Jacques Whitford

Environmental
Engineering
Scientific
Management
Consultants

3 Spectacle Lake Drive
Dartmouth NS
Canada B3B 1W8

Bus 902 468 7777
Fax 902 468 9009

www.jacqueswhitford.com

Project No.1034272

February 11, 2008

Mr. Jim Wooder, CEO
Laurentian Energy Corperation
114 Marine Drive
Edwardsville, NS B2A 4S6

Dear Mr. Wooder:

Re: Proposed Sydport Container Terminal-Sydney Harbour Sediment Quality Analysis

Based on the proposed design specifications of the Sydport Container Terminal Facility, water depths of South Arm and Sydney Harbour will not accommodate Post-Panamax sized vessels, and channel dredging will be necessary. At the request of Laurentian Energy Corporation, Jacques Whitford reviewed and analyzed sediment sample results collected from South Arm and Sydney Harbour, Nova Scotia. The purpose of this study was to determine the extent of surficial sediment contamination at the proposed dredge site. This letter summarizes the program results based on laboratory analytical results and information received from the contractor.

Methodology

- Sediment samples were collected from South Arm and Sydney Harbour by McGregor GeoScience Limited of Halifax, Nova Scotia and CBCL Limited of Sydney, Nova Scotia on January 12, 2008 and January 13, 2008;
- Twenty sediment samples were submitted to Maxxam Analytics Inc. in Sydney, Nova Scotia for analysis of total metals, mercury, total organic carbon, total inorganic carbon, total carbon, Polycyclic Aromatic Hydrocarbons (PAH), Polychlorinated Biphenyls (PCBs), Dichloro-Diphenyl-Trichloroethane (DDT), particle size, Benzene, Toluene, Ethylbenzene and Xylene (BTEX) and total petroleum hydrocarbons (TPH);
- The majority of the sediment samples were taken at surface (0-1m interval). At five sites, two sediment samples were taken: “A” at the 0-1m interval and “B” at the 1-3 m interval;
- Analytical results, sediment core logs and maps depicting sample locations were forwarded to Jacques Whitford for review.

Regulatory Framework

Analytical results were compared to *Canadian Environmental Protection Act* (1999) Disposal at Sea Regulations, Canadian Council of Ministers of the Environment (CCME) Marine Interim Sediment Quality Guidelines (ISQG) (2002) and CCME Soil Quality Guidelines for Industrial Use (2004) where applicable.

Results

The analytical results (Table B-1) and Laboratory Certificates of Analysis are provided in Appendix B. The following summarizes the observed exceedances.

Metals
CCME and CEPA Guidelines exist for arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, thallium, vanadium, and zinc. The exceedances are described as follows:

- the level of arsenic in sediment samples 1A, 3A, 3B, 4, 13, 14 and15 exceed CCME Guidelines for Marine Sediment (ISQG); in addition sediment samples 1A and 13 exceed CCME Guidelines for Soil Quality Guidelines for Industrial Use;

- the level of chromium in sediment samples 1A, 3A, 3B, 4, 6B and 13, 14 and 15 exceed CCME Guidelines for Marine Sediment (ISQG);

- the level of copper in sediment samples 1A, 2B, 3A, 3B, 4,6B and 12, 13, 14 and 15 exceed CCME Guidelines for Marine Sediment (ISQG); and

- the level of lead in sediment samples in 1A, 2A, 2B, 4 and 12, 13, 14 and 15 exceed CCME Guidelines for Marine Sediment (ISQG).

TPH Compounds
CCME Guidelines Soil Quality Guidelines for Industrial Use exist for benzene, toluene ethylbenzene, xylene and modified TPH. CEPA Ocean Disposal Guidelines exist for modified TPH. The following exceedance was noted:

- Modified TPH (Tier 1) – the level of modified TPH in all sediment samples with the exception of samples 9 and 11, exceed the CMME Guidelines for Soil Quality Guidelines for Industrial Use.

Polychlorinated Biphenyls (PCBs) and Dichloro-Diphenyl-Trichloroethane (DDT)
All sediment samples were within the applicable CCME Guidelines for Marine Sediment (ISQG); in addition all the samples were within the laboratory reportable detection limit.

Polycyclic Aromatic Hydrocarbons (PAHs)
CCME Guidelines exist for acenapthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene and pyrene. The following summarizes exceedances:

- the levels of acenapthene and acenaphthylene in sediments sample 14 exceeds the CCME Guidelines for Marine Sediment ISQG;

- the level of anthracene in sediment samples 2A, 3A, 4, 5, 6A, 13 and 14 exceed the CCME Guidelines for Marine Sediment ISQG;

- the level of benzo(a)anthracene in sediment samples 4,5,6A,13 and 14 exceeds the CCME Guidelines for Marine Sediment ISQG;

- the levels of benzo(a)pyrene and dibenzo(a,h)anthracene in sediment samples 13 and 14 exceeds the CCME Guidelines for Marine Sediment ISQG;

- the levels of benzo(b)fluoranthene, chrysene, fluoranthene and pyrene in sediment samples 1A, 2A, 3A, 4, 5, 6A, 13, 14 and 15 exceeds the CCME Guidelines for Marine Sediment ISQG;

- the level of fluorene in sediment samples 3A, 4, 5, 6A, 7 and 14 exceeds the CCME Guidelines for Marine Sediment ISQG;

- the level of naphthalene in sediment samples 3A, 4, 5, 6A, 8, 10A, 10B, 13 and 14 exceeds the CCME Guidelines for Marine Sediment ISQG; and

- the level of phenanthrene in sediment samples 1A, 2A, 2B, 3A, 4, 5, 6A, 7, 8, 10A, 10B, 12, 13, 14 and 15 exceeds the CCME Guidelines for Marine Sediment ISQG.

Discussion

Land use surrounding the proposed Sydport Container Terminal consists of heavy industrial operations including historic steel manufacturing facilities and historic and current bulk petroleum storage facilities. Therefore it is not surprising that sediment analysis indicated the presence of metal contamination including arsenic, chromium, copper and lead in the vicinity of South Arm (sediment samples 1 to 6 and 12 to 15- Refer to Figure 1). Sediment samples collected in Sydney Harbour, after the convergence of South Arm and Northwest Arm, did not exceed CCME or CEPA Guidelines for metals (samples 7 to 11). PAH's exceedances, while observed throughout the study area, were higher in the vicinity of South Arm. In addition, four of the five the samples obtained at depth (1B, 2B, 3B and 6B) had fewer PAHs exceedances than the samples taken at the surface. Modified TPH exceedances were observed throughout the study area.

Approximately 7,000 m of the proposed 9,950 m of dredging channel will be conducted north of the South Arm in the immediate vicinity of sediment samples 7 to 11. These sediments which are slated to be used to reclaim land for the construction of the Sydport Container Terminal are generally less contaminated than the sediments presently in the South Arm.

Closing

This report has been prepared for the sole benefit of Laurentian Energy Corporation and may not be used by any other person or entity without express written consent of Jacques Whitford Limited and Laurentian Energy Corporation.

Any use that a third party makes of this report, or any reliance or decisions made based on it, are the responsibility of such third parties. Jacques Whitford Limited

accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted engineering and scientific practices current at the time the work was performed. Conclusions and recommendations presented in this report should not be construed as legal advice.

The conclusions presented in this report represent the best technical judgment of Jacques Whitford Limited based on the data obtained from the work. The conclusions are based on the site conditions observed by Jacques Whitford Limited at the time the work was performed at the specific testing and/or sampling locations, and can only be extrapolated to an undefined limited area around these locations.

Yours very truly,

JACQUES WHITFORD

Original Signed by

Mary Jane Keefe, BSc.
Project Scientist

Original Signed by

Angela Swaine, BSc.
Project Manager

MJK/tw

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APPENDIX A

Sample Locations

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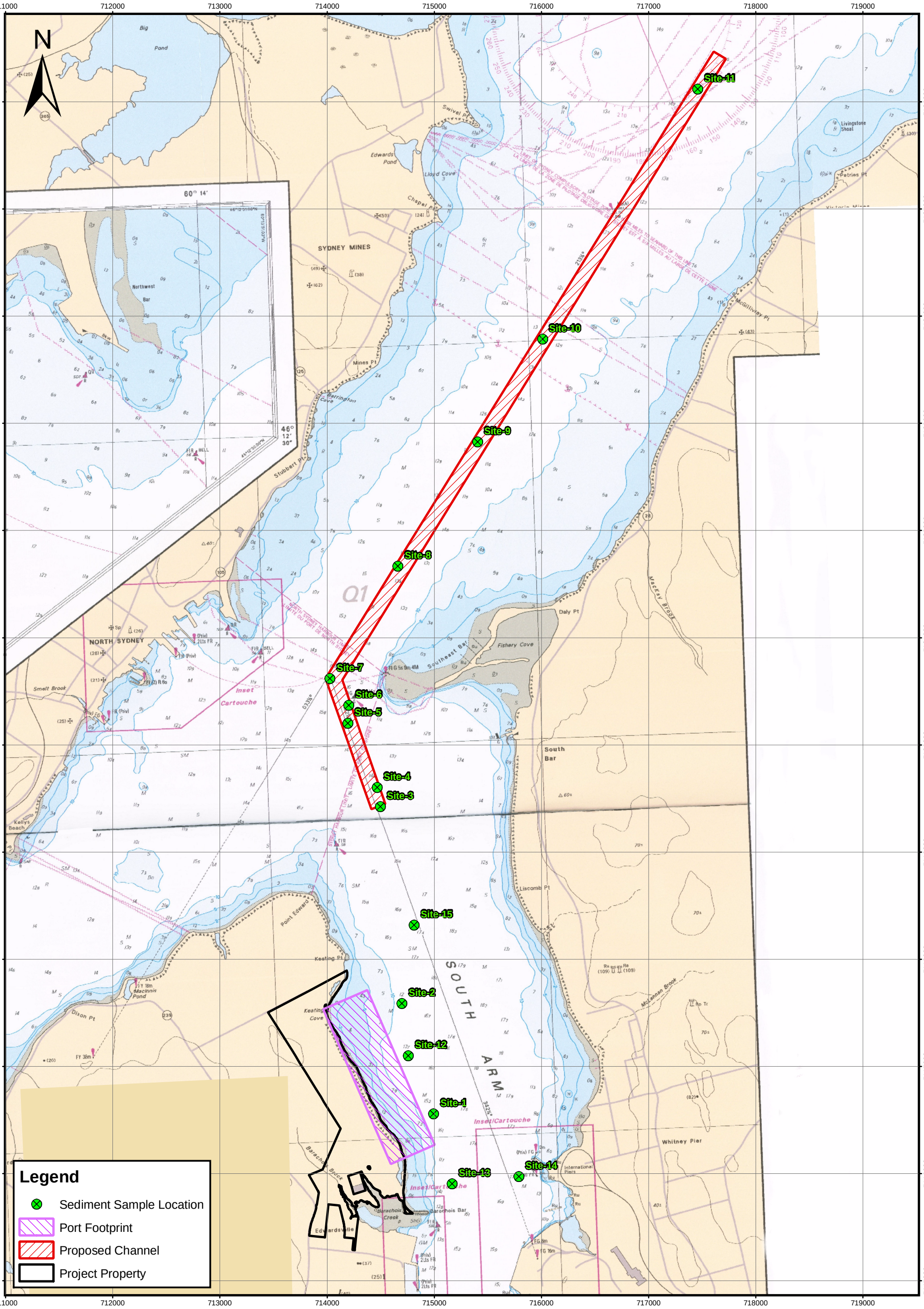

Map Parameters
Projection: UTM-NAD83-Z20
Scale 1:32,000
Date: Feb. 11, 2008
Project No.: 1034272

Data Sources:
Planimetric Data - NSGC; Nova Scotia Topographic Database, 1997, 1:10 000 (GeoNOVA)
Project Components - provided by client.
Navigation Chart - 4266 Sydney Harbour (1 : 20,000)

Figure 1
Sydport Sediment Sampling Locations
Sydney, Nova Scotia

0 495 990 1,980
Meters

Proposed SYDPORT
Container Terminal

LAURENTIAN ENERGY

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APPENDIX B

Analytical Results Table and Laboratory Certificates of Analysis

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TABLE B-1 Sydport Sediment Chemistry – January 12, 2008 and January 13, 2008

Parameter	Units	RDL	1A	1B	2A	2B	3A	3B	4	5	6A	6B	7	8	9	10A	10B	11	12	13	14	15	CCME Marine Sediment ISQG (2002)	CCME Soil Quality Guidelines for Industrial Use (2004)	CEPA Ocean Disposal (1999)
Metals																									
Aluminum	mg/kg	100	73000	42000	42000	44000	70000	74000	65000	56000	50000	64000	60000	42000	23000	31000	32000	21000	63000	78000	82000	78000			
Antimony	mg/kg	2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Arsenic	mg/kg	2.0	**14**	5.7	4.5	4.0	8.6	7.8	7.7	6.3	6.7	5.5	6.4	3.3	ND	3.9	3.7	5.4	6.6	10	**13**	9.3	7.24	12	
Barium	mg/kg	5.0	380	250	330	370	390	420	380	310	300	360	350	270	180	210	220	170	320	390	400	440		2000	
Berylilum	mg/kg	2.0	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	2.5	2.4			
Cadmium	mg/kg	0.15	0.22	0.20	0.32	0.33	0.21	0.21	0.21	0.18	0.18	0.21	0.21	ND	ND	ND	ND	ND	0.42	0.27	0.34	0.23	0.7	22	0.6
Chromium	mg/kg	2.0	64	30	28	29	59	64	56	42	37	57	49	35	8.2	26	27	14	49	63	69	68	52.3	87	
Cobalt	mg/kg	1.0	13.0	9.1	9.1	8.8	12	13	12	9.7	8.9	12	11	8.5	2.7	5.7	6.0	2.8	11	13	13	14			
Copper	mg/kg	2.0	21	12	18	19	22	22	22	16	15	21	18	13	3.3	8.2	9.8	3.4	19	21	23	23	18.7	91	81
Iron	mg/kg	50	31000	19000	20000	20000	31000	33000	31000	25000	23000	30000	27000	22000	6600	15000	15000	9700	27000	32000	35000	34000			
Lead	mg/kg	0.5	34	22	33	37	30	24	32	22	23	20	20	14	6.8	11	10	8.1	34	43	55	32	30.2	600	66
Manganese	mg/kg	2.0	430	310	390	390	570	570	550	520	490	590	540	510	140	320	340	210	390	440	510	520			
Mercury	mg/kg	0.010	0.05	0.01	0.05	0.05	0.04	0.01	0.04	0.03	0.04	ND	0.02	0.02	ND	ND	0.01	ND	0.02	0.05	0.06	0.03	13		0.75
Molybdenum	mg/kg	2.0	3.5	6.1	ND	ND	3.5	3.8	3.5	3.7	3.5	3.8	2.7	ND	ND	ND	ND	ND	11.0	3.6	3.6	3.6			
Nickel	mg/kg	2.0	33	17	16	17	31	34	29	22	20	30	26	19	4.4	14	14	6	28	34	36	35		50	
Selenium	mg/kg	2.0	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		3.9	
Strontium	mg/kg	5.0	96	83	100	110	97	100	96	74	71	84	81	65	55	76	70	53	96	87	89	89			
Thallium	mg/kg	0.10	0.64	0.49	0.45	0.48	0.61	0.66	0.60	0.50	0.47	0.56	0.52	0.42	0.26	0.32	0.33	0.23	0.65	0.70	0.75	0.71		1	
Tin	mg/kg	2.0	3.1	ND	ND	2.1	3.2	2.6	3.3	2.4	2.6	2.2	2.5	ND	ND	ND	ND	ND	2.1	2.9	3.7	2.9			
Uranium	mg/kg	0.10	2.8	3.8	2.3	2.4	2.6	2.8	2.6	2.2	2.1	2.6	2.3	1.7	0.66	1.3	1.4	0.69	4.1	2.8	2.9	3.0			
Vanadium	mg/kg	2.0	110	64	64	62	100	110	95	70	63	94	80	57	17	37	40	26	89	110	120	120		130	
Zinc	mg/kg	5.0	100	76	85	88	95	90	95	73	71	83	77	62	20	40	41	23	90	110	120	100	124	360	
TPH Componds																									
Benzene	mg/kg	0.003	0.006	ND	0.011	0.003	0.006	0.003	0.008	0.007	0.021	ND	0.005	0.007	ND	0.009	0.005	ND	0.003	0.007	0.010	0.003		5.000	
Toluene	mg/kg	0.03	ND	ND	ND	ND	ND	ND	ND	ND	0.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		0.8	
Ethylbenzene	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		20	
Xylenes	mg/kg	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		20	
C_6 - C_{10} (less BTEX)	mg/kg	3.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
$>C_{10}$-C_{21} Hydrocarbons	mg/kg	15.00	42	ND	18	16	28	ND	35	27	32	ND	ND	21	ND	22	26	ND	ND	65	290	18			
$>C_{21}$-$<C_{32}$ Hydrocarbons	mg/kg	15.00	120	38	63	26	99	38	100	78	79	28	32	49	ND	36	49	ND	50	130	450	62			
Modified TPH (Tier 1)	mg/kg	20.00	*160*	*38*	*81*	*42*	*130*	*38*	*130*	*100*	*110*	*28*	*32*	*70*	ND	*58*	*75*	ND	*50*	*200*	*750*	*80*		10	10
PCBs																									
o,p DDD	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00354		
p,p DDD	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00354		
o,p DDE	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00142		
p,p DDE	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00142		
o,p DDT	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0019		
p,p DDT	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0019		
Total PCB	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
PAHs																									
1-Methylnaphthalene	mg/kg	0.05	ND	ND	ND	ND	0.14	ND	0.17	0.16	0.18	0.06	0.07	0.13	ND	0.17	0.14	ND	ND	0.10	0.53	ND			
2-Methylnaphthalene	mg/kg	0.05	ND	ND	ND	ND	0.15	ND	0.19	0.17	0.20	0.05	0.06	0.16	ND	0.18	0.14	ND	ND	0.20	0.64	ND			
Acenaphthene	mg/kg	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43	ND	0.00671		
Acenaphthylene	mg/kg	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37	ND	0.00587		
Anthracene	mg/kg	0.05	ND	ND	0.10	ND	0.13	ND	0.20	0.14	0.14	ND	ND	ND	ND	ND	ND	ND	ND	0.30	2.80	ND	0.0469		
Benzo(a)anthracene	mg/kg	0.05	0.1	ND	0.10	0.06	0.16	ND	0.20	0.16	0.19	ND	ND	ND	ND	ND	ND	ND	ND	0.40	2.60	ND	0.0748		
Benzo(a)pyrene	mg/kg	0.05	0.2	ND	0.20	0.07	0.19	ND	0.26	0.16	0.20	ND	ND	ND	ND	ND	ND	ND	0.06	0.70	3.50	0.10	0.0888		
Benzo(b)fluoranthene	mg/kg	0.05	0.1	ND	0.10	ND	0.15	ND	0.18	0.13	0.16	ND	ND	ND	ND	ND	ND	ND	0.06	0.50	2.50	0.10	0.0888		
Benzo g,h,i)perylene	mg/kg	0.05	0.1	ND	ND	ND	0.12	ND	0.17	0.11	0.13	ND	ND	ND	ND	ND	ND	ND	0.05	0.40	1.60	ND			
Benzo(k)fluoranthlene	mg/kg	0.05	0.2	ND	0.20	0.07	0.22	ND	0.28	0.20	0.22	ND	ND	ND	ND	ND	ND	ND	0.07	0.70	3.20	0.10			
Chrysene	mg/kg	0.05	0.1	ND	0.10	ND	0.14	ND	0.20	0.14	0.16	ND	ND	ND	ND	ND	ND	ND	ND	0.40	2.80	0.10	0.108		
Dibenzo(a,h)anthracene	mg/kg	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.10	0.55	ND	0.00622		
Fluoranthene	mg/kg	0.05	0.2	ND	0.30	0.10	0.28	ND	0.41	0.31	0.39	ND	0.07	0.06	ND	0.05	ND	ND	0.09	0.70	4.30	0.20	0.113		
Fluorene	mg/kg	0.05	ND	ND	ND	ND	0.06	ND	0.07	0.07	0.06	ND	0.07	ND	ND	ND	ND	ND	ND	ND	0.75	ND	0.0212		
Indeno)1,2,3-cd)pyrene	mg/kg	0.05	0.1	ND	0.10	ND	0.11	ND	0.15	0.09	0.12	ND	ND	ND	ND	0.05	ND	ND	ND	0.40	1.80	ND		10	
Naphthalene	mg/kg	0.05	ND	ND	ND	ND	0.11	ND	0.14	0.11	0.13	ND	ND	0.08	ND	0.08	0.06	ND	ND	0.20	0.99	ND	0.0346	22	
Perylene	mg/kg	0.05	ND	ND	ND	ND	0.10	0.14	0.15	0.07	0.06	0.05	0.05	ND	ND	ND	ND	ND	ND	0.20	0.84	ND			
Phenanthrene	mg/kg	0.05	0.2	ND	0.30	0.10	0.32	0.05	0.50	0.39	0.41	0.07	0.13	0.12	ND	0.18	0.16	ND	0.10	0.70	5.10	0.30	0.0867	50	
Pyrene	mg/kg	0.05	0.20	ND	0.30	0.11	0.32	ND	0.40	0.31	0.41	ND	0.08	0.08	ND	0.08	0.08	ND	0.10	0.90	5.40	0.20	0.153	100	
Inorganics																									
Total Inorganic Carbon	g/kg	1	5	3	1	3	5	5	3.6	2.7	5	2.7	2	9.1	ND	2	6.7	ND	4.8	3.6	5.6	4.2			
Moisture	%	1	53	28	57	47	48	45	47	39	35	36	41	27	18	21	24	17	45	54	57	51			
Total Organic Carbon (TOC)	g/kg	0.5	14	8	30	26	16	16	17	16	18	13	16	18	1.7	25	24	0.5	20	21	23	17			
Total Carbon	g/kg	0.5	20	8	11	32	29	21	20	20	23	16	18	27	1.4	27	31	0.7	25	24	29	21			
Grain Size Results																									
< PHI -4 (16 mm)	%	0.1	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100			
< PHI -3 (8 mm)	%	0.1	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100			
< PHI -2 (4 mm)	%	0.1	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100			
< PHI -1 (2 mm)	%	0.1	99	67	92	84	99	98	100	100	100	100	100	100	100	99	99	90	98	98	94	99			
< PHI 0 (1 mm)	%	0.1	98	60	86	79	98	97	99	99	99	99	99	100	99	96	95	82	95	95	93	98			
< PHI +1 (1/2 mm)	%	0.1	96	49	79	73	97	97	98	98	98	99	99	99	96	85	86	70	92	94	93	97			
< PHI +2 (1/4 mm)	%	0.1	94	43	64	62	97	96	98	97	96	98	98	98	69	66	68	41	90	93	93	97			
< PHI +3 (1/8 mm)	%	0.1	90	37	51	52	96	96	95	85	78	96	96	90	8.3	42	43	5.7	87	92	92	97			
< PHI +4 (1/16 mm)	%	0.1	85	30	43	45	92	93	90	67	54	87	87	52	3.9	21	21	3.4	81	90	92	94			
< PHI +5 (1/32mm)	%	0.1	83	28	38	35	83	87	82	49	37	61	76	32	3.6	17	19	3.9	77	90	94	95			
< PHI +6 (1/64 mm)	%	0.1	72	22	30	30	63	71	63	36	27	46	56	21	3.4	12	13	3.5	66	82	86	83			
< PHI +7 (1/128 mm)	%	0.1	48	17	24	23	37	43	37	20	16	27	32	13	2.9	7.9	8.6	2.9	50	60	60	52			
< PHI +8 (1/256 mm)	%	0.1	36	15	21	21	32	32	30	17	14	21	25	9.9	2.8	6.6	7	2.6	33	26	30	42			
< PHI +9 (1/512 mm)	%	0.1	23	11	16	16	19	21	18	11	9.5	14	18	4.4	2.1	3.7	3.7	2.6	12	12	14	22			
Gravel	%	0.1	0.5	33	7.7	16	1.2	2.2	0.2	0.3	0.3	ND	ND	ND	0.3	0.6	1.1	9.9	2.1	2.4	6.3	1.5			
Sand	%	0.1	15	38	50	39	6.9	4.5	9.8	33	46	13	13	48	96	78	78	87	16	7.2	2	4.3			
Silt	%	0.1	48	15	22	25	60	61	60	49	40	65	62	42	1	14	14	0.9	48	64	62	52			
Clay	%	0.1	36	15	21	21	32	32	30	17	14	21	25	9.9	2.8	6.6	7	2.6	33	26	30	42			

