	15:02	Quest Safelog 100 - #2	Carbon Monoxide	0	4	9	50	200
Personal	29-3501	BOVIS	Spotter in Depression.	Tyron Kidd	11/29/2001	11/29/2001	7:33	15:01	Quest Safelog 100 - #1	Carbon Monoxide	0	3	8	50	200
Personal	5-3506	BOVIS/GRACE	Spotter in Depression.	Tyron Kidd	12/5/2001	12/5/2001	8:37	16:21	Quest Safelog 100 - #2	Carbon Monoxide	0	5	8	50	200
Personal	30-3056	BOVIS/GRACE	Flagman on west side of Bldg #1 in pit.	Tyron Kidd	11/30/2001	11/30/2001	6:08	14:53	Quest Safelog 100 - #2	Carbon Monoxide	2	5	14	50	200
Personal	29-3872	BOVIS/GRACE	Flagman	Joseph Pagan	11/29/2001	11/29/2001	8:18	10:27	Quest Safelog 100 - #2 Abbreviated measurement.	Carbon Monoxide	33	123	160	50	200

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