Notes:
-- Below Reportable Detection Limit (RDL)
PAH = polycyclic aromatic hydorcarbons
PCB = polychorinated biphenyls
ISQG = interim sediment quality guideline
Grey Shading Exceeds CCME Marine Sediment ISQG 2002
Italics exeeds the CEPA Ocean Disposal 1999

Bold exceeds CCME Soil Quality Guidelines 2004

Your P.O. #: NSD016400
Your Project #: 1034272/Z9100
Site: SYDNEY HARBOUR SURVEY
Your C.O.C. #: S 13916

Attention: Angela Swaine
Jacques Whitford Limited
3 Spectacle Lake Dr
Dartmouth, NS
B3B 1W8

Report Date: 2008/01/30

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A803419
Received: 2008/01/14, 10:41

Sample Matrix: Soil
Samples Received: 16

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
TEH in Soil (PIRI)	16	2008/01/16	2008/01/16	ATL SOP 00150	Based on Atl. PIRI
Mercury (CVAA)	1	N/A	2008/01/24	ATL SOP 00026 R2	Based on EPA245.5
Mercury (CVAA)	9	N/A	2008/01/25	ATL SOP 00026 R2	Based on EPA245.5
Mercury (CVAA)	6	N/A	2008/01/28	ATL SOP 00026 R2	Based on EPA245.5
Metals Solid Total MS - HF	16	N/A	2008/01/18	ATL SOP 00024 R3	Based on EPA6020A
Moisture	16	N/A	2008/01/15	ATL SOP 00001 R2	MOE Handbook 1983
PAH Compounds by GCMS (SIM)	16	2008/01/17	2008/01/22	ATL SOP 00148	Based on EPA8270
PCB/DDT in Soil by GC-ECD	16	2008/01/15	2008/01/24	ATL SOP 00106 R2	Based EPA8082
VPH in Soil - Low Level	16	2008/01/17	2008/01/17	ATL SOP 00152	Based on Atl. PIRI
Particle size in solids (pipette&sieve)	3	N/A	2008/01/21	ATL SOP 00012 R2	based on MSAMS-1978
Particle size in solids (pipette&sieve)	9	N/A	2008/01/22	ATL SOP 00012 R2	based on MSAMS-1978
Particle size in solids (pipette&sieve)	4	N/A	2008/01/23	ATL SOP 00012 R2	based on MSAMS-1978
Total Carbon in Solids by Ind.	16	N/A	2008/01/21	ATL SOP 00044 R2	LECO 203-601-224
TIC in soil	16	N/A	2008/01/21	ATL SOP 00044 R2	LECO 203-601-224
Total Organic Carbon in Soil	16	N/A	2008/01/16	ATL SOP 00044 R2	LECO 203-601-224
ModTPH (T1) Calc. for Soil	16	2008/01/14	2008/01/21	ATL SOP 00150/00152	Based on Atl PIRI

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bedford
(2) Soils are reported on a dry weight basis unless otherwise specified.
(3) SCC/CAEAL

../2

Your P.O. #: NSD016400
Your Project #: 1034272/Z9100
Site: SYDNEY HARBOUR SURVEY
Your C.O.C. #: S 13916

Attention: Angela Swaine
Jacques Whitford Limited
3 Spectacle Lake Dr
Dartmouth, NS
B3B 1W8

Report Date: 2008/01/30

CERTIFICATE OF ANALYSIS

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

TANYA ADDICOTT, Client Services Representative
Email: tanya.addicott.reports@maxxamanalytics.com
Phone# (902) 567 1255

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CAEAL have approved this reporting process and electronic report format.

For Service Group specific validation please refer to the Validation Signature Page

Total cover pages: 2

Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC ODCA PKG IN SEDIMENT - OLD (SOIL)

Maxxam ID		W74068	W74068		
Sampling Date		2008/01/12	2008/01/12		
COC Number		S 13916	S 13916		
Registration #					
	Units	**1A**	**1A Lab-Dup**	**RDL**	**QC Batch**
INORGANICS					
Total Inorganic Carbon (C)	g/kg	5	N/A	1	1440290
Moisture	%	53	N/A	1	1440621
Organic Carbon (TOC)	g/kg	14	N/A	1	1441470
Total Carbon-combustion IR	g/kg	20	N/A	0.5	1443989
< -4 Phi (16 mm)	%	100	N/A	0.1	1445460
< -3 Phi (8 mm)	%	100	N/A	0.1	1445460
< -2 Phi (4 mm)	%	100	N/A	0.1	1445460
< -1 Phi (2 mm)	%	99	N/A	0.1	1445460
< 0 Phi (1 mm)	%	98	N/A	0.1	1445460
< +1 Phi (0.5 mm)	%	96	N/A	0.1	1445460
< +2 Phi (0.25 mm)	%	94	N/A	0.1	1445460
< +3 Phi (0.12 mm)	%	90	N/A	0.1	1445460
< +4 Phi (0.062 mm)	%	85	N/A	0.1	1445460
< +5 Phi (0.031 mm)	%	83	N/A	0.1	1445460
< +6 Phi (0.016 mm)	%	72	N/A	0.1	1445460
< +7 Phi (0.0078 mm)	%	48	N/A	0.1	1445460
< +8 Phi (0.0039 mm)	%	36	N/A	0.1	1445460
< +9 Phi (0.0020 mm)	%	23	N/A	0.1	1445460
Gravel	%	0.5	N/A	0.1	1445460
Sand	%	15	N/A	0.1	1445460
Silt	%	48	N/A	0.1	1445460
Clay	%	36	N/A	0.1	1445460
PCBs					
o,p-DDD	mg/kg	ND	ND	0.01	1441024
p,p-DDD	mg/kg	ND	ND	0.01	1441024
o,p-DDE	mg/kg	ND	ND	0.01	1441024
p,p-DDE	mg/kg	ND	ND	0.01	1441024
o,p-DDT	mg/kg	ND	ND	0.01	1441024
p,p-DDT	mg/kg	ND	ND	0.01	1441024

ND = Not detected
N/A = Not Applicable
RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
QC Batch = Quality Control Batch

90 Esplanade St, Sydney, Nova Scotia Canada B1P 1A1 Tel: 902 567 1255 Toll Free: 888 535 7770 Fax: 902 5396504 www.maxxamanalytics.com

Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC ODCA PKG IN SEDIMENT - OLD (SOIL)

Maxxam ID		W74068	W74068		
Sampling Date		2008/01/12	2008/01/12		
COC Number		S 13916	S 13916		
Registration #					
	Units	**1A**	**1A Lab-Dup**	**RDL**	**QC Batch**
Total PCB	mg/kg	ND	ND	0.01	1441024
ELEMENTS					
Mercury (Hg)	mg/kg	0.05	0.04	0.01	1446163
Elements (ICP-MS)					
Total Aluminum (Al)	mg/kg	73000	N/A	100	1443220
Total Antimony (Sb)	mg/kg	ND	N/A	2.0	1443220
Total Arsenic (As)	mg/kg	14	N/A	2.0	1443220
Total Barium (Ba)	mg/kg	380	N/A	5.0	1443220
Total Beryllium (Be)	mg/kg	2.2	N/A	2.0	1443220
Total Cadmium (Cd)	mg/kg	0.22	N/A	0.15	1443220
Total Chromium (Cr)	mg/kg	64	N/A	2.0	1443220
Total Cobalt (Co)	mg/kg	13	N/A	1.0	1443220
Total Copper (Cu)	mg/kg	21	N/A	2.0	1443220
Total Iron (Fe)	mg/kg	31000	N/A	50	1443220
Total Lead (Pb)	mg/kg	34	N/A	0.50	1443220
Total Manganese (Mn)	mg/kg	430	N/A	2.0	1443220
Total Molybdenum (Mo)	mg/kg	3.5	N/A	2.0	1443220
Total Nickel (Ni)	mg/kg	33	N/A	2.0	1443220
Total Selenium (Se)	mg/kg	ND	N/A	2.0	1443220
Total Strontium (Sr)	mg/kg	96	N/A	5.0	1443220
Total Thallium (Tl)	mg/kg	0.64	N/A	0.10	1443220
Total Tin (Sn)	mg/kg	3.1	N/A	2.0	1443220
Total Uranium (U)	mg/kg	2.8	N/A	0.10	1443220
Total Vanadium (V)	mg/kg	110	N/A	2.0	1443220
Total Zinc (Zn)	mg/kg	100	N/A	5.0	1443220
Surrogate Recovery (%)					
2,4,5,6-Tetrachloro-m-xylene	%	85	75	N/A	1441024
Decachlorobiphenyl	%	103	88	N/A	1441024

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC ODCA PKG IN SEDIMENT - OLD (SOIL)

Maxxam ID		W74424	W74424		W74425		
Sampling Date		2008/01/12	2008/01/12		2008/01/12		
COC Number		S 13916	S 13916		S 13916		
Registration #							
	Units	**1B**	**1B Lab-Dup**	**RDL**	**2A**	**RDL**	**QC Batch**
INORGANICS							
Total Inorganic Carbon (C)	g/kg	3	N/A	1	1	1	1440290
Moisture	%	28	N/A	1	57	1	1440621
Organic Carbon (TOC)	g/kg	8	N/A	1	30	0.9	1441470
Total Carbon-combustion IR	g/kg	11	N/A	0.5	32	1	1443989
< -4 Phi (16 mm)	%	100	N/A	0.1	100	0.1	1445460
< -3 Phi (8 mm)	%	100	N/A	0.1	100	0.1	1445460
< -2 Phi (4 mm)	%	100	N/A	0.1	100	0.1	1445460
< -1 Phi (2 mm)	%	67	N/A	0.1	92	0.1	1445460
< 0 Phi (1 mm)	%	60	N/A	0.1	86	0.1	1445460
< +1 Phi (0.5 mm)	%	49	N/A	0.1	79	0.1	1445460
< +2 Phi (0.25 mm)	%	43	N/A	0.1	64	0.1	1445460
< +3 Phi (0.12 mm)	%	37	N/A	0.1	51	0.1	1445460
< +4 Phi (0.062 mm)	%	30	N/A	0.1	43	0.1	1445460
< +5 Phi (0.031 mm)	%	28	N/A	0.1	38	0.1	1445460
< +6 Phi (0.016 mm)	%	22	N/A	0.1	30	0.1	1445460
< +7 Phi (0.0078 mm)	%	17	N/A	0.1	24	0.1	1445460
< +8 Phi (0.0039 mm)	%	15	N/A	0.1	21	0.1	1445460
< +9 Phi (0.0020 mm)	%	11	N/A	0.1	16	0.1	1445460
Gravel	%	33	N/A	0.1	7.7	0.1	1445460
Sand	%	38	N/A	0.1	50	0.1	1445460
Silt	%	15	N/A	0.1	22	0.1	1445460
Clay	%	15	N/A	0.1	21	0.1	1445460
PCBs							
o,p-DDD	mg/kg	ND	N/A	0.01	ND	0.01	1441024
p,p-DDD	mg/kg	ND	N/A	0.01	ND	0.01	1441024
o,p-DDE	mg/kg	ND	N/A	0.01	ND	0.01	1441024
p,p-DDE	mg/kg	ND	N/A	0.01	ND	0.01	1441024
o,p-DDT	mg/kg	ND	N/A	0.01	ND	0.01	1441024
p,p-DDT	mg/kg	ND	N/A	0.01	ND	0.01	1441024

ND = Not detected
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RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
QC Batch = Quality Control Batch

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC ODCA PKG IN SEDIMENT - OLD (SOIL)

Maxxam ID		W74424	W74424		W74425		
Sampling Date		2008/01/12	2008/01/12		2008/01/12		
COC Number		S 13916	S 13916		S 13916		
Registration #							
	Units	**1B**	**1B Lab-Dup**	**RDL**	**2A**	**RDL**	**QC Batch**
Total PCB	mg/kg	ND	N/A	0.01	ND	0.01	1441024
ELEMENTS							
Mercury (Hg)	mg/kg	0.01	ND	0.01	0.05	0.01	1447010
Elements (ICP-MS)							
Total Aluminum (Al)	mg/kg	42000	N/A	10	42000	10	1443220
Total Antimony (Sb)	mg/kg	ND	N/A	2.0	ND	2.0	1443220
Total Arsenic (As)	mg/kg	5.7	N/A	2.0	4.5	2.0	1443220
Total Barium (Ba)	mg/kg	250	N/A	5.0	330	5.0	1443220
Total Beryllium (Be)	mg/kg	ND	N/A	2.0	ND	2.0	1443220
Total Cadmium (Cd)	mg/kg	0.20	N/A	0.15	0.32	0.15	1443220
Total Chromium (Cr)	mg/kg	30	N/A	2.0	28	2.0	1443220
Total Cobalt (Co)	mg/kg	9.1	N/A	1.0	9.1	1.0	1443220
Total Copper (Cu)	mg/kg	12	N/A	2.0	18	2.0	1443220
Total Iron (Fe)	mg/kg	19000	N/A	50	20000	50	1443220
Total Lead (Pb)	mg/kg	22	N/A	0.50	33	0.50	1443220
Total Manganese (Mn)	mg/kg	310	N/A	2.0	390	2.0	1443220
Total Molybdenum (Mo)	mg/kg	6.1	N/A	2.0	ND	2.0	1443220
Total Nickel (Ni)	mg/kg	17	N/A	2.0	16	2.0	1443220
Total Selenium (Se)	mg/kg	ND	N/A	2.0	ND	2.0	1443220
Total Strontium (Sr)	mg/kg	83	N/A	5.0	100	5.0	1443220
Total Thallium (Tl)	mg/kg	0.49	N/A	0.10	0.45	0.10	1443220
Total Tin (Sn)	mg/kg	ND	N/A	2.0	ND	2.0	1443220
Total Uranium (U)	mg/kg	3.8	N/A	0.10	2.3	0.10	1443220
Total Vanadium (V)	mg/kg	64	N/A	2.0	64	2.0	1443220
Total Zinc (Zn)	mg/kg	76	N/A	5.0	85	5.0	1443220
Surrogate Recovery (%)							
2,4,5,6-Tetrachloro-m-xylene	%	91	N/A	N/A	85	N/A	1441024
Decachlorobiphenyl	%	108	N/A	N/A	98	N/A	1441024

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC ODCA PKG IN SEDIMENT - OLD (SOIL)

Maxxam ID		W74426		W74427		
Sampling Date		2008/01/12		2008/01/12		
COC Number		S 13916		S 13916		
Registration #						
	Units	**2B**	**RDL**	**3A**	**RDL**	**QC Batch**
INORGANICS						
Total Inorganic Carbon (C)	g/kg	3	1	5	1	1440290
Moisture	%	47	1	48	1	1440621
Organic Carbon (TOC)	g/kg	26	1	16	1	1441470
Total Carbon-combustion IR	g/kg	29	1	21	0.5	1443989
< -4 Phi (16 mm)	%	100	0.1	100	0.1	1445661
< -3 Phi (8 mm)	%	100	0.1	100	0.1	1445661
< -2 Phi (4 mm)	%	100	0.1	100	0.1	1445661
< -1 Phi (2 mm)	%	84	0.1	99	0.1	1445661
< 0 Phi (1 mm)	%	79	0.1	98	0.1	1445661
< +1 Phi (0.5 mm)	%	73	0.1	97	0.1	1445661
< +2 Phi (0.25 mm)	%	62	0.1	97	0.1	1445661
< +3 Phi (0.12 mm)	%	52	0.1	96	0.1	1445661
< +4 Phi (0.062 mm)	%	45	0.1	92	0.1	1445661
< +5 Phi (0.031 mm)	%	35	0.1	83	0.1	1445661
< +6 Phi (0.016 mm)	%	30	0.1	63	0.1	1445661
< +7 Phi (0.0078 mm)	%	23	0.1	37	0.1	1445661
< +8 Phi (0.0039 mm)	%	21	0.1	32	0.1	1445661
< +9 Phi (0.0020 mm)	%	16	0.1	19	0.1	1445661
Gravel	%	16	0.1	1.2	0.1	1445661
Sand	%	39	0.1	6.9	0.1	1445661
Silt	%	25	0.1	60	0.1	1445661
Clay	%	21	0.1	32	0.1	1445661
PCBs						
o,p-DDD	mg/kg	ND	0.01	ND	0.01	1441024
p,p-DDD	mg/kg	ND	0.01	ND	0.01	1441024
o,p-DDE	mg/kg	ND	0.01	ND	0.01	1441024
p,p-DDE	mg/kg	ND	0.01	ND	0.01	1441024
o,p-DDT	mg/kg	ND	0.01	ND	0.01	1441024
p,p-DDT	mg/kg	ND	0.01	ND	0.01	1441024
Total PCB	mg/kg	ND	0.01	ND	0.01	1441024

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC ODCA PKG IN SEDIMENT - OLD (SOIL)

Maxxam ID		W74426		W74427		
Sampling Date		2008/01/12		2008/01/12		
COC Number		S 13916		S 13916		
Registration #						
	Units	**2B**	**RDL**	**3A**	**RDL**	**QC Batch**
ELEMENTS						
Mercury (Hg)	mg/kg	0.05	0.01	0.04	0.01	1447010
Elements (ICP-MS)						
Total Aluminum (Al)	mg/kg	44000	10	70000	100	1443220
Total Antimony (Sb)	mg/kg	ND	2.0	ND	2.0	1443220
Total Arsenic (As)	mg/kg	4.0	2.0	8.6	2.0	1443220
Total Barium (Ba)	mg/kg	370	5.0	390	5.0	1443220
Total Beryllium (Be)	mg/kg	ND	2.0	ND	2.0	1443220
Total Cadmium (Cd)	mg/kg	0.33	0.15	0.21	0.15	1443220
Total Chromium (Cr)	mg/kg	29	2.0	59	2.0	1443220
Total Cobalt (Co)	mg/kg	8.8	1.0	12	1.0	1443220
Total Copper (Cu)	mg/kg	19	2.0	22	2.0	1443220
Total Iron (Fe)	mg/kg	20000	50	31000	50	1443220
Total Lead (Pb)	mg/kg	37	0.50	30	0.50	1443220
Total Manganese (Mn)	mg/kg	390	2.0	570	2.0	1443220
Total Molybdenum (Mo)	mg/kg	ND	2.0	3.5	2.0	1443220
Total Nickel (Ni)	mg/kg	17	2.0	31	2.0	1443220
Total Selenium (Se)	mg/kg	ND	2.0	ND	2.0	1443220
Total Strontium (Sr)	mg/kg	110	5.0	97	5.0	1443220
Total Thallium (Tl)	mg/kg	0.48	0.10	0.61	0.10	1443220
Total Tin (Sn)	mg/kg	2.1	2.0	3.2	2.0	1443220
Total Uranium (U)	mg/kg	2.4	0.10	2.6	0.10	1443220
Total Vanadium (V)	mg/kg	62	2.0	100	2.0	1443220
Total Zinc (Zn)	mg/kg	88	5.0	95	5.0	1443220
Surrogate Recovery (%)						
2,4,5,6-Tetrachloro-m-xylene	%	80	N/A	84	N/A	1441024
Decachlorobiphenyl	%	93	N/A	99	N/A	1441024

ND = Not detected
N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC ODCA PKG IN SEDIMENT - OLD (SOIL)

Maxxam ID		W74428		W74429	W74430		
Sampling Date		2008/01/12		2008/01/12	2008/01/12		
COC Number		S 13916		S 13916	S 13916		
Registration #							
	Units	**3B**	**RDL**	**4**	**5**	**RDL**	**QC Batch**
INORGANICS							
Total Inorganic Carbon (C)	g/kg	5	1	3.6	2.7	0.9	1440290
Moisture	%	45	1	47	39	1	1440621
Organic Carbon (TOC)	g/kg	16	1	17	16	0.9	1441470
Total Carbon-combustion IR	g/kg	20	0.8	20	19	0.7	1443989
< -4 Phi (16 mm)	%	100	0.1	100	100	0.1	1445661
< -3 Phi (8 mm)	%	100	0.1	100	100	0.1	1445661
< -2 Phi (4 mm)	%	100	0.1	100	100	0.1	1445661
< -1 Phi (2 mm)	%	98	0.1	100	100	0.1	1445661
< 0 Phi (1 mm)	%	97	0.1	99	99	0.1	1445661
< +1 Phi (0.5 mm)	%	97	0.1	98	98	0.1	1445661
< +2 Phi (0.25 mm)	%	96	0.1	98	97	0.1	1445661
< +3 Phi (0.12 mm)	%	96	0.1	95	85	0.1	1445661
< +4 Phi (0.062 mm)	%	93	0.1	90	67	0.1	1445661
< +5 Phi (0.031 mm)	%	87	0.1	82	49	0.1	1445661
< +6 Phi (0.016 mm)	%	71	0.1	63	36	0.1	1445661
< +7 Phi (0.0078 mm)	%	43	0.1	37	20	0.1	1445661
< +8 Phi (0.0039 mm)	%	32	0.1	30	17	0.1	1445661
< +9 Phi (0.0020 mm)	%	21	0.1	18	11	0.1	1445661
Gravel	%	2.2	0.1	0.2	0.3	0.1	1445661
Sand	%	4.5	0.1	9.8	33	0.1	1445661
Silt	%	61	0.1	60	49	0.1	1445661
Clay	%	32	0.1	30	17	0.1	1445661
PCBs							
o,p-DDD	mg/kg	ND	0.01	ND	ND	0.01	1441024
p,p-DDD	mg/kg	ND	0.01	ND	ND	0.01	1441024
o,p-DDE	mg/kg	ND	0.01	ND	ND	0.01	1441024
p,p-DDE	mg/kg	ND	0.01	ND	ND	0.01	1441024
o,p-DDT	mg/kg	ND	0.01	ND	ND	0.01	1441024
p,p-DDT	mg/kg	ND	0.01	ND	ND	0.01	1441024
Total PCB	mg/kg	ND	0.01	ND	ND	0.01	1441024

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

90 Esplanade St, Sydney, Nova Scotia Canada B1P 1A1 Tel: 902 567 1255 Toll Free: 888 535 7770 Fax: 902 5396504 www.maxxamanalytics.com

Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC ODCA PKG IN SEDIMENT - OLD (SOIL)

Maxxam ID		W74428		W74429	W74430		
Sampling Date		2008/01/12		2008/01/12	2008/01/12		
COC Number		S 13916		S 13916	S 13916		
Registration #							
	Units	**3B**	**RDL**	**4**	**5**	**RDL**	**QC Batch**
ELEMENTS							
Mercury (Hg)	mg/kg	0.01	0.01	0.04	0.03	0.01	1447010
Elements (ICP-MS)							
Total Aluminum (Al)	mg/kg	74000	100	65000	56000	100	1443220
Total Antimony (Sb)	mg/kg	ND	2.0	ND	ND	2.0	1443220
Total Arsenic (As)	mg/kg	7.8	2.0	7.7	6.3	2.0	1443220
Total Barium (Ba)	mg/kg	420	5.0	380	310	5.0	1443220
Total Beryllium (Be)	mg/kg	ND	2.0	ND	ND	2.0	1443220
Total Cadmium (Cd)	mg/kg	0.21	0.15	0.21	0.18	0.15	1443220
Total Chromium (Cr)	mg/kg	64	2.0	56	42	2.0	1443220
Total Cobalt (Co)	mg/kg	13	1.0	12	9.7	1.0	1443220
Total Copper (Cu)	mg/kg	22	2.0	22	16	2.0	1443220
Total Iron (Fe)	mg/kg	33000	50	31000	25000	50	1443220
Total Lead (Pb)	mg/kg	24	0.50	32	22	0.50	1443220
Total Manganese (Mn)	mg/kg	570	2.0	550	520	2.0	1443220
Total Molybdenum (Mo)	mg/kg	3.8	2.0	3.5	3.7	2.0	1443220
Total Nickel (Ni)	mg/kg	34	2.0	29	22	2.0	1443220
Total Selenium (Se)	mg/kg	2.3	2.0	ND	ND	2.0	1443220
Total Strontium (Sr)	mg/kg	100	5.0	96	74	5.0	1443220
Total Thallium (Tl)	mg/kg	0.66	0.10	0.60	0.50	0.10	1443220
Total Tin (Sn)	mg/kg	2.6	2.0	3.3	2.4	2.0	1443220
Total Uranium (U)	mg/kg	2.8	0.10	2.6	2.2	0.10	1443220
Total Vanadium (V)	mg/kg	110	2.0	95	70	2.0	1443220
Total Zinc (Zn)	mg/kg	90	5.0	95	73	5.0	1443220
Surrogate Recovery (%)							
2,4,5,6-Tetrachloro-m-xylene	%	79	N/A	81	85	N/A	1441024
Decachlorobiphenyl	%	93	N/A	99	103	N/A	1441024

ND = Not detected
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RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC ODCA PKG IN SEDIMENT - OLD (SOIL)

Maxxam ID		W74431		W74432		
Sampling Date		2008/01/12		2008/01/12		
COC Number		S 13916		S 13916		
Registration #						
	Units	**6A**	**RDL**	**6B**	**RDL**	**QC Batch**
INORGANICS						
Total Inorganic Carbon (C)	g/kg	5	1	2.7	0.9	1440290
Moisture	%	35	1	36	1	1440621
Organic Carbon (TOC)	g/kg	18	1	13	0.9	1441470
Total Carbon-combustion IR	g/kg	23	0.6	16	0.6	1443989
< -4 Phi (16 mm)	%	100	0.1	100	0.1	1445661
< -3 Phi (8 mm)	%	100	0.1	100	0.1	1445661
< -2 Phi (4 mm)	%	100	0.1	100	0.1	1445661
< -1 Phi (2 mm)	%	100	0.1	100	0.1	1445661
< 0 Phi (1 mm)	%	99	0.1	99	0.1	1445661
< +1 Phi (0.5 mm)	%	98	0.1	99	0.1	1445661
< +2 Phi (0.25 mm)	%	96	0.1	98	0.1	1445661
< +3 Phi (0.12 mm)	%	78	0.1	96	0.1	1445661
< +4 Phi (0.062 mm)	%	54	0.1	87	0.1	1445661
< +5 Phi (0.031 mm)	%	37	0.1	61	0.1	1445661
< +6 Phi (0.016 mm)	%	27	0.1	46	0.1	1445661
< +7 Phi (0.0078 mm)	%	16	0.1	27	0.1	1445661
< +8 Phi (0.0039 mm)	%	14	0.1	21	0.1	1445661
< +9 Phi (0.0020 mm)	%	9.5	0.1	14	0.1	1445661
Gravel	%	0.3	0.1	ND	0.1	1445661
Sand	%	46	0.1	13	0.1	1445661
Silt	%	40	0.1	65	0.1	1445661
Clay	%	14	0.1	21	0.1	1445661
PCBs						
o,p-DDD	mg/kg	ND	0.01	ND	0.01	1441024
p,p-DDD	mg/kg	ND	0.01	ND	0.01	1441024
o,p-DDE	mg/kg	ND	0.01	ND	0.01	1441024
p,p-DDE	mg/kg	ND	0.01	ND	0.01	1441024
o,p-DDT	mg/kg	ND	0.01	ND	0.01	1441024
p,p-DDT	mg/kg	ND	0.01	ND	0.01	1441024
Total PCB	mg/kg	ND	0.01	ND	0.01	1441024

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC ODCA PKG IN SEDIMENT - OLD (SOIL)

Maxxam ID		W74431		W74432		
Sampling Date		2008/01/12		2008/01/12		
COC Number		S 13916		S 13916		
Registration #						
	Units	**6A**	**RDL**	**6B**	**RDL**	**QC Batch**
ELEMENTS						
Mercury (Hg)	mg/kg	0.04	0.01	ND	0.01	1447010
Elements (ICP-MS)						
Total Aluminum (Al)	mg/kg	50000	100	64000	100	1443220
Total Antimony (Sb)	mg/kg	ND	2.0	ND	2.0	1443220
Total Arsenic (As)	mg/kg	6.7	2.0	5.5	2.0	1443220
Total Barium (Ba)	mg/kg	300	5.0	360	5.0	1443220
Total Beryllium (Be)	mg/kg	ND	2.0	ND	2.0	1443220
Total Cadmium (Cd)	mg/kg	0.18	0.15	0.21	0.15	1443220
Total Chromium (Cr)	mg/kg	37	2.0	57	2.0	1443220
Total Cobalt (Co)	mg/kg	8.9	1.0	12	1.0	1443220
Total Copper (Cu)	mg/kg	15	2.0	21	2.0	1443220
Total Iron (Fe)	mg/kg	23000	50	30000	50	1443220
Total Lead (Pb)	mg/kg	23	0.50	20	0.50	1443220
Total Manganese (Mn)	mg/kg	490	2.0	590	2.0	1443220
Total Molybdenum (Mo)	mg/kg	3.5	2.0	3.8	2.0	1443220
Total Nickel (Ni)	mg/kg	20	2.0	30	2.0	1443220
Total Selenium (Se)	mg/kg	ND	2.0	ND	2.0	1443220
Total Strontium (Sr)	mg/kg	71	5.0	84	5.0	1443220
Total Thallium (Tl)	mg/kg	0.47	0.10	0.56	0.10	1443220
Total Tin (Sn)	mg/kg	2.6	2.0	2.2	2.0	1443220
Total Uranium (U)	mg/kg	2.1	0.10	2.6	0.10	1443220
Total Vanadium (V)	mg/kg	63	2.0	94	2.0	1443220
Total Zinc (Zn)	mg/kg	71	5.0	83	5.0	1443220
Surrogate Recovery (%)						
2,4,5,6-Tetrachloro-m-xylene	%	79	N/A	93	N/A	1441024
Decachlorobiphenyl	%	96	N/A	111	N/A	1441024

ND = Not detected
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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC ODCA PKG IN SEDIMENT - OLD (SOIL)

Maxxam ID		W74433		W74434		
Sampling Date		2008/01/12		2008/01/12		
COC Number		S 13916		S 13916		
Registration #						
	Units	**7**	**RDL**	**8**	**RDL**	**QC Batch**
INORGANICS						
Total Inorganic Carbon (C)	g/kg	2	1	9.1	0.9	1440290
Moisture	%	41	1	27	1	1440621
Organic Carbon (TOC)	g/kg	16	1	18	0.9	1441470
Total Carbon-combustion IR	g/kg	18	0.7	27	0.7	1443989
< -4 Phi (16 mm)	%	100	0.1	100	0.1	1445661
< -3 Phi (8 mm)	%	100	0.1	100	0.1	1445661
< -2 Phi (4 mm)	%	100	0.1	100	0.1	1445661
< -1 Phi (2 mm)	%	100	0.1	100	0.1	1445661
< 0 Phi (1 mm)	%	99	0.1	100	0.1	1445661
< +1 Phi (0.5 mm)	%	99	0.1	99	0.1	1445661
< +2 Phi (0.25 mm)	%	98	0.1	98	0.1	1445661
< +3 Phi (0.12 mm)	%	96	0.1	90	0.1	1445661
< +4 Phi (0.062 mm)	%	87	0.1	52	0.1	1445661
< +5 Phi (0.031 mm)	%	76	0.1	32	0.1	1445661
< +6 Phi (0.016 mm)	%	56	0.1	21	0.1	1445661
< +7 Phi (0.0078 mm)	%	32	0.1	13	0.1	1445661
< +8 Phi (0.0039 mm)	%	25	0.1	9.9	0.1	1445661
< +9 Phi (0.0020 mm)	%	18	0.1	4.4	0.1	1445661
Gravel	%	ND	0.1	ND	0.1	1445661
Sand	%	13	0.1	48	0.1	1445661
Silt	%	62	0.1	42	0.1	1445661
Clay	%	25	0.1	9.9	0.1	1445661
PCBs						
o,p-DDD	mg/kg	ND	0.01	ND	0.01	1441024
p,p-DDD	mg/kg	ND	0.01	ND	0.01	1441024
o,p-DDE	mg/kg	ND	0.01	ND	0.01	1441024
p,p-DDE	mg/kg	ND	0.01	ND	0.01	1441024
o,p-DDT	mg/kg	ND	0.01	ND	0.01	1441024
p,p-DDT	mg/kg	ND	0.01	ND	0.01	1441024
Total PCB	mg/kg	ND	0.01	ND	0.01	1441024

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC ODCA PKG IN SEDIMENT - OLD (SOIL)

Maxxam ID		W74433		W74434		
Sampling Date		2008/01/12		2008/01/12		
COC Number		S 13916		S 13916		
Registration #						
	Units	**7**	**RDL**	**8**	**RDL**	**QC Batch**
ELEMENTS						
Mercury (Hg)	mg/kg	0.02	0.01	0.02	0.01	1448036
Elements (ICP-MS)						
Total Aluminum (Al)	mg/kg	60000	100	42000	10	1443220
Total Antimony (Sb)	mg/kg	ND	2.0	ND	2.0	1443220
Total Arsenic (As)	mg/kg	6.4	2.0	3.3	2.0	1443220
Total Barium (Ba)	mg/kg	350	5.0	270	5.0	1443220
Total Beryllium (Be)	mg/kg	ND	2.0	ND	2.0	1443220
Total Cadmium (Cd)	mg/kg	0.21	0.15	ND	0.15	1443220
Total Chromium (Cr)	mg/kg	49	2.0	35	2.0	1443220
Total Cobalt (Co)	mg/kg	11	1.0	8.5	1.0	1443220
Total Copper (Cu)	mg/kg	18	2.0	13	2.0	1443220
Total Iron (Fe)	mg/kg	27000	50	22000	50	1443220
Total Lead (Pb)	mg/kg	20	0.50	14	0.50	1443220
Total Manganese (Mn)	mg/kg	540	2.0	510	2.0	1443220
Total Molybdenum (Mo)	mg/kg	2.7	2.0	ND	2.0	1443220
Total Nickel (Ni)	mg/kg	26	2.0	19	2.0	1443220
Total Selenium (Se)	mg/kg	ND	2.0	ND	2.0	1443220
Total Strontium (Sr)	mg/kg	81	5.0	65	5.0	1443220
Total Thallium (Tl)	mg/kg	0.52	0.10	0.42	0.10	1443220
Total Tin (Sn)	mg/kg	2.5	2.0	ND	2.0	1443220
Total Uranium (U)	mg/kg	2.3	0.10	1.7	0.10	1443220
Total Vanadium (V)	mg/kg	80	2.0	57	2.0	1443220
Total Zinc (Zn)	mg/kg	77	5.0	62	5.0	1443220
Surrogate Recovery (%)						
2,4,5,6-Tetrachloro-m-xylene	%	84	N/A	78	N/A	1441024
Decachlorobiphenyl	%	101	N/A	95	N/A	1441024

ND = Not detected
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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC ODCA PKG IN SEDIMENT - OLD (SOIL)

Maxxam ID		W74435			W74436		
Sampling Date		2008/01/12			2008/01/12		
COC Number		S 13916			S 13916		
Registration #							
	Units	**9**	**RDL**	**QC Batch**	**10A**	**RDL**	**QC Batch**
INORGANICS							
Total Inorganic Carbon (C)	g/kg	ND	0.4	1440290	2.0	0.7	1440290
Moisture	%	18	1	1440621	21	1	1440621
Organic Carbon (TOC)	g/kg	1.7	0.4	1441470	25	0.5	1445015
Total Carbon-combustion IR	g/kg	1.4	0.2	1443989	27	0.7	1443989
< -4 Phi (16 mm)	%	100	0.1	1446221	100	0.1	1446221
< -3 Phi (8 mm)	%	100	0.1	1446221	100	0.1	1446221
< -2 Phi (4 mm)	%	100	0.1	1446221	100	0.1	1446221
< -1 Phi (2 mm)	%	100	0.1	1446221	99	0.1	1446221
< 0 Phi (1 mm)	%	99	0.1	1446221	96	0.1	1446221
< +1 Phi (0.5 mm)	%	96	0.1	1446221	85	0.1	1446221
< +2 Phi (0.25 mm)	%	69	0.1	1446221	66	0.1	1446221
< +3 Phi (0.12 mm)	%	8.3	0.1	1446221	42	0.1	1446221
< +4 Phi (0.062 mm)	%	3.9	0.1	1446221	21	0.1	1446221
< +5 Phi (0.031 mm)	%	3.6	0.1	1446221	17	0.1	1446221
< +6 Phi (0.016 mm)	%	3.4	0.1	1446221	12	0.1	1446221
< +7 Phi (0.0078 mm)	%	2.9	0.1	1446221	7.9	0.1	1446221
< +8 Phi (0.0039 mm)	%	2.8	0.1	1446221	6.6	0.1	1446221
< +9 Phi (0.0020 mm)	%	2.0	0.1	1446221	3.7	0.1	1446221
Gravel	%	0.3	0.1	1446221	0.6	0.1	1446221
Sand	%	96	0.1	1446221	78	0.1	1446221
Silt	%	1.0	0.1	1446221	14	0.1	1446221
Clay	%	2.8	0.1	1446221	6.6	0.1	1446221
PCBs							
o,p-DDD	mg/kg	ND	0.01	1441024	ND	0.01	1441024
p,p-DDD	mg/kg	ND	0.01	1441024	ND	0.01	1441024
o,p-DDE	mg/kg	ND	0.01	1441024	ND	0.01	1441024
p,p-DDE	mg/kg	ND	0.01	1441024	ND	0.01	1441024
o,p-DDT	mg/kg	ND	0.01	1441024	ND	0.01	1441024
p,p-DDT	mg/kg	ND	0.01	1441024	ND	0.01	1441024
Total PCB	mg/kg	ND	0.01	1441024	ND	0.01	1441024

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC ODCA PKG IN SEDIMENT - OLD (SOIL)

Maxxam ID		W74435			W74436		
Sampling Date		2008/01/12			2008/01/12		
COC Number		S 13916			S 13916		
Registration #							
	Units	**9**	**RDL**	**QC Batch**	**10A**	**RDL**	**QC Batch**
ELEMENTS							
Mercury (Hg)	mg/kg	ND	0.01	1448036	ND	0.01	1448036
Elements (ICP-MS)							
Total Aluminum (Al)	mg/kg	23000	10	1443220	31000	10	1443220
Total Antimony (Sb)	mg/kg	ND	2.0	1443220	ND	2.0	1443220
Total Arsenic (As)	mg/kg	ND	2.0	1443220	3.9	2.0	1443220
Total Barium (Ba)	mg/kg	180	5.0	1443220	210	5.0	1443220
Total Beryllium (Be)	mg/kg	ND	2.0	1443220	ND	2.0	1443220
Total Cadmium (Cd)	mg/kg	ND	0.15	1443220	ND	0.15	1443220
Total Chromium (Cr)	mg/kg	8.2	2.0	1443220	26	2.0	1443220
Total Cobalt (Co)	mg/kg	2.7	1.0	1443220	5.7	1.0	1443220
Total Copper (Cu)	mg/kg	3.3	2.0	1443220	8.2	2.0	1443220
Total Iron (Fe)	mg/kg	6600	50	1443220	15000	50	1443220
Total Lead (Pb)	mg/kg	6.8	0.50	1443220	11	0.50	1443220
Total Manganese (Mn)	mg/kg	140	2.0	1443220	320	2.0	1443220
Total Molybdenum (Mo)	mg/kg	ND	2.0	1443220	ND	2.0	1443220
Total Nickel (Ni)	mg/kg	4.4	2.0	1443220	14	2.0	1443220
Total Selenium (Se)	mg/kg	ND	2.0	1443220	ND	2.0	1443220
Total Strontium (Sr)	mg/kg	55	5.0	1443220	76	5.0	1443220
Total Thallium (Tl)	mg/kg	0.26	0.10	1443220	0.32	0.10	1443220
Total Tin (Sn)	mg/kg	ND	2.0	1443220	ND	2.0	1443220
Total Uranium (U)	mg/kg	0.66	0.10	1443220	1.3	0.10	1443220
Total Vanadium (V)	mg/kg	17	2.0	1443220	37	2.0	1443220
Total Zinc (Zn)	mg/kg	20	5.0	1443220	40	5.0	1443220
Surrogate Recovery (%)							
2,4,5,6-Tetrachloro-m-xylene	%	80	N/A	1441024	72	N/A	1441024
Decachlorobiphenyl	%	95	N/A	1441024	89	N/A	1441024

ND = Not detected
N/A = Not Applicable
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QC Batch = Quality Control Batch

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Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC ODCA PKG IN SEDIMENT - OLD (SOIL)

Maxxam ID		W74437		W74438	W74438		
Sampling Date		2008/01/12		2008/01/12	2008/01/12		
COC Number		S 13916		S 13916	S 13916		
Registration #							
	Units	**10B**	**RDL**	**11**	**11 Lab-Dup**	**RDL**	**QC Batch**
INORGANICS							
Total Inorganic Carbon (C)	g/kg	6.7	0.8	ND	N/A	0.2	1440290
Moisture	%	24	1	17	N/A	1	1440621
Organic Carbon (TOC)	g/kg	24	0.8	0.5	0.5	0.2	1441470
Total Carbon-combustion IR	g/kg	31	0.6	0.7	ND	0.2	1443989
< -4 Phi (16 mm)	%	100	0.1	100	100	0.1	1446221
< -3 Phi (8 mm)	%	100	0.1	100	100	0.1	1446221
< -2 Phi (4 mm)	%	100	0.1	100	100	0.1	1446221
< -1 Phi (2 mm)	%	99	0.1	90	97	0.1	1446221
< 0 Phi (1 mm)	%	95	0.1	82	92	0.1	1446221
< +1 Phi (0.5 mm)	%	86	0.1	70	80	0.1	1446221
< +2 Phi (0.25 mm)	%	68	0.1	41	46	0.1	1446221
< +3 Phi (0.12 mm)	%	43	0.1	5.7	4.2 (1)	0.1	1446221
< +4 Phi (0.062 mm)	%	21	0.1	3.4	2.7	0.1	1446221
< +5 Phi (0.031 mm)	%	19	0.1	3.9	2.8 (1)	0.1	1446221
< +6 Phi (0.016 mm)	%	13	0.1	3.5	3.1	0.1	1446221
< +7 Phi (0.0078 mm)	%	8.6	0.1	2.9	3.0	0.1	1446221
< +8 Phi (0.0039 mm)	%	7.0	0.1	2.6	3.2	0.1	1446221
< +9 Phi (0.0020 mm)	%	3.7	0.1	2.6	2.9	0.1	1446221
Gravel	%	1.1	0.1	9.9	3.1 (2)	0.1	1446221
Sand	%	78	0.1	87	94	0.1	1446221
Silt	%	14	0.1	0.9	ND	0.1	1446221
Clay	%	7.0	0.1	2.6	3.2	0.1	1446221
PCBs							
o,p-DDD	mg/kg	ND	0.01	ND	N/A	0.01	1441024
p,p-DDD	mg/kg	ND	0.01	ND	N/A	0.01	1441024
o,p-DDE	mg/kg	ND	0.01	ND	N/A	0.01	1441024
p,p-DDE	mg/kg	ND	0.01	ND	N/A	0.01	1441024
o,p-DDT	mg/kg	ND	0.01	ND	N/A	0.01	1441024

ND = Not detected
N/A = Not Applicable
RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
QC Batch = Quality Control Batch
(1) Duplicate %RPD violation not applicable for individual PHI fractions.
(2) Duplicate %RPD violation not applicable. Values agree within 10%.

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC ODCA PKG IN SEDIMENT - OLD (SOIL)

Maxxam ID		W74437		W74438	W74438		
Sampling Date		2008/01/12		2008/01/12	2008/01/12		
COC Number		S 13916		S 13916	S 13916		
Registration #							
	Units	**10B**	**RDL**	**11**	**11 Lab-Dup**	**RDL**	**QC Batch**
p,p-DDT	mg/kg	ND	0.01	ND	N/A	0.01	1441024
Total PCB	mg/kg	ND	0.01	ND	N/A	0.01	1441024
ELEMENTS							
Mercury (Hg)	mg/kg	0.01	0.01	ND	N/A	0.01	1448036
Elements (ICP-MS)							
Total Aluminum (Al)	mg/kg	32000	10	21000	21000	10	1443220
Total Antimony (Sb)	mg/kg	ND	2.0	ND	ND	2.0	1443220
Total Arsenic (As)	mg/kg	3.7	2.0	5.4	4.9	2.0	1443220
Total Barium (Ba)	mg/kg	220	5.0	170	170	5.0	1443220
Total Beryllium (Be)	mg/kg	ND	2.0	ND	ND	2.0	1443220
Total Cadmium (Cd)	mg/kg	ND	0.15	ND	ND	0.15	1443220
Total Chromium (Cr)	mg/kg	27	2.0	14	11 (1)	2.0	1443220
Total Cobalt (Co)	mg/kg	6.0	1.0	2.8	2.6	1.0	1443220
Total Copper (Cu)	mg/kg	9.8	2.0	3.4	3.3	2.0	1443220
Total Iron (Fe)	mg/kg	15000	50	9700	7800	50	1443220
Total Lead (Pb)	mg/kg	10	0.50	8.1	7.4	0.50	1443220
Total Manganese (Mn)	mg/kg	340	2.0	210	150 (1)	2.0	1443220
Total Molybdenum (Mo)	mg/kg	ND	2.0	ND	ND	2.0	1443220
Total Nickel (Ni)	mg/kg	14	2.0	6.0	5.2	2.0	1443220
Total Selenium (Se)	mg/kg	ND	2.0	ND	ND	2.0	1443220
Total Strontium (Sr)	mg/kg	70	5.0	53	55	5.0	1443220
Total Thallium (Tl)	mg/kg	0.33	0.10	0.23	0.24	0.10	1443220
Total Tin (Sn)	mg/kg	ND	2.0	ND	ND	2.0	1443220
Total Uranium (U)	mg/kg	1.4	0.10	0.69	0.62	0.10	1443220
Total Vanadium (V)	mg/kg	40	2.0	26	21	2.0	1443220
Total Zinc (Zn)	mg/kg	41	5.0	23	21	5.0	1443220
Surrogate Recovery (%)							
2,4,5,6-Tetrachloro-m-xylene	%	77	N/A	83	N/A	N/A	1441024
Decachlorobiphenyl	%	95	N/A	96	N/A	N/A	1441024

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RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
QC Batch = Quality Control Batch
(1) Poor RPD due to sample inhomogeneity.

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC MUST (PIRI TIER I) IN SOIL

Maxxam ID		W74068	W74068	W74424	W74425		
Sampling Date		2008/01/12	2008/01/12	2008/01/12	2008/01/12		
COC Number		S 13916	S 13916	S 13916	S 13916		
Registration #							
	Units	**1A**	**1A Lab-Dup**	**1B**	**2A**	**RDL**	**QC Batch**
TPH COMPOUNDS							
Benzene	mg/kg	0.006	0.006	ND	0.011	0.003	1443863
Toluene	mg/kg	ND	ND	ND	ND	0.03	1443863
Ethylbenzene	mg/kg	ND	ND	ND	ND	0.01	1443863
Xylene (Total)	mg/kg	ND	ND	ND	ND	0.05	1443863
C6 - C10 (less BTEX)	mg/kg	ND	ND	ND	ND	3	1443863
>C10-C21 Hydrocarbons	mg/kg	42	42	ND	18	15	1441037
>C21-<C32 Hydrocarbons	mg/kg	120	84	38	63	15	1441037
Modified TPH (Tier1)	mg/kg	160	N/A	38	81	20	1439936
Surrogate Recovery (%)							
Isobutylbenzene - Extractable	%	97	99	94	88	N/A	1441037
Isobutylbenzene - Volatile	%	128	134	104	139	N/A	1443863
n-Dotriacontane - Extractable	%	99 (1)	103 (2)	101 (1)	94 (1)	N/A	1441037

ND = Not detected
N/A = Not Applicable
RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
QC Batch = Quality Control Batch
(1) LUBE OIL FRACTION
(2) LUIBE OIL FRACTION

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC MUST (PIRI TIER I) IN SOIL

Maxxam ID		W74426		W74427	W74428		
Sampling Date		2008/01/12		2008/01/12	2008/01/12		
COC Number		S 13916		S 13916	S 13916		
Registration #							
	Units	**2B**	**QC Batch**	**3A**	**3B**	**RDL**	**QC Batch**
TPH COMPOUNDS							
Benzene	mg/kg	0.003	1443863	0.006	0.003	0.003	1443863
Toluene	mg/kg	ND	1443863	ND	ND	0.03	1443863
Ethylbenzene	mg/kg	ND	1443863	ND	ND	0.01	1443863
Xylene (Total)	mg/kg	ND	1443863	ND	ND	0.05	1443863
C6 - C10 (less BTEX)	mg/kg	ND	1443863	ND	ND	3	1443863
>C10-C21 Hydrocarbons	mg/kg	16	1441037	28	ND	15	1441037
>C21-<C32 Hydrocarbons	mg/kg	26	1441037	99	38	15	1441037
Modified TPH (Tier1)	mg/kg	42	1439936	130	38	20	1440433
Surrogate Recovery (%)							
Isobutylbenzene - Extractable	%	78	1441037	84	94	N/A	1441037
Isobutylbenzene - Volatile	%	119	1443863	123	125	N/A	1443863
n-Dotriacontane - Extractable	%	83 (1)	1441037	89 (1)	98 (1)	N/A	1441037

ND = Not detected
N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) LUBE OIL FRACTION

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC MUST (PIRI TIER I) IN SOIL

Maxxam ID		W74429	W74430	W74431	W74432		
Sampling Date		2008/01/12	2008/01/12	2008/01/12	2008/01/12		
COC Number		S 13916	S 13916	S 13916	S 13916		
Registration #							
	Units	**4**	**5**	**6A**	**6B**	**RDL**	**QC Batch**
TPH COMPOUNDS							
Benzene	mg/kg	0.008	0.007	0.021	ND	0.003	1443863
Toluene	mg/kg	ND	ND	0.06	ND	0.03	1443863
Ethylbenzene	mg/kg	ND	ND	0.01	ND	0.01	1443863
Xylene (Total)	mg/kg	ND	ND	ND	ND	0.05	1443863
C6 - C10 (less BTEX)	mg/kg	ND	ND	ND	ND	3	1443863
>C10-C21 Hydrocarbons	mg/kg	35	27	32	ND	15	1441037
>C21-<C32 Hydrocarbons	mg/kg	100	78	79	28	15	1441037
Modified TPH (Tier1)	mg/kg	130	100	110	28	20	1440433
Surrogate Recovery (%)							
Isobutylbenzene - Extractable	%	90	87	89	86	N/A	1441037
Isobutylbenzene - Volatile	%	109	127	112	108	N/A	1443863
n-Dotriacontane - Extractable	%	96 (1)	94 (1)	95 (1)	92 (1)	N/A	1441037

ND = Not detected
N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) LUBE OIL FRACTION

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC MUST (PIRI TIER I) IN SOIL

Maxxam ID		W74433	W74434	W74435	W74436		
Sampling Date		2008/01/12	2008/01/12	2008/01/12	2008/01/12		
COC Number		S 13916	S 13916	S 13916	S 13916		
Registration #							
	Units	**7**	**8**	**9**	**10A**	**RDL**	**QC Batch**
TPH COMPOUNDS							
Benzene	mg/kg	0.005	0.007	ND	0.009	0.003	1443863
Toluene	mg/kg	ND	ND	ND	ND	0.03	1443863
Ethylbenzene	mg/kg	ND	ND	ND	ND	0.01	1443863
Xylene (Total)	mg/kg	ND	ND	ND	ND	0.05	1443863
C6 - C10 (less BTEX)	mg/kg	ND	ND	ND	ND	3	1443863
>C10-C21 Hydrocarbons	mg/kg	ND	21	ND	22	15	1441037
>C21-<C32 Hydrocarbons	mg/kg	32	49	ND	36	15	1441037
Modified TPH (Tier1)	mg/kg	32	70	ND	58	20	1440433
Surrogate Recovery (%)							
Isobutylbenzene - Extractable	%	96	92	95	88	N/A	1441037
Isobutylbenzene - Volatile	%	112	112	114	113	N/A	1443863
n-Dotriacontane - Extractable	%	101 (1)	97 (1)	100	92 (1)	N/A	1441037

ND = Not detected
N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) LUBE OIL FRACTION

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC MUST (PIRI TIER I) IN SOIL

Maxxam ID		W74437	W74438		
Sampling Date		2008/01/12	2008/01/12		
COC Number		S 13916	S 13916		
Registration #					
	Units	**10B**	**11**	**RDL**	**QC Batch**
TPH COMPOUNDS					
Benzene	mg/kg	0.005	ND	0.003	1443863
Toluene	mg/kg	ND	ND	0.03	1443863
Ethylbenzene	mg/kg	ND	ND	0.01	1443863
Xylene (Total)	mg/kg	ND	ND	0.05	1443863
C6 - C10 (less BTEX)	mg/kg	ND	ND	3	1443863
>C10-C21 Hydrocarbons	mg/kg	26	ND	15	1441037
>C21-<C32 Hydrocarbons	mg/kg	49	ND	15	1441037
Modified TPH (Tier1)	mg/kg	75	ND	20	1440433
Surrogate Recovery (%)					
Isobutylbenzene - Extractable	%	87	75	N/A	1441037
Isobutylbenzene - Volatile	%	110	112	N/A	1443863
n-Dotriacontane - Extractable	%	91 (1)	80	N/A	1441037

ND = Not detected
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RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) LUBE OIL FRACTION

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Maxxam ID		W74068	W74068		W74424		
Sampling Date		2008/01/12	2008/01/12		2008/01/12		
COC Number		S 13916	S 13916		S 13916		
Registration #							
	Units	**1A**	**1A Lab-Dup**	**RDL**	**1B**	**RDL**	**QC Batch**
PAHs							
1-Methylnaphthalene	mg/kg	ND	ND	0.1	ND	0.05	1442727
2-Methylnaphthalene	mg/kg	ND	ND	0.1	ND	0.05	1442727
Acenaphthene	mg/kg	ND	ND	0.1	ND	0.05	1442727
Acenaphthylene	mg/kg	ND	ND	0.1	ND	0.05	1442727
Anthracene	mg/kg	ND	ND	0.1	ND	0.05	1442727
Benzo(a)anthracene	mg/kg	0.1	0.1	0.1	ND	0.05	1442727
Benzo(a)pyrene	mg/kg	0.2	0.2	0.1	ND	0.05	1442727
Benzo(b)fluoranthene	mg/kg	0.1	0.2	0.1	ND	0.05	1442727
Benzo(g,h,i)perylene	mg/kg	0.1	0.2	0.1	ND	0.05	1442727
Benzo(k)fluoranthene	mg/kg	0.2	0.2	0.1	ND	0.05	1442727
Chrysene	mg/kg	0.1	0.1	0.1	ND	0.05	1442727
Dibenz(a,h)anthracene	mg/kg	ND	ND	0.1	ND	0.05	1442727
Fluoranthene	mg/kg	0.2	0.3	0.1	ND	0.05	1442727
Fluorene	mg/kg	ND	ND	0.1	ND	0.05	1442727
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	0.1	ND	0.05	1442727
Naphthalene	mg/kg	ND	ND	0.1	ND	0.05	1442727
Perylene	mg/kg	ND	ND	0.1	ND	0.05	1442727
Phenanthrene	mg/kg	0.2	0.2	0.1	ND	0.05	1442727
Pyrene	mg/kg	0.2	0.3	0.1	ND	0.05	1442727
Surrogate Recovery (%)							
D10-Anthracene	%	97	118	N/A	100	N/A	1442727
D14-Terphenyl (FS)	%	83	81	N/A	84	N/A	1442727
D8-Acenaphthylene	%	92	94	N/A	92	N/A	1442727

ND = Not detected
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Lab-Dup = Laboratory Initiated Duplicate
QC Batch = Quality Control Batch

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Maxxam ID		W74425		W74426	W74427		
Sampling Date		2008/01/12		2008/01/12	2008/01/12		
COC Number		S 13916		S 13916	S 13916		
Registration #							
	Units	**2A**	**RDL**	**2B**	**3A**	**RDL**	**QC Batch**
PAHs							
1-Methylnaphthalene	mg/kg	ND	0.1	ND	0.14	0.05	1442727
2-Methylnaphthalene	mg/kg	ND	0.1	ND	0.15	0.05	1442727
Acenaphthene	mg/kg	ND	0.1	ND	ND	0.05	1442727
Acenaphthylene	mg/kg	ND	0.1	ND	ND	0.05	1442727
Anthracene	mg/kg	0.1	0.1	ND	0.13	0.05	1442727
Benzo(a)anthracene	mg/kg	0.1	0.1	0.06	0.16	0.05	1442727
Benzo(a)pyrene	mg/kg	0.2	0.1	0.07	0.19	0.05	1442727
Benzo(b)fluoranthene	mg/kg	0.1	0.1	ND	0.15	0.05	1442727
Benzo(g,h,i)perylene	mg/kg	ND	0.1	ND	0.12	0.05	1442727
Benzo(k)fluoranthene	mg/kg	0.2	0.1	0.07	0.22	0.05	1442727
Chrysene	mg/kg	0.1	0.1	ND	0.14	0.05	1442727
Dibenz(a,h)anthracene	mg/kg	ND	0.1	ND	ND	0.05	1442727
Fluoranthene	mg/kg	0.3	0.1	0.10	0.28	0.05	1442727
Fluorene	mg/kg	ND	0.1	ND	0.06	0.05	1442727
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	ND	0.11	0.05	1442727
Naphthalene	mg/kg	ND	0.1	ND	0.11	0.05	1442727
Perylene	mg/kg	ND	0.1	ND	0.10	0.05	1442727
Phenanthrene	mg/kg	0.3	0.1	0.10	0.32	0.05	1442727
Pyrene	mg/kg	0.3	0.1	0.11	0.32	0.05	1442727
Surrogate Recovery (%)							
D10-Anthracene	%	100	N/A	100	119	N/A	1442727
D14-Terphenyl (FS)	%	85	N/A	83	84	N/A	1442727
D8-Acenaphthylene	%	91	N/A	88	92	N/A	1442727

ND = Not detected
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RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Maxxam ID		W74428	W74429	W74430	W74431		
Sampling Date		2008/01/12	2008/01/12	2008/01/12	2008/01/12		
COC Number		S 13916	S 13916	S 13916	S 13916		
Registration #							
	Units	**3B**	**4**	**5**	**6A**	**RDL**	**QC Batch**
PAHs							
1-Methylnaphthalene	mg/kg	ND	0.17	0.16	0.18	0.05	1442727
2-Methylnaphthalene	mg/kg	ND	0.19	0.17	0.20	0.05	1442727
Acenaphthene	mg/kg	ND	ND	ND	ND	0.05	1442727
Acenaphthylene	mg/kg	ND	ND	ND	ND	0.05	1442727
Anthracene	mg/kg	ND	0.20	0.14	0.14	0.05	1442727
Benzo(a)anthracene	mg/kg	ND	0.20	0.16	0.19	0.05	1442727
Benzo(a)pyrene	mg/kg	ND	0.26	0.16	0.20	0.05	1442727
Benzo(b)fluoranthene	mg/kg	ND	0.18	0.13	0.16	0.05	1442727
Benzo(g,h,i)perylene	mg/kg	ND	0.17	0.11	0.13	0.05	1442727
Benzo(k)fluoranthene	mg/kg	ND	0.28	0.20	0.22	0.05	1442727
Chrysene	mg/kg	ND	0.20	0.14	0.16	0.05	1442727
Dibenz(a,h)anthracene	mg/kg	ND	ND	ND	ND	0.05	1442727
Fluoranthene	mg/kg	ND	0.41	0.31	0.39	0.05	1442727
Fluorene	mg/kg	ND	0.07	0.07	0.06	0.05	1442727
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.15	0.09	0.12	0.05	1442727
Naphthalene	mg/kg	ND	0.14	0.11	0.13	0.05	1442727
Perylene	mg/kg	0.14	0.15	0.07	0.06	0.05	1442727
Phenanthrene	mg/kg	0.05	0.50	0.39	0.41	0.05	1442727
Pyrene	mg/kg	ND	0.40	0.31	0.41	0.05	1442727
Surrogate Recovery (%)							
D10-Anthracene	%	94	120	114	113	N/A	1442727
D14-Terphenyl (FS)	%	89	84	82	83	N/A	1442727
D8-Acenaphthylene	%	96	91	92	89	N/A	1442727

ND = Not detected
N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A803419
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Maxxam ID		W74432	W74433	W74434	W74435		
Sampling Date		2008/01/12	2008/01/12	2008/01/12	2008/01/12		
COC Number		S 13916	S 13916	S 13916	S 13916		
Registration #							
	Units	**6B**	**7**	**8**	**9**	**RDL**	**QC Batch**
PAHs							
1-Methylnaphthalene	mg/kg	0.06	0.07	0.13	ND	0.05	1442727
2-Methylnaphthalene	mg/kg	0.05	0.06	0.16	ND	0.05	1442727
Acenaphthene	mg/kg	ND	ND	ND	ND	0.05	1442727
Acenaphthylene	mg/kg	ND	ND	ND	ND	0.05	1442727
Anthracene	mg/kg	ND	ND	ND	ND	0.05	1442727
Benzo(a)anthracene	mg/kg	ND	ND	ND	ND	0.05	1442727
Benzo(a)pyrene	mg/kg	ND	ND	ND	ND	0.05	1442727
Benzo(b)fluoranthene	mg/kg	ND	ND	ND	ND	0.05	1442727
Benzo(g,h,i)perylene	mg/kg	ND	ND	ND	ND	0.05	1442727
Benzo(k)fluoranthene	mg/kg	ND	ND	ND	ND	0.05	1442727
Chrysene	mg/kg	ND	ND	ND	ND	0.05	1442727
Dibenz(a,h)anthracene	mg/kg	ND	ND	ND	ND	0.05	1442727
Fluoranthene	mg/kg	ND	0.07	0.06	ND	0.05	1442727
Fluorene	mg/kg	ND	ND	ND	ND	0.05	1442727
Indeno(1,2,3-cd)pyrene	mg/kg	ND	ND	ND	ND	0.05	1442727
Naphthalene	mg/kg	ND	ND	0.08	ND	0.05	1442727
Perylene	mg/kg	0.05	0.05	ND	ND	0.05	1442727
Phenanthrene	mg/kg	0.07	0.13	0.12	ND	0.05	1442727
Pyrene	mg/kg	ND	0.08	0.08	ND	0.05	1442727
Surrogate Recovery (%)							
D10-Anthracene	%	97	116	116	96	N/A	1442727
D14-Terphenyl (FS)	%	83	84	82	85	N/A	1442727
D8-Acenaphthylene	%	91	89	91	92	N/A	1442727

ND = Not detected
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QC Batch = Quality Control Batch

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Maxxam Job #: A803419
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Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Maxxam ID		W74436	W74437	W74438		
Sampling Date		2008/01/12	2008/01/12	2008/01/12		
COC Number		S 13916	S 13916	S 13916		
Registration #						
	Units	**10A**	**10B**	**11**	**RDL**	**QC Batch**
PAHs						
1-Methylnaphthalene	mg/kg	0.17	0.14	ND	0.05	1442727
2-Methylnaphthalene	mg/kg	0.18	0.14	ND	0.05	1442727
Acenaphthene	mg/kg	ND	ND	ND	0.05	1442727
Acenaphthylene	mg/kg	ND	ND	ND	0.05	1442727
Anthracene	mg/kg	ND	ND	ND	0.05	1442727
Benzo(a)anthracene	mg/kg	ND	ND	ND	0.05	1442727
Benzo(a)pyrene	mg/kg	ND	ND	ND	0.05	1442727
Benzo(b)fluoranthene	mg/kg	ND	ND	ND	0.05	1442727
Benzo(g,h,i)perylene	mg/kg	ND	ND	ND	0.05	1442727
Benzo(k)fluoranthene	mg/kg	ND	ND	ND	0.05	1442727
Chrysene	mg/kg	ND	ND	ND	0.05	1442727
Dibenz(a,h)anthracene	mg/kg	ND	ND	ND	0.05	1442727
Fluoranthene	mg/kg	0.05	ND	ND	0.05	1442727
Fluorene	mg/kg	ND	ND	ND	0.05	1442727
Indeno(1,2,3-cd)pyrene	mg/kg	ND	ND	ND	0.05	1442727
Naphthalene	mg/kg	0.08	0.06	ND	0.05	1442727
Perylene	mg/kg	ND	ND	ND	0.05	1442727
Phenanthrene	mg/kg	0.18	0.16	ND	0.05	1442727
Pyrene	mg/kg	0.08	0.08	ND	0.05	1442727
Surrogate Recovery (%)						
D10-Anthracene	%	116	95	96	N/A	1442727
D14-Terphenyl (FS)	%	82	83	84	N/A	1442727
D8-Acenaphthylene	%	87	90	93	N/A	1442727

ND = Not detected
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QC Batch = Quality Control Batch

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GENERAL COMMENTS

Uranium recovery from the applicable digested reference material is 70 % for work sheet # 1443220.

Sample W74068-01: Elevated PAH RDL(s) due to high moisture.

Sample W74425-01: Elevated PAH RDL(s) due to high moisture.

Results relate only to the items tested.

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Jacques Whitford Limited
Attention: Angela Swaine
Client Project #: 1034272/Z9100
P.O. #: NSD016400
Project name: SYDNEY HARBOUR SURVEY

Quality Assurance Report

Maxxam Job Number: KA803419

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1441024	CMI	MATRIX SPIKE						
		[W74068-01]	2,4,5,6-Tetrachloro-m-xylene	2008/01/24		82	%	70 - 130
			Decachlorobiphenyl	2008/01/24		97	%	70 - 130
			o,p-DDD	2008/01/24		70	%	N/A
			p,p-DDD	2008/01/24		87	%	N/A
			o,p-DDE	2008/01/24		75	%	N/A
			p,p-DDE	2008/01/24		76	%	N/A
			o,p-DDT	2008/01/24		78	%	N/A
			p,p-DDT	2008/01/24		88	%	N/A
			Total PCB	2008/01/24		108	%	N/A
		Spiked Blank	2,4,5,6-Tetrachloro-m-xylene	2008/01/24		83	%	70 - 130
			Decachlorobiphenyl	2008/01/24		99	%	70 - 130
			o,p-DDD	2008/01/24		88	%	N/A
			p,p-DDD	2008/01/24		93	%	N/A
			o,p-DDE	2008/01/24		96	%	N/A
			p,p-DDE	2008/01/24		98	%	N/A
			o,p-DDT	2008/01/24		94	%	N/A
			p,p-DDT	2008/01/24		103	%	N/A
			Total PCB	2008/01/24		108	%	70 - 130
		Method Blank	2,4,5,6-Tetrachloro-m-xylene	2008/01/24		80	%	70 - 130
			Decachlorobiphenyl	2008/01/24		97	%	70 - 130
			o,p-DDD	2008/01/24	ND, RDL=0.01		mg/kg	
			p,p-DDD	2008/01/24	ND, RDL=0.01		mg/kg	
			o,p-DDE	2008/01/24	ND, RDL=0.01		mg/kg	
			p,p-DDE	2008/01/24	ND, RDL=0.01		mg/kg	
			o,p-DDT	2008/01/24	ND, RDL=0.01		mg/kg	
			p,p-DDT	2008/01/24	ND, RDL=0.01		mg/kg	
			Total PCB	2008/01/24	ND, RDL=0.01		mg/kg	
		RPD [W74068-01]	o,p-DDD	2008/01/24	NC		%	50
			p,p-DDD	2008/01/24	NC		%	50
			o,p-DDE	2008/01/24	NC		%	50
			p,p-DDE	2008/01/24	NC		%	50
			o,p-DDT	2008/01/24	NC		%	50
			p,p-DDT	2008/01/24	NC		%	50
			Total PCB	2008/01/24	NC		%	50
1441037	AHL	MATRIX SPIKE						
		[W74068-01]	Isobutylbenzene - Extractable	2008/01/16		93	%	30 - 130
			n-Dotriacontane - Extractable	2008/01/16		96	%	30 - 130
			>C10-C21 Hydrocarbons	2008/01/16		81	%	30 - 130
			>C21-<C32 Hydrocarbons	2008/01/16		63	%	30 - 130
		Spiked Blank	Isobutylbenzene - Extractable	2008/01/16		73	%	30 - 130
			n-Dotriacontane - Extractable	2008/01/16		76	%	30 - 130
			>C10-C21 Hydrocarbons	2008/01/16		99	%	30 - 130
			>C21-<C32 Hydrocarbons	2008/01/16		82	%	30 - 130
		Method Blank	Isobutylbenzene - Extractable	2008/01/16		79	%	30 - 130
			n-Dotriacontane - Extractable	2008/01/16		81	%	30 - 130
			>C10-C21 Hydrocarbons	2008/01/16	ND, RDL=15		mg/kg	
			>C21-<C32 Hydrocarbons	2008/01/16	ND, RDL=15		mg/kg	
		RPD [W74068-01]	>C10-C21 Hydrocarbons	2008/01/16	NC		%	50
			>C21-<C32 Hydrocarbons	2008/01/16	31.6		%	50
1441470	CAC	QC STANDARD	Organic Carbon (TOC)	2008/01/16		100	%	75 - 125
		Method Blank	Organic Carbon (TOC)	2008/01/16	ND, RDL=0.2		g/kg	
		RPD [W74438-01]	Organic Carbon (TOC)	2008/01/16	NC		%	35
1442727	TML	MATRIX SPIKE						
		[W74068-01]	D10-Anthracene	2008/01/22		98	%	30 - 130

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Client Project #: 1034272/Z9100
P.O. #: NSD016400
Project name: SYDNEY HARBOUR SURVEY

Quality Assurance Report (Continued)

Maxxam Job Number: KA803419

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1442727	TML	MATRIX SPIKE						
		[W74068-01]	D14-Terphenyl (FS)	2008/01/22		92	%	30 - 130
			D8-Acenaphthylene	2008/01/22		92	%	30 - 130
			1-Methylnaphthalene	2008/01/22		89	%	40 - 140
			2-Methylnaphthalene	2008/01/22		82	%	40 - 140
			Acenaphthene	2008/01/22		88	%	40 - 140
			Acenaphthylene	2008/01/22		93	%	40 - 140
			Anthracene	2008/01/22		120	%	40 - 140
			Benzo(a)anthracene	2008/01/22		81	%	40 - 140
			Benzo(a)pyrene	2008/01/22		93	%	40 - 140
			Benzo(b)fluoranthene	2008/01/22		86	%	40 - 140
			Benzo(g,h,i)perylene	2008/01/22		96	%	40 - 140
			Benzo(k)fluoranthene	2008/01/22		113	%	40 - 140
			Chrysene	2008/01/22		93	%	40 - 140
			Dibenz(a,h)anthracene	2008/01/22		99	%	40 - 140
			Fluoranthene	2008/01/22		87	%	40 - 140
			Fluorene	2008/01/22		94	%	40 - 140
			Indeno(1,2,3-cd)pyrene	2008/01/22		84	%	40 - 140
			Naphthalene	2008/01/22		85	%	40 - 140
			Perylene	2008/01/22		98	%	40 - 140
			Phenanthrene	2008/01/22		118	%	40 - 140
			Pyrene	2008/01/22		87	%	40 - 140
		Spiked Blank	D10-Anthracene	2008/01/22		119	%	30 - 130
			D14-Terphenyl (FS)	2008/01/22		92	%	30 - 130
			D8-Acenaphthylene	2008/01/22		94	%	30 - 130
			1-Methylnaphthalene	2008/01/22		91	%	40 - 140
			2-Methylnaphthalene	2008/01/22		86	%	40 - 140
			Acenaphthene	2008/01/22		92	%	40 - 140
			Acenaphthylene	2008/01/22		93	%	40 - 140
			Anthracene	2008/01/22		123	%	40 - 140
			Benzo(a)anthracene	2008/01/22		91	%	40 - 140
			Benzo(a)pyrene	2008/01/22		113	%	40 - 140
			Benzo(b)fluoranthene	2008/01/22		89	%	40 - 140
			Benzo(g,h,i)perylene	2008/01/22		118	%	40 - 140
			Benzo(k)fluoranthene	2008/01/22		116	%	40 - 140
			Chrysene	2008/01/22		99	%	40 - 140
			Dibenz(a,h)anthracene	2008/01/22		113	%	40 - 140
			Fluoranthene	2008/01/22		90	%	40 - 140
			Fluorene	2008/01/22		93	%	40 - 140
			Indeno(1,2,3-cd)pyrene	2008/01/22		90	%	40 - 140
			Naphthalene	2008/01/22		86	%	40 - 140
			Perylene	2008/01/22		115	%	40 - 140
			Phenanthrene	2008/01/22		119	%	40 - 140
			Pyrene	2008/01/22		90	%	40 - 140
		Method Blank	D10-Anthracene	2008/01/22		97	%	30 - 130
			D14-Terphenyl (FS)	2008/01/22		84	%	30 - 130
			D8-Acenaphthylene	2008/01/22		94	%	30 - 130
			1-Methylnaphthalene	2008/01/22	ND, RDL=0.05		mg/kg	
			2-Methylnaphthalene	2008/01/22	ND, RDL=0.05		mg/kg	
			Acenaphthene	2008/01/22	ND, RDL=0.05		mg/kg	
			Acenaphthylene	2008/01/22	ND, RDL=0.05		mg/kg	
			Anthracene	2008/01/22	ND, RDL=0.05		mg/kg	
			Benzo(a)anthracene	2008/01/22	ND, RDL=0.05		mg/kg	
			Benzo(a)pyrene	2008/01/22	ND, RDL=0.05		mg/kg	
			Benzo(b)fluoranthene	2008/01/22	ND, RDL=0.05		mg/kg	

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Client Project #: 1034272/Z9100
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Project name: SYDNEY HARBOUR SURVEY

Quality Assurance Report (Continued)

Maxxam Job Number: KA803419

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1442727	TML	Method Blank	Benzo(g,h,i)perylene	2008/01/22	ND, RDL=0.05		mg/kg	
			Benzo(k)fluoranthene	2008/01/22	ND, RDL=0.05		mg/kg	
			Chrysene	2008/01/22	ND, RDL=0.05		mg/kg	
			Dibenz(a,h)anthracene	2008/01/22	ND, RDL=0.05		mg/kg	
			Fluoranthene	2008/01/22	ND, RDL=0.05		mg/kg	
			Fluorene	2008/01/22	ND, RDL=0.05		mg/kg	
			Indeno(1,2,3-cd)pyrene	2008/01/22	ND, RDL=0.05		mg/kg	
			Naphthalene	2008/01/22	ND, RDL=0.05		mg/kg	
			Perylene	2008/01/22	ND, RDL=0.05		mg/kg	
			Phenanthrene	2008/01/22	ND, RDL=0.05		mg/kg	
			Pyrene	2008/01/22	ND, RDL=0.05		mg/kg	
		RPD [W74068-01]	1-Methylnaphthalene	2008/01/22	NC		%	50
			2-Methylnaphthalene	2008/01/22	NC		%	50
			Acenaphthene	2008/01/22	NC		%	50
			Acenaphthylene	2008/01/22	NC		%	50
			Anthracene	2008/01/22	NC		%	50
			Benzo(a)anthracene	2008/01/22	NC		%	50
			Benzo(a)pyrene	2008/01/22	NC		%	50
			Benzo(b)fluoranthene	2008/01/22	NC		%	50
			Benzo(g,h,i)perylene	2008/01/22	NC		%	50
			Benzo(k)fluoranthene	2008/01/22	NC		%	50
			Chrysene	2008/01/22	NC		%	50
			Dibenz(a,h)anthracene	2008/01/22	NC		%	50
			Fluoranthene	2008/01/22	NC		%	50
			Fluorene	2008/01/22	NC		%	50
			Indeno(1,2,3-cd)pyrene	2008/01/22	NC		%	50
			Naphthalene	2008/01/22	NC		%	50
			Perylene	2008/01/22	NC		%	50
			Phenanthrene	2008/01/22	NC		%	50
			Pyrene	2008/01/22	NC		%	50
1443220	DLB	MATRIX SPIKE [W74438-01]	Total Aluminum (Al)	2008/01/18		113	%	75 - 125
			Total Antimony (Sb)	2008/01/18		101	%	75 - 125
			Total Arsenic (As)	2008/01/18		95	%	75 - 125
			Total Barium (Ba)	2008/01/18		124	%	75 - 125
			Total Beryllium (Be)	2008/01/18		98	%	75 - 125
			Total Cadmium (Cd)	2008/01/18		98	%	75 - 125
			Total Chromium (Cr)	2008/01/18		106	%	75 - 125
			Total Cobalt (Co)	2008/01/18		99	%	75 - 125
			Total Copper (Cu)	2008/01/18		92	%	75 - 125
			Total Iron (Fe)	2008/01/18		NC	%	75 - 125
			Total Lead (Pb)	2008/01/18		102	%	75 - 125
			Total Manganese (Mn)	2008/01/18		NC	%	75 - 125
			Total Molybdenum (Mo)	2008/01/18		98	%	75 - 125
			Total Nickel (Ni)	2008/01/18		97	%	75 - 125
			Total Selenium (Se)	2008/01/18		86	%	75 - 125
			Total Strontium (Sr)	2008/01/18		109	%	75 - 125
			Total Thallium (Tl)	2008/01/18		100	%	75 - 125
			Total Tin (Sn)	2008/01/18		101	%	75 - 125
			Total Uranium (U)	2008/01/18		103	%	75 - 125
			Total Vanadium (V)	2008/01/18		142 (1)	%	75 - 125
			Total Zinc (Zn)	2008/01/18		95	%	75 - 125
		QC STANDARD	Total Aluminum (Al)	2008/01/18		88	%	75 - 125
			Total Arsenic (As)	2008/01/18		92	%	75 - 125
			Total Beryllium (Be)	2008/01/18		105	%	75 - 125

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Client Project #: 1034272/Z9100
P.O. #: NSD016400
Project name: SYDNEY HARBOUR SURVEY

Quality Assurance Report (Continued)

Maxxam Job Number: KA803419

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1443220	DLB	QC STANDARD	Total Chromium (Cr)	2008/01/18		85	%	75 - 125
			Total Cobalt (Co)	2008/01/18		87	%	75 - 125
			Total Copper (Cu)	2008/01/18		85	%	75 - 125
			Total Iron (Fe)	2008/01/18		87	%	75 - 125
			Total Lead (Pb)	2008/01/18		92	%	75 - 125
			Total Manganese (Mn)	2008/01/18		77	%	75 - 125
			Total Molybdenum (Mo)	2008/01/18		94	%	75 - 125
			Total Nickel (Ni)	2008/01/18		86	%	75 - 125
			Total Strontium (Sr)	2008/01/18		69 (2)	%	75 - 125
			Total Thallium (Tl)	2008/01/18		103	%	75 - 125
			Total Tin (Sn)	2008/01/18		116	%	75 - 125
			Total Vanadium (V)	2008/01/18		92	%	75 - 125
			Total Zinc (Zn)	2008/01/18		91	%	75 - 125
		Spiked Blank	Total Aluminum (Al)	2008/01/18		97	%	75 - 125
			Total Antimony (Sb)	2008/01/18		96	%	75 - 125
			Total Arsenic (As)	2008/01/18		87	%	75 - 125
			Total Barium (Ba)	2008/01/18		94	%	75 - 125
			Total Beryllium (Be)	2008/01/18		91	%	75 - 125
			Total Cadmium (Cd)	2008/01/18		96	%	75 - 125
			Total Chromium (Cr)	2008/01/18		97	%	75 - 125
			Total Cobalt (Co)	2008/01/18		96	%	75 - 125
			Total Copper (Cu)	2008/01/18		94	%	75 - 125
			Total Iron (Fe)	2008/01/18		97	%	75 - 125
			Total Lead (Pb)	2008/01/18		94	%	75 - 125
			Total Manganese (Mn)	2008/01/18		100	%	75 - 125
			Total Molybdenum (Mo)	2008/01/18		96	%	75 - 125
			Total Nickel (Ni)	2008/01/18		95	%	75 - 125
			Total Selenium (Se)	2008/01/18		85	%	75 - 125
			Total Strontium (Sr)	2008/01/18		98	%	75 - 125
			Total Thallium (Tl)	2008/01/18		94	%	75 - 125
			Total Tin (Sn)	2008/01/18		74 (3)	%	75 - 125
			Total Uranium (U)	2008/01/18		93	%	75 - 125
			Total Vanadium (V)	2008/01/18		98	%	75 - 125
			Total Zinc (Zn)	2008/01/18		91	%	75 - 125
		Method Blank	Total Aluminum (Al)	2008/01/18	ND, RDL=10		mg/kg	
			Total Antimony (Sb)	2008/01/18	ND, RDL=2.0		mg/kg	
			Total Arsenic (As)	2008/01/18	ND, RDL=2.0		mg/kg	
			Total Barium (Ba)	2008/01/18	ND, RDL=5.0		mg/kg	
			Total Beryllium (Be)	2008/01/18	ND, RDL=2.0		mg/kg	
			Total Cadmium (Cd)	2008/01/18	ND, RDL=0.15		mg/kg	
			Total Chromium (Cr)	2008/01/18	ND, RDL=2.0		mg/kg	
			Total Cobalt (Co)	2008/01/18	ND, RDL=1.0		mg/kg	
			Total Copper (Cu)	2008/01/18	ND, RDL=2.0		mg/kg	
			Total Iron (Fe)	2008/01/18	ND, RDL=50		mg/kg	
			Total Lead (Pb)	2008/01/18	ND, RDL=0.50		mg/kg	
			Total Manganese (Mn)	2008/01/18	ND, RDL=2.0		mg/kg	
			Total Molybdenum (Mo)	2008/01/18	ND, RDL=2.0		mg/kg	
			Total Nickel (Ni)	2008/01/18	ND, RDL=2.0		mg/kg	
			Total Selenium (Se)	2008/01/18	ND, RDL=2.0		mg/kg	
			Total Strontium (Sr)	2008/01/18	ND, RDL=5.0		mg/kg	
			Total Thallium (Tl)	2008/01/18	ND, RDL=0.10		mg/kg	
			Total Tin (Sn)	2008/01/18	ND, RDL=2.0		mg/kg	
			Total Uranium (U)	2008/01/18	ND, RDL=0.10		mg/kg	
			Total Vanadium (V)	2008/01/18	ND, RDL=2.0		mg/kg	
			Total Zinc (Zn)	2008/01/18	ND, RDL=5.0		mg/kg	

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Jacques Whitford Limited
Attention: Angela Swaine
Client Project #: 1034272/Z9100
P.O. #: NSD016400
Project name: SYDNEY HARBOUR SURVEY

Quality Assurance Report (Continued)

Maxxam Job Number: KA803419

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1443220	DLB	RPD [W74438-01]	Total Aluminum (Al)	2008/01/18	0.001		%	25
			Total Antimony (Sb)	2008/01/18	NC		%	25
			Total Arsenic (As)	2008/01/18	NC		%	25
			Total Barium (Ba)	2008/01/18	2.4		%	25
			Total Beryllium (Be)	2008/01/18	NC		%	25
			Total Cadmium (Cd)	2008/01/18	NC		%	25
			Total Chromium (Cr)	2008/01/18	26.0 (4)		%	25
			Total Cobalt (Co)	2008/01/18	NC		%	25
			Total Copper (Cu)	2008/01/18	NC		%	25
			Total Iron (Fe)	2008/01/18	21.7		%	25
			Total Lead (Pb)	2008/01/18	9.3		%	25
			Total Manganese (Mn)	2008/01/18	32.1 (4)		%	25
			Total Molybdenum (Mo)	2008/01/18	NC		%	25
			Total Nickel (Ni)	2008/01/18	NC		%	25
			Total Selenium (Se)	2008/01/18	NC		%	25
			Total Strontium (Sr)	2008/01/18	2.4		%	25
			Total Thallium (Tl)	2008/01/18	NC		%	25
			Total Tin (Sn)	2008/01/18	NC		%	25
			Total Uranium (U)	2008/01/18	11.2		%	25
			Total Vanadium (V)	2008/01/18	22.3		%	25
			Total Zinc (Zn)	2008/01/18	NC		%	25
1443863	BMI	MATRIX SPIKE [W74068-01]	Isobutylbenzene - Volatile	2008/01/17		127	%	60 - 140
			Benzene	2008/01/17		72	%	40 - 130
			Toluene	2008/01/17		74	%	40 - 130
			Ethylbenzene	2008/01/17		71	%	40 - 130
			Xylene (Total)	2008/01/17		80	%	40 - 130
			C6 - C10 (less BTEX)	2008/01/17		95	%	N/A
		Spiked Blank	Isobutylbenzene - Volatile	2008/01/17		101	%	60 - 140
			Benzene	2008/01/17		83	%	40 - 130
			Toluene	2008/01/17		86	%	40 - 130
			Ethylbenzene	2008/01/17		80	%	40 - 130
			Xylene (Total)	2008/01/17		88	%	40 - 130
			C6 - C10 (less BTEX)	2008/01/17		107	%	N/A
		Method Blank	Isobutylbenzene - Volatile	2008/01/17		100	%	60 - 140
			Benzene	2008/01/17	ND, RDL=0.003		mg/kg	
			Toluene	2008/01/17	ND, RDL=0.025		mg/kg	
			Ethylbenzene	2008/01/17	ND, RDL=0.01		mg/kg	
			Xylene (Total)	2008/01/17	ND, RDL=0.05		mg/kg	
			C6 - C10 (less BTEX)	2008/01/17	ND, RDL=3		mg/kg	
		RPD [W74068-01]	Benzene	2008/01/17	NC		%	50
			Toluene	2008/01/17	NC		%	50
			Ethylbenzene	2008/01/17	NC		%	50
			Xylene (Total)	2008/01/17	NC		%	50
			C6 - C10 (less BTEX)	2008/01/17	NC		%	50
1443989	CAC	QC STANDARD	Total Carbon-combustion IR	2008/01/21		106	%	75 - 125
		Method Blank	Total Carbon-combustion IR	2008/01/21	ND, RDL=0.2		g/kg	
		RPD [W74438-01]	Total Carbon-combustion IR	2008/01/21	NC		%	35
1445015	CAC	QC STANDARD	Organic Carbon (TOC)	2008/01/23		97	%	75 - 125
		Method Blank	Organic Carbon (TOC)	2008/01/23	ND, RDL=0.2		g/kg	
1446163	SSI	MATRIX SPIKE [W74068-01]	Mercury (Hg)	2008/01/24		91	%	75 - 125
		QC STANDARD	Mercury (Hg)	2008/01/24		95	%	75 - 125
		Spiked Blank	Mercury (Hg)	2008/01/24		98	%	75 - 125
		Method Blank	Mercury (Hg)	2008/01/24	ND, RDL=0.01		mg/kg	

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Jacques Whitford Limited
Attention: Angela Swaine
Client Project #: 1034272/Z9100
P.O. #: NSD016400
Project name: SYDNEY HARBOUR SURVEY

Quality Assurance Report (Continued)

Maxxam Job Number: KA803419

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1446163	SSI	RPD [W74068-01]	Mercury (Hg)	2008/01/24	NC		%	35
1446221	BAN	RPD [W74438-01]	< -4 Phi (16 mm)	2008/01/23	0		%	25
			< -3 Phi (8 mm)	2008/01/23	0		%	25
			< -2 Phi (4 mm)	2008/01/23	0		%	25
			< -1 Phi (2 mm)	2008/01/23	7.3		%	25
			< 0 Phi (1 mm)	2008/01/23	10.9		%	25
			< +1 Phi (0.5 mm)	2008/01/23	13.9		%	25
			< +2 Phi (0.25 mm)	2008/01/23	10.7		%	25
			< +3 Phi (0.12 mm)	2008/01/23	29.1 (5)		%	25
			< +4 Phi (0.062 mm)	2008/01/23	23.8		%	25
			< +5 Phi (0.031 mm)	2008/01/23	33.3 (5)		%	25
			< +6 Phi (0.016 mm)	2008/01/23	12.5		%	25
			< +7 Phi (0.0078 mm)	2008/01/23	0.7		%	25
			< +8 Phi (0.0039 mm)	2008/01/23	23.3		%	25
			< +9 Phi (0.0020 mm)	2008/01/23	9.2		%	25
			Gravel	2008/01/23	105 (6)		%	25
			Sand	2008/01/23	8.4		%	25
			Silt	2008/01/23	NC		%	25
			Clay	2008/01/23	23.3		%	25
1447010	SSI	MATRIX SPIKE [W74424-01]	Mercury (Hg)	2008/01/25		101	%	75 - 125
		QC STANDARD	Mercury (Hg)	2008/01/25		97	%	75 - 125
		Spiked Blank	Mercury (Hg)	2008/01/25		100	%	75 - 125
		Method Blank	Mercury (Hg)	2008/01/25	ND, RDL=0.01		mg/kg	
		RPD [W74424-01]	Mercury (Hg)	2008/01/25	NC		%	35
1448036	AMC	MATRIX SPIKE	Mercury (Hg)	2008/01/28		93	%	75 - 125
		QC STANDARD	Mercury (Hg)	2008/01/28		96	%	75 - 125
		Spiked Blank	Mercury (Hg)	2008/01/28		106	%	N/A
		Method Blank	Mercury (Hg)	2008/01/28	ND, RDL=0.01		mg/kg	
		RPD	Mercury (Hg)	2008/01/28	NC		%	35

ND = Not detected
N/A = Not Applicable
NC = Non-calculable
RPD = Relative Percent Difference
QC Standard = Quality Control Standard
SPIKE = Fortified sample
(1) Elevated recovery due to sample inhomogeneity.
(2) Secondary RM is acceptable.
(3) Low recovery due to digestion eficiency.
(4) Poor RPD due to sample inhomogeneity.
(5) Duplicate %RPD violation not applicable for individual PHI fractions.
(6) Duplicate %RPD violation not applicable. Values agree within 10%.

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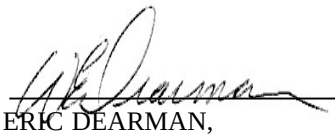
Validation Signature Page

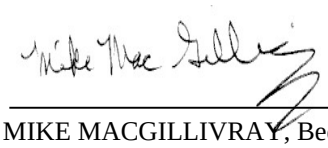
Maxxam Job #: A803419

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

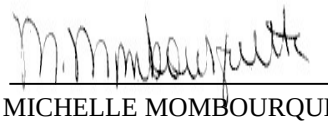


ERIC DEARMAN,

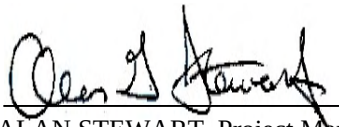
JERRY ARENOVICH, Inorganics Manager



MIKE MACGILLIVRAY, Bedford Inorg Spvsr



MICHELLE MOMBOURQUETTE, Laboratory Manager



ALAN STEWART, Project Manager

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CAEAL have approved this reporting process and electronic report format.

90 Esplanade St, Sydney, Nova Scotia Canada B1P 1A1 Tel: 902 567 1255 Toll Free: 888 535 7770 Fax: 902 5396504 www.maxxamanalytics.com

Your P.O. #: NSD016400
Your Project #: 1034272/Z9100
Site: SYDNEY HARBOUR SURVEY
Your C.O.C. #: S 13913

Attention: Angela Swaine
Jacques Whitford Limited
3 Spectacle Lake Dr
Dartmouth, NS
B3B 1W8

Report Date: 2008/01/30

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A804601
Received: 2008/01/16, 14:38

Sample Matrix: Soil
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
TEH in Soil (PIRI)	4	2008/01/19	2008/01/20	ATL SOP 00150	Based on Atl. PIRI
Mercury (CVAA)	4	N/A	2008/01/29	ATL SOP 00026 R2	Based on EPA245.5
Metals Solid Total MS - HF	4	N/A	2008/01/25	ATL SOP 00024 R3	Based on EPA6020A
Moisture	4	N/A	2008/01/21	ATL SOP 00194	MOE Handbook 1983
PAH Compounds by GCMS (SIM)	4	2008/01/18	2008/01/18	ATL SOP 00148	Based on EPA8270
PCB/DDT in Soil by GC-ECD	4	2008/01/24	2008/01/29	ATL SOP 00106 R2	Based EPA8082
VPH in Soil - Low Level	4	2008/01/18	2008/01/18	ATL SOP 00152	Based on Atl. PIRI
Particle size in solids (pipette&sieve)	2	N/A	2008/01/23	ATL SOP 00012 R2	based on MSAMS-1978
Particle size in solids (pipette&sieve)	2	N/A	2008/01/24	ATL SOP 00012 R2	based on MSAMS-1978
Total Carbon in Solids by Ind.	4	N/A	2008/01/21	ATL SOP 00044 R2	LECO 203-601-224
TIC in soil	1	N/A	2008/01/25	ATL SOP 00044 R2	LECO 203-601-224
TIC in soil	3	N/A	2008/01/29	ATL SOP 00044 R2	LECO 203-601-224
Total Organic Carbon in Soil	1	N/A	2008/01/25	ATL SOP 00044 R2	LECO 203-601-224
Total Organic Carbon in Soil	3	N/A	2008/01/29	ATL SOP 00044 R2	LECO 203-601-224
ModTPH (T1) Calc. for Soil	4	2008/01/17	2008/01/21	ATL SOP 00150/00152	Based on Atl PIRI

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bedford
(2) Soils are reported on a dry weight basis unless otherwise specified.
(3) SCC/CAEAL

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

TANYA ADDICOTT, Client Services Representative
Email: tanya.addicott.reports@maxxamanalytics.com
Phone# (902) 567 1255

Your P.O. #: NSD016400
Your Project #: 1034272/Z9100
Site: SYDNEY HARBOUR SURVEY
Your C.O.C. #: S 13913

Attention: Angela Swaine
Jacques Whitford Limited
3 Spectacle Lake Dr
Dartmouth, NS
B3B 1W8

Report Date: 2008/01/30

CERTIFICATE OF ANALYSIS

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CAEAL have approved this reporting process and electronic report format.

For Service Group specific validation please refer to the Validation Signature Page

Total cover pages: 2

90 Esplanade St, Sydney, Nova Scotia Canada B1P 1A1 Tel: 902 567 1255 Toll Free: 888 535 7770 Fax: 902 5396504 www.maxxamanalytics.com

Maxxam Job #: A804601
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC MUST (PIRI TIER I) IN SOIL

Maxxam ID		W78835	W78884	W78885	W78885		
Sampling Date		2008/01/13	2008/01/13	2008/01/13	2008/01/13		
COC Number		S 13913	S 13913	S 13913	S 13913		
Registration #							
	Units	**12**	**13**	**14**	**14 Lab-Dup**	**RDL**	**QC Batch**
TPH COMPOUNDS							
Benzene	mg/kg	0.003	0.007	0.010	0.010	0.003	1443926
Toluene	mg/kg	ND	ND	ND	ND	0.03	1443926
Ethylbenzene	mg/kg	ND	ND	ND	ND	0.01	1443926
Xylene (Total)	mg/kg	ND	ND	ND	ND	0.05	1443926
C6 - C10 (less BTEX)	mg/kg	ND	ND	ND	ND	3	1443926
>C10-C21 Hydrocarbons	mg/kg	ND	65	290	330	15	1443551
>C21-<C32 Hydrocarbons	mg/kg	50	130	450	570	15	1443551
Modified TPH (Tier1)	mg/kg	50	200	750	N/A	20	1442210
Surrogate Recovery (%)							
Isobutylbenzene - Extractable	%	116	113	106	110	N/A	1443551
Isobutylbenzene - Volatile	%	107	112	119	112	N/A	1443926
n-Dotriacontane - Extractable	%	115 (1)	114 (1)	108 (1)	111 (1)	N/A	1443551

ND = Not detected
N/A = Not Applicable
RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
QC Batch = Quality Control Batch
(1) Lube Oil Fraction

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Maxxam Job #: A804601
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

ATLANTIC MUST (PIRI TIER I) IN SOIL

Maxxam ID		W78886		
Sampling Date		2008/01/13		
COC Number		S 13913		
Registration #				
	Units	**15**	**RDL**	**QC Batch**
TPH COMPOUNDS				
Benzene	mg/kg	0.003	0.003	1443926
Toluene	mg/kg	ND	0.03	1443926
Ethylbenzene	mg/kg	ND	0.01	1443926
Xylene (Total)	mg/kg	ND	0.05	1443926
C6 - C10 (less BTEX)	mg/kg	ND	3	1443926
>C10-C21 Hydrocarbons	mg/kg	18	15	1443551
>C21-<C32 Hydrocarbons	mg/kg	62	15	1443551
Modified TPH (Tier1)	mg/kg	80	20	1442210
Surrogate Recovery (%)				
Isobutylbenzene - Extractable	%	116	N/A	1443551
Isobutylbenzene - Volatile	%	113	N/A	1443926
n-Dotriacontane - Extractable	%	114 (1)	N/A	1443551

ND = Not detected
N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Lube Oil Fration

90 Esplanade St, Sydney, Nova Scotia Canada B1P 1A1 Tel: 902 567 1255 Toll Free: 888 535 7770 Fax: 902 5396504 www.maxxamanalytics.com

Maxxam Job #: A804601
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

OLD OCEAN DUMPING PACKAGE (SOIL)

Maxxam ID		W78835	W78835		
Sampling Date		2008/01/13	2008/01/13		
COC Number		S 13913	S 13913		
Registration #					
	Units	**12**	**12 Lab-Dup**	**RDL**	**QC Batch**
INORGANICS					
Total Inorganic Carbon (C)	g/kg	4.8	N/A	0.5	1442217
Moisture	%	45	N/A	1	1443458
Organic Carbon (TOC)	g/kg	20	N/A	0.5	1446305
Total Carbon-combustion IR	g/kg	25	N/A	0.5	1443989
< -4 Phi (16 mm)	%	100	N/A	0.1	1446221
< -3 Phi (8 mm)	%	100	N/A	0.1	1446221
< -2 Phi (4 mm)	%	100	N/A	0.1	1446221
< -1 Phi (2 mm)	%	98	N/A	0.1	1446221
< 0 Phi (1 mm)	%	95	N/A	0.1	1446221
< +1 Phi (0.5 mm)	%	92	N/A	0.1	1446221
< +2 Phi (0.25 mm)	%	90	N/A	0.1	1446221
< +3 Phi (0.12 mm)	%	87	N/A	0.1	1446221
< +4 Phi (0.062 mm)	%	81	N/A	0.1	1446221
< +5 Phi (0.031 mm)	%	77	N/A	0.1	1446221
< +6 Phi (0.016 mm)	%	66	N/A	0.1	1446221
< +7 Phi (0.0078 mm)	%	50	N/A	0.1	1446221
< +8 Phi (0.0039 mm)	%	33	N/A	0.1	1446221
< +9 Phi (0.0020 mm)	%	12	N/A	0.1	1446221
Gravel	%	2.1	N/A	0.1	1446221
Sand	%	16	N/A	0.1	1446221
Silt	%	48	N/A	0.1	1446221
Clay	%	33	N/A	0.1	1446221
PCBs					
o,p-DDD	mg/kg	ND	ND	0.01	1446132
p,p-DDD	mg/kg	ND	ND	0.01	1446132
o,p-DDE	mg/kg	ND	ND	0.01	1446132
p,p-DDE	mg/kg	ND	ND	0.01	1446132
o,p-DDT	mg/kg	ND	ND	0.01	1446132
p,p-DDT	mg/kg	ND	ND	0.01	1446132

ND = Not detected
N/A = Not Applicable
RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
QC Batch = Quality Control Batch

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Maxxam Job #: A804601
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

OLD OCEAN DUMPING PACKAGE (SOIL)

Maxxam ID		W78835	W78835		
Sampling Date		2008/01/13	2008/01/13		
COC Number		S 13913	S 13913		
Registration #					
	Units	**12**	**12 Lab-Dup**	**RDL**	**QC Batch**
Total PCB	mg/kg	ND	ND	0.01	1446132
ELEMENTS					
Mercury (Hg)	mg/kg	0.02	0.02	0.01	1448652
Elements (ICP-MS)					
Total Aluminum (Al)	mg/kg	63000	N/A	100	1447101
Total Antimony (Sb)	mg/kg	ND	N/A	2.0	1447101
Total Arsenic (As)	mg/kg	6.6	N/A	2.0	1447101
Total Barium (Ba)	mg/kg	320	N/A	5.0	1447101
Total Beryllium (Be)	mg/kg	ND	N/A	2.0	1447101
Total Cadmium (Cd)	mg/kg	0.42	N/A	0.15	1447101
Total Chromium (Cr)	mg/kg	49	N/A	2.0	1447101
Total Cobalt (Co)	mg/kg	11	N/A	1.0	1447101
Total Copper (Cu)	mg/kg	19	N/A	2.0	1447101
Total Iron (Fe)	mg/kg	27000	N/A	50	1447101
Total Lead (Pb)	mg/kg	34	N/A	0.50	1447101
Total Manganese (Mn)	mg/kg	390	N/A	2.0	1447101
Total Molybdenum (Mo)	mg/kg	11	N/A	2.0	1447101
Total Nickel (Ni)	mg/kg	28	N/A	2.0	1447101
Total Selenium (Se)	mg/kg	ND	N/A	2.0	1447101
Total Strontium (Sr)	mg/kg	96	N/A	5.0	1447101
Total Thallium (Tl)	mg/kg	0.65	N/A	0.10	1447101
Total Tin (Sn)	mg/kg	2.1	N/A	2.0	1447101
Total Uranium (U)	mg/kg	4.1	N/A	0.10	1447101
Total Vanadium (V)	mg/kg	89	N/A	2.0	1447101
Total Zinc (Zn)	mg/kg	90	N/A	5.0	1447101
PAHs					
1-Methylnaphthalene	mg/kg	ND	N/A	0.05	1443461
2-Methylnaphthalene	mg/kg	ND	N/A	0.05	1443461
Acenaphthene	mg/kg	ND	N/A	0.05	1443461
Acenaphthylene	mg/kg	ND	N/A	0.05	1443461

ND = Not detected
N/A = Not Applicable
RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
QC Batch = Quality Control Batch

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Maxxam Job #: A804601
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

OLD OCEAN DUMPING PACKAGE (SOIL)

Maxxam ID		W78835	W78835		
Sampling Date		2008/01/13	2008/01/13		
COC Number		S 13913	S 13913		
Registration #					
	Units	**12**	**12 Lab-Dup**	**RDL**	**QC Batch**
Anthracene	mg/kg	ND	N/A	0.05	1443461
Benzo(a)anthracene	mg/kg	ND	N/A	0.05	1443461
Benzo(a)pyrene	mg/kg	0.06	N/A	0.05	1443461
Benzo(b)fluoranthene	mg/kg	0.06	N/A	0.05	1443461
Benzo(g,h,i)perylene	mg/kg	0.05	N/A	0.05	1443461
Benzo(k)fluoranthene	mg/kg	0.07	N/A	0.05	1443461
Chrysene	mg/kg	ND	N/A	0.05	1443461
Dibenz(a,h)anthracene	mg/kg	ND	N/A	0.05	1443461
Fluoranthene	mg/kg	0.09	N/A	0.05	1443461
Fluorene	mg/kg	ND	N/A	0.05	1443461
Indeno(1,2,3-cd)pyrene	mg/kg	ND	N/A	0.05	1443461
Naphthalene	mg/kg	ND	N/A	0.05	1443461
Perylene	mg/kg	ND	N/A	0.05	1443461
Phenanthrene	mg/kg	0.10	N/A	0.05	1443461
Pyrene	mg/kg	0.10	N/A	0.05	1443461
Surrogate Recovery (%)					
2,4,5,6-Tetrachloro-m-xylene	%	84	76	N/A	1446132
Decachlorobiphenyl	%	93	83	N/A	1446132
D10-Anthracene	%	119	N/A	N/A	1443461
D14-Terphenyl (FS)	%	84	N/A	N/A	1443461
D8-Acenaphthylene	%	97	N/A	N/A	1443461

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N/A = Not Applicable
RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
QC Batch = Quality Control Batch

90 Esplanade St, Sydney, Nova Scotia Canada B1P 1A1 Tel: 902 567 1255 Toll Free: 888 535 7770 Fax: 902 5396504 www.maxxamanalytics.com

Maxxam Job #: A804601
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

OLD OCEAN DUMPING PACKAGE (SOIL)

Maxxam ID		W78884			W78885		
Sampling Date		2008/01/13			2008/01/13		
COC Number		S 13913			S 13913		
Registration #							
	Units	**13**	**RDL**	**QC Batch**	**14**	**RDL**	**QC Batch**
INORGANICS							
Total Inorganic Carbon (C)	g/kg	3.6	0.6	1442217	5.6	0.6	1442217
Moisture	%	54	1	1443458	57	1	1443458
Organic Carbon (TOC)	g/kg	21	0.5	1448588	23	0.5	1448588
Total Carbon-combustion IR	g/kg	24	0.6	1443989	29	0.6	1443989
< -4 Phi (16 mm)	%	100	0.1	1446221	100	0.1	1447182
< -3 Phi (8 mm)	%	100	0.1	1446221	100	0.1	1447182
< -2 Phi (4 mm)	%	100	0.1	1446221	100	0.1	1447182
< -1 Phi (2 mm)	%	98	0.1	1446221	94	0.1	1447182
< 0 Phi (1 mm)	%	95	0.1	1446221	93	0.1	1447182
< +1 Phi (0.5 mm)	%	94	0.1	1446221	93	0.1	1447182
< +2 Phi (0.25 mm)	%	93	0.1	1446221	93	0.1	1447182
< +3 Phi (0.12 mm)	%	92	0.1	1446221	92	0.1	1447182
< +4 Phi (0.062 mm)	%	90	0.1	1446221	92	0.1	1447182
< +5 Phi (0.031 mm)	%	90	0.1	1446221	94	0.1	1447182
< +6 Phi (0.016 mm)	%	82	0.1	1446221	86	0.1	1447182
< +7 Phi (0.0078 mm)	%	60	0.1	1446221	60	0.1	1447182
< +8 Phi (0.0039 mm)	%	26	0.1	1446221	30	0.1	1447182
< +9 Phi (0.0020 mm)	%	12	0.1	1446221	14	0.1	1447182
Gravel	%	2.4	0.1	1446221	6.3	0.1	1447182
Sand	%	7.2	0.1	1446221	2.0	0.1	1447182
Silt	%	64	0.1	1446221	62	0.1	1447182
Clay	%	26	0.1	1446221	30	0.1	1447182
PCBs							
o,p-DDD	mg/kg	ND	0.01	1446132	ND	0.01	1446132
p,p-DDD	mg/kg	ND	0.01	1446132	ND	0.01	1446132
o,p-DDE	mg/kg	ND	0.01	1446132	ND	0.01	1446132
p,p-DDE	mg/kg	ND	0.01	1446132	ND	0.01	1446132
o,p-DDT	mg/kg	ND	0.01	1446132	ND	0.01	1446132
p,p-DDT	mg/kg	ND	0.01	1446132	ND	0.01	1446132
Total PCB	mg/kg	ND	0.01	1446132	ND	0.01	1446132

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Maxxam Job #: A804601
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

OLD OCEAN DUMPING PACKAGE (SOIL)

Maxxam ID		W78884			W78885		
Sampling Date		2008/01/13			2008/01/13		
COC Number		S 13913			S 13913		
Registration #							
	Units	**13**	**RDL**	**QC Batch**	**14**	**RDL**	**QC Batch**
ELEMENTS							
Mercury (Hg)	mg/kg	0.05	0.01	1448652	0.06	0.01	1448652
Elements (ICP-MS)							
Total Aluminum (Al)	mg/kg	78000	100	1447101	82000	100	1447101
Total Antimony (Sb)	mg/kg	ND	2.0	1447101	ND	2.0	1447101
Total Arsenic (As)	mg/kg	10	2.0	1447101	13	2.0	1447101
Total Barium (Ba)	mg/kg	390	5.0	1447101	400	5.0	1447101
Total Beryllium (Be)	mg/kg	2.1	2.0	1447101	2.5	2.0	1447101
Total Cadmium (Cd)	mg/kg	0.27	0.15	1447101	0.34	0.15	1447101
Total Chromium (Cr)	mg/kg	63	2.0	1447101	69	2.0	1447101
Total Cobalt (Co)	mg/kg	13	1.0	1447101	13	1.0	1447101
Total Copper (Cu)	mg/kg	21	2.0	1447101	23	2.0	1447101
Total Iron (Fe)	mg/kg	32000	50	1447101	35000	50	1447101
Total Lead (Pb)	mg/kg	43	0.50	1447101	55	0.50	1447101
Total Manganese (Mn)	mg/kg	440	2.0	1447101	510	2.0	1447101
Total Molybdenum (Mo)	mg/kg	3.6	2.0	1447101	3.6	2.0	1447101
Total Nickel (Ni)	mg/kg	34	2.0	1447101	36	2.0	1447101
Total Selenium (Se)	mg/kg	ND	2.0	1447101	ND	2.0	1447101
Total Strontium (Sr)	mg/kg	87	5.0	1447101	89	5.0	1447101
Total Thallium (Tl)	mg/kg	0.70	0.10	1447101	0.75	0.10	1447101
Total Tin (Sn)	mg/kg	2.9	2.0	1447101	3.7	2.0	1447101
Total Uranium (U)	mg/kg	2.8	0.10	1447101	2.9	0.10	1447101
Total Vanadium (V)	mg/kg	110	2.0	1447101	120	2.0	1447101
Total Zinc (Zn)	mg/kg	110	5.0	1447101	120	5.0	1447101
PAHs							
1-Methylnaphthalene	mg/kg	0.1	0.1	1443461	0.53	0.05	1443461
2-Methylnaphthalene	mg/kg	0.2	0.1	1443461	0.64	0.05	1443461
Acenaphthene	mg/kg	ND	0.1	1443461	0.43	0.05	1443461
Acenaphthylene	mg/kg	ND	0.1	1443461	0.37	0.05	1443461
Anthracene	mg/kg	0.3	0.1	1443461	2.8	0.05	1443461
Benzo(a)anthracene	mg/kg	0.4	0.1	1443461	2.6	0.05	1443461

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QC Batch = Quality Control Batch

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Maxxam Job #: A804601
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

OLD OCEAN DUMPING PACKAGE (SOIL)

Maxxam ID		W78884			W78885		
Sampling Date		2008/01/13			2008/01/13		
COC Number		S 13913			S 13913		
Registration #							
	Units	**13**	**RDL**	**QC Batch**	**14**	**RDL**	**QC Batch**
Benzo(a)pyrene	mg/kg	0.7	0.1	1443461	3.5	0.05	1443461
Benzo(b)fluoranthene	mg/kg	0.5	0.1	1443461	2.5	0.05	1443461
Benzo(g,h,i)perylene	mg/kg	0.4	0.1	1443461	1.6	0.05	1443461
Benzo(k)fluoranthene	mg/kg	0.7	0.1	1443461	3.2	0.05	1443461
Chrysene	mg/kg	0.4	0.1	1443461	2.8	0.05	1443461
Dibenz(a,h)anthracene	mg/kg	0.1	0.1	1443461	0.55	0.05	1443461
Fluoranthene	mg/kg	0.7	0.1	1443461	4.3	0.05	1443461
Fluorene	mg/kg	ND	0.1	1443461	0.75	0.05	1443461
Indeno(1,2,3-cd)pyrene	mg/kg	0.4	0.1	1443461	1.8	0.05	1443461
Naphthalene	mg/kg	0.2	0.1	1443461	0.99	0.05	1443461
Perylene	mg/kg	0.2	0.1	1443461	0.84	0.05	1443461
Phenanthrene	mg/kg	0.7	0.1	1443461	5.1	0.05	1443461
Pyrene	mg/kg	0.9	0.1	1443461	5.4	0.05	1443461
Surrogate Recovery (%)							
2,4,5,6-Tetrachloro-m-xylene	%	79	N/A	1446132	75	N/A	1446132
Decachlorobiphenyl	%	89	N/A	1446132	83	N/A	1446132
D10-Anthracene	%	100	N/A	1443461	120	N/A	1443461
D14-Terphenyl (FS)	%	81	N/A	1443461	86	N/A	1443461
D8-Acenaphthylene	%	95	N/A	1443461	92	N/A	1443461

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Maxxam Job #: A804601
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

OLD OCEAN DUMPING PACKAGE (SOIL)

Maxxam ID		W78885		W78886	W78886		
Sampling Date		2008/01/13		2008/01/13	2008/01/13		
COC Number		S 13913		S 13913	S 13913		
Registration #							
	Units	**14 Lab-Dup**	**RDL**	**15**	**15 Lab-Dup**	**RDL**	**QC Batch**
INORGANICS							
Total Inorganic Carbon (C)	g/kg	N/A	0.6	4.2	N/A	0.6	1442217
Moisture	%	57	1	51	N/A	1	1443458
Organic Carbon (TOC)	g/kg	N/A	0.5	17	17	0.5	1448588
Total Carbon-combustion IR	g/kg	N/A	0.6	21	N/A	0.6	1443989
< -4 Phi (16 mm)	%	N/A	0.1	100	N/A	0.1	1447182
< -3 Phi (8 mm)	%	N/A	0.1	100	N/A	0.1	1447182
< -2 Phi (4 mm)	%	N/A	0.1	100	N/A	0.1	1447182
< -1 Phi (2 mm)	%	N/A	0.1	99	N/A	0.1	1447182
< 0 Phi (1 mm)	%	N/A	0.1	98	N/A	0.1	1447182
< +1 Phi (0.5 mm)	%	N/A	0.1	97	N/A	0.1	1447182
< +2 Phi (0.25 mm)	%	N/A	0.1	97	N/A	0.1	1447182
< +3 Phi (0.12 mm)	%	N/A	0.1	97	N/A	0.1	1447182
< +4 Phi (0.062 mm)	%	N/A	0.1	94	N/A	0.1	1447182
< +5 Phi (0.031 mm)	%	N/A	0.1	95	N/A	0.1	1447182
< +6 Phi (0.016 mm)	%	N/A	0.1	83	N/A	0.1	1447182
< +7 Phi (0.0078 mm)	%	N/A	0.1	52	N/A	0.1	1447182
< +8 Phi (0.0039 mm)	%	N/A	0.1	42	N/A	0.1	1447182
< +9 Phi (0.0020 mm)	%	N/A	0.1	22	N/A	0.1	1447182
Gravel	%	N/A	0.1	1.5	N/A	0.1	1447182
Sand	%	N/A	0.1	4.3	N/A	0.1	1447182
Silt	%	N/A	0.1	52	N/A	0.1	1447182
Clay	%	N/A	0.1	42	N/A	0.1	1447182
PCBs							
o,p-DDD	mg/kg	N/A	0.01	ND	N/A	0.01	1446132
p,p-DDD	mg/kg	N/A	0.01	ND	N/A	0.01	1446132
o,p-DDE	mg/kg	N/A	0.01	ND	N/A	0.01	1446132
p,p-DDE	mg/kg	N/A	0.01	ND	N/A	0.01	1446132
o,p-DDT	mg/kg	N/A	0.01	ND	N/A	0.01	1446132
p,p-DDT	mg/kg	N/A	0.01	ND	N/A	0.01	1446132

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Maxxam Job #: A804601
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

OLD OCEAN DUMPING PACKAGE (SOIL)

Maxxam ID		W78885		W78886	W78886		
Sampling Date		2008/01/13		2008/01/13	2008/01/13		
COC Number		S 13913		S 13913	S 13913		
Registration #							
	Units	**14 Lab-Dup**	**RDL**	**15**	**15 Lab-Dup**	**RDL**	**QC Batch**
Total PCB	mg/kg	N/A	0.01	ND	N/A	0.01	1446132
ELEMENTS							
Mercury (Hg)	mg/kg	N/A	0.01	0.03	N/A	0.01	1448652
Elements (ICP-MS)							
Total Aluminum (Al)	mg/kg	N/A	100	78000	78000	100	1447101
Total Antimony (Sb)	mg/kg	N/A	2.0	ND	ND	2.0	1447101
Total Arsenic (As)	mg/kg	N/A	2.0	9.3	8.0	2.0	1447101
Total Barium (Ba)	mg/kg	N/A	5.0	440	440	5.0	1447101
Total Beryllium (Be)	mg/kg	N/A	2.0	2.4	2.3	2.0	1447101
Total Cadmium (Cd)	mg/kg	N/A	0.15	0.23	0.21	0.15	1447101
Total Chromium (Cr)	mg/kg	N/A	2.0	68	65	2.0	1447101
Total Cobalt (Co)	mg/kg	N/A	1.0	14	13	1.0	1447101
Total Copper (Cu)	mg/kg	N/A	2.0	23	22	2.0	1447101
Total Iron (Fe)	mg/kg	N/A	50	34000	33000	50	1447101
Total Lead (Pb)	mg/kg	N/A	0.50	32	33	0.50	1447101
Total Manganese (Mn)	mg/kg	N/A	2.0	520	510	2.0	1447101
Total Molybdenum (Mo)	mg/kg	N/A	2.0	3.6	3.9	2.0	1447101
Total Nickel (Ni)	mg/kg	N/A	2.0	35	34	2.0	1447101
Total Selenium (Se)	mg/kg	N/A	2.0	ND	ND	2.0	1447101
Total Strontium (Sr)	mg/kg	N/A	5.0	89	93	5.0	1447101
Total Thallium (Tl)	mg/kg	N/A	0.10	0.71	0.70	0.10	1447101
Total Tin (Sn)	mg/kg	N/A	2.0	2.9	2.7	2.0	1447101
Total Uranium (U)	mg/kg	N/A	0.10	3.0	2.9	0.10	1447101
Total Vanadium (V)	mg/kg	N/A	2.0	120	110	2.0	1447101
Total Zinc (Zn)	mg/kg	N/A	5.0	100	97	5.0	1447101
PAHs							
1-Methylnaphthalene	mg/kg	0.51	0.05	ND	N/A	0.1	1443461
2-Methylnaphthalene	mg/kg	0.66	0.05	ND	N/A	0.1	1443461
Acenaphthene	mg/kg	0.39	0.05	ND	N/A	0.1	1443461
Acenaphthylene	mg/kg	0.33	0.05	ND	N/A	0.1	1443461

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Lab-Dup = Laboratory Initiated Duplicate
QC Batch = Quality Control Batch

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Maxxam Job #: A804601
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

OLD OCEAN DUMPING PACKAGE (SOIL)

Maxxam ID		W78885		W78886	W78886		
Sampling Date		2008/01/13		2008/01/13	2008/01/13		
COC Number		S 13913		S 13913	S 13913		
Registration #							
	Units	**14 Lab-Dup**	**RDL**	**15**	**15 Lab-Dup**	**RDL**	**QC Batch**
Anthracene	mg/kg	2.5	0.05	ND	N/A	0.1	1443461
Benzo(a)anthracene	mg/kg	2.3	0.05	ND	N/A	0.1	1443461
Benzo(a)pyrene	mg/kg	3.4	0.05	0.1	N/A	0.1	1443461
Benzo(b)fluoranthene	mg/kg	2.4	0.05	0.1	N/A	0.1	1443461
Benzo(g,h,i)perylene	mg/kg	1.6	0.05	ND	N/A	0.1	1443461
Benzo(k)fluoranthene	mg/kg	3.2	0.05	0.1	N/A	0.1	1443461
Chrysene	mg/kg	2.6	0.05	0.1	N/A	0.1	1443461
Dibenz(a,h)anthracene	mg/kg	0.50	0.05	ND	N/A	0.1	1443461
Fluoranthene	mg/kg	3.9	0.05	0.2	N/A	0.1	1443461
Fluorene	mg/kg	0.70	0.05	ND	N/A	0.1	1443461
Indeno(1,2,3-cd)pyrene	mg/kg	1.8	0.05	ND	N/A	0.1	1443461
Naphthalene	mg/kg	1.0	0.05	ND	N/A	0.1	1443461
Perylene	mg/kg	0.83	0.05	ND	N/A	0.1	1443461
Phenanthrene	mg/kg	4.6	0.05	0.3	N/A	0.1	1443461
Pyrene	mg/kg	5.2	0.05	0.2	N/A	0.1	1443461
Surrogate Recovery (%)							
2,4,5,6-Tetrachloro-m-xylene	%	N/A	N/A	80	N/A	N/A	1446132
Decachlorobiphenyl	%	N/A	N/A	89	N/A	N/A	1446132
D10-Anthracene	%	99	N/A	114	N/A	N/A	1443461
D14-Terphenyl (FS)	%	82	N/A	84	N/A	N/A	1443461
D8-Acenaphthylene	%	92	N/A	96	N/A	N/A	1443461

ND = Not detected
N/A = Not Applicable
RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
QC Batch = Quality Control Batch

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Maxxam Job #: A804601
Report Date: 2008/01/30

Jacques Whitford Limited
Client Project #: 1034272/Z9100
Project name: SYDNEY HARBOUR SURVEY
Your P.O. #: NSD016400
Sampler Initials:

GENERAL COMMENTS

Uranium recovery in the applicable digested reference material is 75 % for worksheet # 1447101.

Sample W78884-01: Elevated PAH RDL(s) due to high moisture content.

Sample W78886-01: Elevated PAH RDL(s) due to high moisture content.

Results relate only to the items tested.

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Attention: Angela Swaine
Client Project #: 1034272/Z9100
P.O. #: NSD016400
Project name: SYDNEY HARBOUR SURVEY

Quality Assurance Report

Maxxam Job Number: KA804601

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1443458	TML	Method Blank	Moisture	2008/01/21	ND, RDL=1		%	
		RPD [W78885-01]	Moisture	2008/01/21	0.9		%	25
1443461	TML	MATRIX SPIKE	D10-Anthracene	2008/01/18		95	%	30 - 130
			D14-Terphenyl (FS)	2008/01/18		91	%	30 - 130
			D8-Acenaphthylene	2008/01/18		89	%	30 - 130
			1-Methylnaphthalene	2008/01/18		123	%	40 - 140
			2-Methylnaphthalene	2008/01/18		124	%	40 - 140
			Acenaphthene	2008/01/18		89	%	40 - 140
			Acenaphthylene	2008/01/18		92	%	40 - 140
			Anthracene	2008/01/18		124	%	40 - 140
			Benzo(a)anthracene	2008/01/18		83	%	40 - 140
			Benzo(a)pyrene	2008/01/18		84	%	40 - 140
			Benzo(b)fluoranthene	2008/01/18		89	%	40 - 140
			Benzo(g,h,i)perylene	2008/01/18		83	%	40 - 140
			Benzo(k)fluoranthene	2008/01/18		89	%	40 - 140
			Chrysene	2008/01/18		82	%	40 - 140
			Dibenz(a,h)anthracene	2008/01/18		93	%	40 - 140
			Fluoranthene	2008/01/18		84	%	40 - 140
			Fluorene	2008/01/18		90	%	40 - 140
			Indeno(1,2,3-cd)pyrene	2008/01/18		78	%	40 - 140
			Naphthalene	2008/01/18		116	%	40 - 140
			Perylene	2008/01/18		87	%	40 - 140
			Phenanthrene	2008/01/18		119	%	40 - 140
			Pyrene	2008/01/18		85	%	40 - 140
		Spiked Blank	D10-Anthracene	2008/01/18		96	%	30 - 130
			D14-Terphenyl (FS)	2008/01/18		98	%	30 - 130
			D8-Acenaphthylene	2008/01/18		96	%	30 - 130
			1-Methylnaphthalene	2008/01/18		91	%	40 - 140
			2-Methylnaphthalene	2008/01/18		86	%	40 - 140
			Acenaphthene	2008/01/18		90	%	40 - 140
			Acenaphthylene	2008/01/18		94	%	40 - 140
			Anthracene	2008/01/18		98	%	40 - 140
			Benzo(a)anthracene	2008/01/18		89	%	40 - 140
			Benzo(a)pyrene	2008/01/18		93	%	40 - 140
			Benzo(b)fluoranthene	2008/01/18		90	%	40 - 140
			Benzo(g,h,i)perylene	2008/01/18		93	%	40 - 140
			Benzo(k)fluoranthene	2008/01/18		98	%	40 - 140
			Chrysene	2008/01/18		96	%	40 - 140
			Dibenz(a,h)anthracene	2008/01/18		96	%	40 - 140
			Fluoranthene	2008/01/18		93	%	40 - 140
			Fluorene	2008/01/18		93	%	40 - 140
			Indeno(1,2,3-cd)pyrene	2008/01/18		98	%	40 - 140
			Naphthalene	2008/01/18		87	%	40 - 140
			Perylene	2008/01/18		98	%	40 - 140
			Phenanthrene	2008/01/18		93	%	40 - 140
			Pyrene	2008/01/18		92	%	40 - 140
		Method Blank	D10-Anthracene	2008/01/18		98	%	30 - 130
			D14-Terphenyl (FS)	2008/01/18		90	%	30 - 130
			D8-Acenaphthylene	2008/01/18		123	%	30 - 130
			1-Methylnaphthalene	2008/01/18	ND, RDL=0.05		mg/kg	
			2-Methylnaphthalene	2008/01/18	ND, RDL=0.05		mg/kg	
			Acenaphthene	2008/01/18	ND, RDL=0.05		mg/kg	
			Acenaphthylene	2008/01/18	ND, RDL=0.05		mg/kg	
			Anthracene	2008/01/18	ND, RDL=0.05		mg/kg	
			Benzo(a)anthracene	2008/01/18	ND, RDL=0.05		mg/kg	

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Quality Assurance Report (Continued)

Maxxam Job Number: KA804601

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1443461	TML	Method Blank	Benzo(a)pyrene	2008/01/18	ND, RDL=0.05		mg/kg	
			Benzo(b)fluoranthene	2008/01/18	ND, RDL=0.05		mg/kg	
			Benzo(g,h,i)perylene	2008/01/18	ND, RDL=0.05		mg/kg	
			Benzo(k)fluoranthene	2008/01/18	ND, RDL=0.05		mg/kg	
			Chrysene	2008/01/18	ND, RDL=0.05		mg/kg	
			Dibenz(a,h)anthracene	2008/01/18	ND, RDL=0.05		mg/kg	
			Fluoranthene	2008/01/18	ND, RDL=0.05		mg/kg	
			Fluorene	2008/01/18	ND, RDL=0.05		mg/kg	
			Indeno(1,2,3-cd)pyrene	2008/01/18	ND, RDL=0.05		mg/kg	
			Naphthalene	2008/01/18	ND, RDL=0.05		mg/kg	
			Perylene	2008/01/18	ND, RDL=0.05		mg/kg	
			Phenanthrene	2008/01/18	ND, RDL=0.05		mg/kg	
			Pyrene	2008/01/18	ND, RDL=0.05		mg/kg	
		RPD [W78885-01]	1-Methylnaphthalene	2008/01/18	3.8		%	50
			2-Methylnaphthalene	2008/01/18	3.1		%	50
			Acenaphthene	2008/01/18	9.8		%	50
			Acenaphthylene	2008/01/18	11.4		%	50
			Anthracene	2008/01/18	11.3		%	50
			Benzo(a)anthracene	2008/01/18	12.2		%	50
			Benzo(a)pyrene	2008/01/18	2.9		%	50
			Benzo(b)fluoranthene	2008/01/18	4.1		%	50
			Benzo(g,h,i)perylene	2008/01/18	0		%	50
			Benzo(k)fluoranthene	2008/01/18	0		%	50
			Chrysene	2008/01/18	7.4		%	50
			Dibenz(a,h)anthracene	2008/01/18	9.5		%	50
			Fluoranthene	2008/01/18	9.8		%	50
			Fluorene	2008/01/18	6.9		%	50
			Indeno(1,2,3-cd)pyrene	2008/01/18	0		%	50
			Naphthalene	2008/01/18	1.0		%	50
			Perylene	2008/01/18	1.2		%	50
			Phenanthrene	2008/01/18	10.3		%	50
			Pyrene	2008/01/18	3.8		%	50
1443551	AHL	Spiked Blank	Isobutylbenzene - Extractable	2008/01/20		103	%	30 - 130
			n-Dotriacontane - Extractable	2008/01/20		101	%	30 - 130
			>C10-C21 Hydrocarbons	2008/01/20		92	%	30 - 130
			>C21-<C32 Hydrocarbons	2008/01/20		83	%	30 - 130
		Method Blank	Isobutylbenzene - Extractable	2008/01/20		99	%	30 - 130
			n-Dotriacontane - Extractable	2008/01/20		96	%	30 - 130
			>C10-C21 Hydrocarbons	2008/01/20	ND, RDL=15		mg/kg	
			>C21-<C32 Hydrocarbons	2008/01/20	ND, RDL=15		mg/kg	
		RPD [W78885-01]	>C10-C21 Hydrocarbons	2008/01/20	10.8		%	50
			>C21-<C32 Hydrocarbons	2008/01/20	23.5		%	50
1443926	BMI	MATRIX SPIKE [W78885-01]	Isobutylbenzene - Volatile	2008/01/18		113	%	60 - 140
			Benzene	2008/01/18		71	%	40 - 130
			Toluene	2008/01/18		71	%	40 - 130
			Ethylbenzene	2008/01/18		67	%	40 - 130
			Xylene (Total)	2008/01/18		75	%	40 - 130
			C6 - C10 (less BTEX)	2008/01/18		96	%	N/A
		Spiked Blank	Isobutylbenzene - Volatile	2008/01/18		101	%	60 - 140
			Benzene	2008/01/18		88	%	40 - 130
			Toluene	2008/01/18		90	%	40 - 130
			Ethylbenzene	2008/01/18		84	%	40 - 130
			Xylene (Total)	2008/01/18		93	%	40 - 130
			C6 - C10 (less BTEX)	2008/01/18		109	%	N/A

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Quality Assurance Report (Continued)

Maxxam Job Number: KA804601

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1443926	BMI	Method Blank	Isobutylbenzene - Volatile	2008/01/18		100	%	60 - 140
			Benzene	2008/01/18	ND, RDL=0.003		mg/kg	
			Toluene	2008/01/18	ND, RDL=0.025		mg/kg	
			Ethylbenzene	2008/01/18	ND, RDL=0.01		mg/kg	
			Xylene (Total)	2008/01/18	ND, RDL=0.05		mg/kg	
			C6 - C10 (less BTEX)	2008/01/18	ND, RDL=3		mg/kg	
		RPD [W78885-01]	Benzene	2008/01/18	NC		%	50
			Toluene	2008/01/18	NC		%	50
			Ethylbenzene	2008/01/18	NC		%	50
			Xylene (Total)	2008/01/18	NC		%	50
			C6 - C10 (less BTEX)	2008/01/18	NC		%	50
1443989	CAC	QC STANDARD	Total Carbon-combustion IR	2008/01/21		106	%	75 - 125
		Method Blank	Total Carbon-combustion IR	2008/01/21	ND, RDL=0.2		g/kg	
		RPD	Total Carbon-combustion IR	2008/01/21	NC		%	35
1446132	CMI	MATRIX SPIKE [W78835-01]	2,4,5,6-Tetrachloro-m-xylene	2008/01/29		78	%	70 - 130
			Decachlorobiphenyl	2008/01/29		83	%	70 - 130
			o,p-DDD	2008/01/29		85	%	N/A
			p,p-DDD	2008/01/29		99	%	N/A
			o,p-DDE	2008/01/29		89	%	N/A
			p,p-DDE	2008/01/29		90	%	N/A
			o,p-DDT	2008/01/29		91	%	N/A
			p,p-DDT	2008/01/29		87	%	N/A
			Total PCB	2008/01/29		80	%	N/A
		Spiked Blank	2,4,5,6-Tetrachloro-m-xylene	2008/01/29		95	%	70 - 130
			Decachlorobiphenyl	2008/01/29		100	%	70 - 130
			o,p-DDD	2008/01/29		92	%	N/A
			p,p-DDD	2008/01/29		100	%	N/A
			o,p-DDE	2008/01/29		99	%	N/A
			p,p-DDE	2008/01/29		99	%	N/A
			o,p-DDT	2008/01/29		96	%	N/A
			p,p-DDT	2008/01/29		85	%	N/A
			Total PCB	2008/01/29		104	%	70 - 130
		Method Blank	2,4,5,6-Tetrachloro-m-xylene	2008/01/29		77	%	70 - 130
			Decachlorobiphenyl	2008/01/29		80	%	70 - 130
			o,p-DDD	2008/01/29	ND, RDL=0.01		mg/kg	
			p,p-DDD	2008/01/29	ND, RDL=0.01		mg/kg	
			o,p-DDE	2008/01/29	ND, RDL=0.01		mg/kg	
			p,p-DDE	2008/01/29	ND, RDL=0.01		mg/kg	
			o,p-DDT	2008/01/29	ND, RDL=0.01		mg/kg	
			p,p-DDT	2008/01/29	ND, RDL=0.01		mg/kg	
			Total PCB	2008/01/29	ND, RDL=0.01		mg/kg	
		RPD [W78835-01]	o,p-DDD	2008/01/29	NC		%	50
			p,p-DDD	2008/01/29	NC		%	50
			o,p-DDE	2008/01/29	NC		%	50
			p,p-DDE	2008/01/29	NC		%	50
			o,p-DDT	2008/01/29	NC		%	50
			p,p-DDT	2008/01/29	NC		%	50
			Total PCB	2008/01/29	NC		%	50
1446221	BAN	RPD	< -4 Phi (16 mm)	2008/01/23	0		%	25
			< -3 Phi (8 mm)	2008/01/23	0		%	25
			< -2 Phi (4 mm)	2008/01/23	0		%	25
			< -1 Phi (2 mm)	2008/01/23	7.3		%	25
			< 0 Phi (1 mm)	2008/01/23	10.9		%	25
			< +1 Phi (0.5 mm)	2008/01/23	13.9		%	25

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Quality Assurance Report (Continued)

Maxxam Job Number: KA804601

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1446221	BAN	RPD	< +2 Phi (0.25 mm)	2008/01/23	10.7		%	25
			< +3 Phi (0.12 mm)	2008/01/23	29.1 (1)		%	25
			< +4 Phi (0.062 mm)	2008/01/23	23.8		%	25
			< +5 Phi (0.031 mm)	2008/01/23	33.3 (1)		%	25
			< +6 Phi (0.016 mm)	2008/01/23	12.5		%	25
			< +7 Phi (0.0078 mm)	2008/01/23	0.7		%	25
			< +8 Phi (0.0039 mm)	2008/01/23	23.3		%	25
			< +9 Phi (0.0020 mm)	2008/01/23	9.2		%	25
			Gravel	2008/01/23	105 (2)		%	25
			Sand	2008/01/23	8.4		%	25
			Silt	2008/01/23	NC		%	25
			Clay	2008/01/23	23.3		%	25
1446305	CAC	QC STANDARD	Organic Carbon (TOC)	2008/01/25		91	%	75 - 125
		Method Blank	Organic Carbon (TOC)	2008/01/25	ND, RDL=0.2		g/kg	
		RPD	Organic Carbon (TOC)	2008/01/25	1.8		%	35
1447101	DLB	MATRIX SPIKE						
		[W78886-01]	Total Aluminum (Al)	2008/01/25		NC	%	75 - 125
			Total Antimony (Sb)	2008/01/25		106	%	75 - 125
			Total Arsenic (As)	2008/01/25		85	%	75 - 125
			Total Barium (Ba)	2008/01/25		NC	%	75 - 125
			Total Beryllium (Be)	2008/01/25		104	%	75 - 125
			Total Cadmium (Cd)	2008/01/25		103	%	75 - 125
			Total Chromium (Cr)	2008/01/25		99	%	75 - 125
			Total Cobalt (Co)	2008/01/25		97	%	75 - 125
			Total Copper (Cu)	2008/01/25		87	%	75 - 125
			Total Iron (Fe)	2008/01/25		NC	%	75 - 125
			Total Lead (Pb)	2008/01/25		113	%	75 - 125
			Total Manganese (Mn)	2008/01/25		NC	%	75 - 125
			Total Molybdenum (Mo)	2008/01/25		104	%	75 - 125
			Total Nickel (Ni)	2008/01/25		99	%	75 - 125
			Total Selenium (Se)	2008/01/25		86	%	75 - 125
			Total Strontium (Sr)	2008/01/25		102	%	75 - 125
			Total Thallium (Tl)	2008/01/25		109	%	75 - 125
			Total Tin (Sn)	2008/01/25		108	%	75 - 125
			Total Uranium (U)	2008/01/25		112	%	75 - 125
			Total Vanadium (V)	2008/01/25		117	%	75 - 125
			Total Zinc (Zn)	2008/01/25		96	%	75 - 125
		QC STANDARD	Total Aluminum (Al)	2008/01/25		95	%	75 - 125
			Total Arsenic (As)	2008/01/25		88	%	75 - 125
			Total Beryllium (Be)	2008/01/25		96	%	75 - 125
			Total Chromium (Cr)	2008/01/25		84	%	75 - 125
			Total Cobalt (Co)	2008/01/25		87	%	75 - 125
			Total Copper (Cu)	2008/01/25		85	%	75 - 125
			Total Iron (Fe)	2008/01/25		88	%	75 - 125
			Total Lead (Pb)	2008/01/25		104	%	75 - 125
			Total Manganese (Mn)	2008/01/25		76	%	75 - 125
			Total Molybdenum (Mo)	2008/01/25		99	%	75 - 125
			Total Nickel (Ni)	2008/01/25		87	%	75 - 125
			Total Strontium (Sr)	2008/01/25		71 (3)	%	75 - 125
			Total Thallium (Tl)	2008/01/25		106	%	75 - 125
			Total Tin (Sn)	2008/01/25		115	%	75 - 125
			Total Vanadium (V)	2008/01/25		90	%	75 - 125
			Total Zinc (Zn)	2008/01/25		90	%	75 - 125
		Spiked Blank	Total Aluminum (Al)	2008/01/25		97	%	75 - 125
			Total Antimony (Sb)	2008/01/25		97	%	75 - 125

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Quality Assurance Report (Continued)

Maxxam Job Number: KA804601

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1447101	DLB	Spiked Blank	Total Arsenic (As)	2008/01/25		74 (4)	%	75 - 125
			Total Barium (Ba)	2008/01/25		97	%	75 - 125
			Total Beryllium (Be)	2008/01/25		93	%	75 - 125
			Total Cadmium (Cd)	2008/01/25		97	%	75 - 125
			Total Chromium (Cr)	2008/01/25		99	%	75 - 125
			Total Cobalt (Co)	2008/01/25		96	%	75 - 125
			Total Copper (Cu)	2008/01/25		97	%	75 - 125
			Total Iron (Fe)	2008/01/25		99	%	75 - 125
			Total Lead (Pb)	2008/01/25		101	%	75 - 125
			Total Manganese (Mn)	2008/01/25		99	%	75 - 125
			Total Molybdenum (Mo)	2008/01/25		95	%	75 - 125
			Total Nickel (Ni)	2008/01/25		97	%	75 - 125
			Total Selenium (Se)	2008/01/25		87	%	75 - 125
			Total Strontium (Sr)	2008/01/25		98	%	75 - 125
			Total Thallium (Tl)	2008/01/25		101	%	75 - 125
			Total Tin (Sn)	2008/01/25		93	%	75 - 125
			Total Uranium (U)	2008/01/25		99	%	75 - 125
			Total Vanadium (V)	2008/01/25		95	%	75 - 125
			Total Zinc (Zn)	2008/01/25		94	%	75 - 125
		Method Blank	Total Aluminum (Al)	2008/01/25	ND, RDL=10		mg/kg	
			Total Antimony (Sb)	2008/01/25	ND, RDL=2.0		mg/kg	
			Total Arsenic (As)	2008/01/25	ND, RDL=2.0		mg/kg	
			Total Barium (Ba)	2008/01/25	ND, RDL=5.0		mg/kg	
			Total Beryllium (Be)	2008/01/25	ND, RDL=2.0		mg/kg	
			Total Cadmium (Cd)	2008/01/25	ND, RDL=0.15		mg/kg	
			Total Chromium (Cr)	2008/01/25	ND, RDL=2.0		mg/kg	
			Total Cobalt (Co)	2008/01/25	ND, RDL=1.0		mg/kg	
			Total Copper (Cu)	2008/01/25	ND, RDL=2.0		mg/kg	
			Total Iron (Fe)	2008/01/25	ND, RDL=50		mg/kg	
			Total Lead (Pb)	2008/01/25	ND, RDL=0.50		mg/kg	
			Total Manganese (Mn)	2008/01/25	ND, RDL=2.0		mg/kg	
			Total Molybdenum (Mo)	2008/01/25	ND, RDL=2.0		mg/kg	
			Total Nickel (Ni)	2008/01/25	ND, RDL=2.0		mg/kg	
			Total Selenium (Se)	2008/01/25	ND, RDL=2.0		mg/kg	
			Total Strontium (Sr)	2008/01/25	ND, RDL=5.0		mg/kg	
			Total Thallium (Tl)	2008/01/25	ND, RDL=0.10		mg/kg	
			Total Tin (Sn)	2008/01/25	ND, RDL=2.0		mg/kg	
			Total Uranium (U)	2008/01/25	ND, RDL=0.10		mg/kg	
			Total Vanadium (V)	2008/01/25	ND, RDL=2.0		mg/kg	
			Total Zinc (Zn)	2008/01/25	ND, RDL=5.0		mg/kg	
		RPD [W78886-01]	Total Aluminum (Al)	2008/01/25	0.3		%	25
			Total Antimony (Sb)	2008/01/25	NC		%	25
			Total Arsenic (As)	2008/01/25	NC		%	25
			Total Barium (Ba)	2008/01/25	0.5		%	25
			Total Beryllium (Be)	2008/01/25	NC		%	25
			Total Cadmium (Cd)	2008/01/25	NC		%	25
			Total Chromium (Cr)	2008/01/25	5.6		%	25
			Total Cobalt (Co)	2008/01/25	3.6		%	25
			Total Copper (Cu)	2008/01/25	4.2		%	25
			Total Iron (Fe)	2008/01/25	3.4		%	25
			Total Lead (Pb)	2008/01/25	2.3		%	25
			Total Manganese (Mn)	2008/01/25	1.7		%	25
			Total Molybdenum (Mo)	2008/01/25	NC		%	25
			Total Nickel (Ni)	2008/01/25	2.5		%	25
			Total Selenium (Se)	2008/01/25	NC		%	25

90 Esplanade St, Sydney, Nova Scotia Canada B1P 1A1 Tel: 902 567 1255 Toll Free: 888 535 7770 Fax: 902 5396504 www.maxxamanalytics.com

Jacques Whitford Limited
Attention: Angela Swaine
Client Project #: 1034272/Z9100
P.O. #: NSD016400
Project name: SYDNEY HARBOUR SURVEY

Quality Assurance Report (Continued)

Maxxam Job Number: KA804601

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1447101	DLB	RPD [W78886-01]	Total Strontium (Sr)	2008/01/25	5.0		%	25
			Total Thallium (Tl)	2008/01/25	0.9		%	25
			Total Tin (Sn)	2008/01/25	NC		%	25
			Total Uranium (U)	2008/01/25	2.8		%	25
			Total Vanadium (V)	2008/01/25	9.0		%	25
			Total Zinc (Zn)	2008/01/25	4.4		%	25
1448588	CAC	QC STANDARD	Organic Carbon (TOC)	2008/01/29		88	%	75 - 125
		Method Blank	Organic Carbon (TOC)	2008/01/29	ND, RDL=0.2		g/kg	
		RPD [W78886-01]	Organic Carbon (TOC)	2008/01/29	1.4		%	35
1448652	SSI	MATRIX SPIKE [W78835-01]	Mercury (Hg)	2008/01/29		87	%	75 - 125
		QC STANDARD	Mercury (Hg)	2008/01/29		87	%	75 - 125
		Spiked Blank	Mercury (Hg)	2008/01/29		100	%	75 - 125
		Method Blank	Mercury (Hg)	2008/01/29	ND, RDL=0.01		mg/kg	
		RPD [W78835-01]	Mercury (Hg)	2008/01/29	NC		%	35

ND = Not detected
N/A = Not Applicable
NC = Non-calculable
RPD = Relative Percent Difference
QC Standard = Quality Control Standard
SPIKE = Fortified sample
(1) Duplicate %RPD violation not applicable for individual PHI fractions.
(2) Duplicate %RPD violation not applicable. Values agree within 10%.
(3) Secondary RM is acceptable.
(4) Low recovery due to digestion efficiency.

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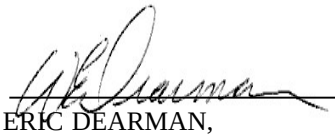
Validation Signature Page

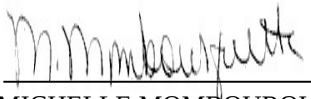
Maxxam Job #: A804601

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

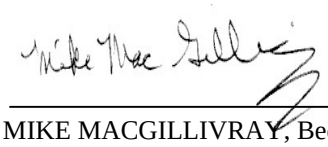
ALAN STEWART, Project Manager



ERIC DEARMAN,



MICHELLE MOMBOURQUETTE, Laboratory Manager



MIKE MACGILLIVRAY, Bedford Inorg Spvsr

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CAEAL have approved this reporting process and electronic report format.

90 Esplanade St, Sydney, Nova Scotia Canada B1P 1A1 Tel: 902 567 1255 Toll Free: 888 535 7770 Fax: 902 5396504 www.maxxamanalytics.com

Jacques Whitford

Environmental
Engineering
Scientific
Management
Consultants

3 Spectacle Lake Drive
Dartmouth NS
Canada B3B 1W8

Bus 902 468 7777
Fax 902 468 9009

www.jacqueswhitford.com

Project No.1044442

November 6, 2008

Via Email:

jlchiasson@syd.eastlink.ca (Len Chiasson – Sydney Ports Corporation)
richardmo@cbcl.ca (Richard Morykot – CBCL Ltd.)

Mr. Len Chiasson
Sydney Ports Corporation
Sydney Marine Terminal
B1P 1A1

Dear Mr. Chiasson:

Re: Proposed Sydport Container Terminal-Sydney Harbour Sediment Quality Analysis - January and October 2008

Introduction

At the request of Sydney Ports Corporation, Jacques Whitford collected sediment samples for analytical testing during a geotechnical borehole investigation program. The geotechnical borehole investigation was completed within the proposed dredge site. In addition a limited borehole program was completed within the footprint of the proposed container terminal building. The borehole investigation was completed between October 2nd and 14th, 2008.

A previous sediment sampling analytical program was completed in January 2008 have been reported in a previous letter dated February 11, 2008. This report summarizes the results of the sediment sample event that took place in October 2008. Samples were collected from the South Arm and Sydney Harbour by Jacques Whtiford of Sydney, Nova Scotia and Boart Longyear of Moncton, NewBrunswick between October 2nd and 14th, 2008.

The purpose of the sediment sampling and analytical program was to compare the analytical results to regulatory criteria.

Methodology

- Sediment samples were collected during the geotechnical borehole program from South Arm and Sydney Harbour by Jacques Whitford using a drill and barge system supplied by Boart Longyear of Moncton, NewBrunswick. Between October 2 and 14th, 2008.

- Nine sediment samples were submitted to Maxxam Analytics Inc. in Sydney, Nova Scotia for analysis of total organic carbon, total inorganic carbon, total carbon, Polycyclic Aromatic Hydrogrocarbons (PAH), Polychlorinated Biphenyls (PCBs), Dichloro-Diphenyl-Trichloroethane (DDT), particle size, Benzene, Toluene, Ethylbenzene and Xylene (BTEX) and total petroleum hydrocarbons (TPH);

- Composite samples were made up of sediment collected between the harbor bottom down to a depth of 17 metres below sea level. Sediment samples were collected continuously from the boreholes at approximately 0.61 m intervals (where possible) using a 50 mm outside diameter split-spoon sampler.

- Borehole locations, observations and measurements made during the drilling program were recorded on borehole records. Drawings and logs will be provided on a drawing under separate cover.

Regulatory Framework

Analytical results were compared to *Canadian Environmental Protection Act* (1999) Disposal at Sea Regulations, Canadian Council of Ministers of the Environment (CCME) Marine Interim Sediment Quality Guidelines (ISQG) (2002) and CCME Soil Quality Guidelines for Industrial Use (2004) where applicable.

Results

The analytical results (Table B-1) and Laboratory Certificates of Analysis are provided in Appendix B. The following summarizes the observed exceedances.

TPH Compounds
CCME Guidelines Soil Quality Guidelines for Industrial Use exist for benzene, toluene ethylbenzene, xylene and modified TPH. CEPA Ocean Disposal Guidelines exist for modified TPH. The following exceedance was noted:

- Modified TPH (Tier 1) – the level of modified TPH in three (BH1 COMP, BH2 COMP, and BH6 COMP) of the nine samples exceed the CCME Guidelines for Soil Quality Guidelines for Industrial Use.

Polychlorinated Biphenyls (PCBs) and Dichloro-Diphenyl-Trichloroethane (DDT)
All sediment samples were within the applicable CCME Guidelines for Marine Sediment (ISQG); in addition all the samples were within the laboratory reportable detection limit.

Polycyclic Aromatic Hydrocarbons (PAHs)
CCME Guidelines exist for acenapthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene and pyrene. The following summarizes exceedances:

- BH1 COMP presented levels of phenanthrene in exceedence of the CCME Guidelines for Marine Sediment ISQG;

- BH2 COMP presented levels in exceedence of the CCME Guidelines for Marine Sediment ISQG for acenapthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, dibenzo(a,h)anthracene,

fluoranthene, fluorene, naphthalene, phenanthrene and pyrene. in exceedence of the CCME Guidelines for Marine Sediment ISQG;

Closing

This report has been prepared for the sole benefit of Sydney Ports Corporation. and may not be used by any other person or entity without express written consent of Jacques Whitford Limited and Sydney Ports Corporation.

Any use that a third party makes of this report, or any reliance or decisions made based on it, are the responsibility of such third parties. Jacques Whitford Limited accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted engineering and scientific practices current at the time the work was performed. Conclusions and recommendations presented in this report should not be construed as legal advice.

The conclusions presented in this report represent the best technical judgment of Jacques Whitford Limited based on the data obtained from the work. The conclusions are based on the site conditions observed by Jacques Whitford Limited at the time the work was performed at the specific testing and/or sampling locations, and can only be extrapolated to an undefined limited area around these locations.

Yours very truly,

JACQUES WHITFORD

Original Signed by

Willie McNeil, BTech.(Env.)
Operations Manager, Sydney, NS

APPENDIX A

Analytical Results Table
and Laboratory Certificates of Analysis

Jacques Whitford

TABLE 1 Sydport Sediment Chemistry – January and October 2008

Parameter	Units	RDL	2008 January Sampling Event																				CCME	CCME	CEPA
			1A	1B	2A	2B	3A	3B	4	5	6A	6B	7	8	9	10A	10B	11	12	13	14	15	Marine Sediment ISQG (2002)	Soil Quality Guidelines for Industrial Use (2004)	Ocean Disposal (1999)
Metals																									
Aluminum	mg/kg	100	73000	42000	42000	44000	70000	74000	65000	56000	50000	64000	60000	42000	23000	31000	32000	21000	63000	78000	82000	78000			
Antimony	mg/kg	2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Arsenic	mg/kg	2.0	**14**	5.7	4.5	4.0	8.6	7.8	7.7	6.3	6.7	5.5	6.4	3.3	ND	3.9	3.7	5.4	6.6	10	**13**	9.3	7.24	12	
Barium	mg/kg	5.0	380	250	330	370	390	420	380	310	300	360	350	270	180	210	220	170	320	390	400	440		2000	
Berylilum	mg/kg	2.0	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	2.5	2.4			
Cadmium	mg/kg	0.15	0.22	0.20	0.32	0.33	0.21	0.21	0.21	0.18	0.18	0.21	0.21	ND	ND	ND	ND	ND	0.42	0.27	0.34	0.23	0.7	22	0.6
Chromium	mg/kg	2.0	64	30	28	29	59	64	56	42	37	57	49	35	8.2	26	27	14	49	63	69	68	52.3	87	
Cobalt	mg/kg	1.0	13.0	9.1	9.1	8.8	12	13	12	9.7	8.9	12	11	8.5	2.7	5.7	6.0	2.8	11	13	13	14			
Copper	mg/kg	2.0	21	12	18	19	22	22	22	16	15	21	18	13	3.3	8.2	9.8	3.4	19	21	23	23	18.7	91	81
Iron	mg/kg	50	31000	19000	20000	20000	31000	33000	31000	25000	23000	30000	27000	22000	6600	15000	15000	9700	27000	32000	35000	34000			
Lead	mg/kg	0.5	34	22	33	37	30	24	32	22	23	20	20	14	6.8	11	10	8.1	34	43	55	32	30.2	600	66
Manganese	mg/kg	2.0	430	310	390	390	570	570	550	520	490	590	540	510	140	320	340	210	390	440	510	520			
Mercury	mg/kg	0.010	0.05	0.01	0.05	0.05	0.04	0.01	0.04	0.03	0.04	ND	0.02	0.02	ND	ND	0.01	ND	0.02	0.05	0.06	0.03	13		0.75
Molybdenum	mg/kg	2.0	3.5	6.1	ND	ND	3.5	3.8	3.5	3.7	3.5	3.8	2.7	ND	ND	ND	ND	ND	11.0	3.6	3.6	3.6			
Nickel	mg/kg	2.0	33	17	16	17	31	34	29	22	20	30	26	19	4.4	14	14	6	28	34	36	35		50	
Selenium	mg/kg	2.0	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		3.9	
Strontium	mg/kg	5.0	96	83	100	110	97	100	96	74	71	84	81	65	55	76	70	53	96	87	89	89			
Thallium	mg/kg	0.10	0.64	0.49	0.45	0.48	0.61	0.66	0.60	0.50	0.47	0.56	0.52	0.42	0.26	0.32	0.33	0.23	0.65	0.70	0.75	0.71		1	
Tin	mg/kg	2.0	3.1	ND	ND	2.1	3.2	2.6	3.3	2.4	2.6	2.2	2.5	ND	ND	ND	ND	ND	2.1	2.9	3.7	2.9			
Uranium	mg/kg	0.10	2.8	3.8	2.3	2.4	2.6	2.8	2.6	2.2	2.1	2.6	2.3	1.7	0.66	1.3	1.4	0.69	4.1	2.8	2.9	3.0			
Vanadium	mg/kg	2.0	110	64	64	62	100	110	95	70	63	94	80	57	17	37	40	26	89	110	120	120		130	
Zinc	mg/kg	5.0	100	76	85	88	95	90	95	73	71	83	77	62	20	40	41	23	90	110	120	100	124	360	
TPH Componds																									
Benzene	mg/kg	0.003	0.006	ND	0.011	0.003	0.006	0.003	0.008	0.007	0.021	ND	0.005	0.007	ND	0.009	0.005	ND	0.003	0.007	0.010	0.003		5.000	
Toluene	mg/kg	0.03	ND	ND	ND	ND	ND	ND	ND	ND	0.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		0.8	
Ethylbenzene	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		20	
Xylenes	mg/kg	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		20	
C_6 - C_{10} (less BTEX)	mg/kg	3.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
>C_{10}-C_{21} Hydrocarbons	mg/kg	15.00	42	ND	18	16	28	ND	35	27	32	ND	ND	21	ND	22	26	ND	ND	65	290	18			
>C_{21}-<C_{32} Hydrocarbons	mg/kg	15.00	120	38	63	26	99	38	100	78	79	28	32	49	ND	36	49	ND	50	130	450	62			
Modified TPH (Tier 1)	mg/kg	20.00	*160*	*38*	*81*	*42*	*130*	*38*	*130*	*100*	*110*	*28*	*32*	*70*	ND	*58*	*75*	ND	*50*	*200*	*750*	*80*		10	10
PCBs																									
o,p DDD	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00354		
p,p DDD	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00354		
o,p DDE	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00142		
p,p DDE	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00142		
o,p DDT	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0019		
p,p DDT	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0019		
Total PCB	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
PAHs																									
1-Methylnaphthalene	mg/kg	0.05	ND	ND	ND	ND	0.14	ND	0.17	0.16	0.18	0.06	0.07	0.13	ND	0.17	0.14	ND	ND	0.10	0.53	ND			
2-Methylnaphthalene	mg/kg	0.05	ND	ND	ND	ND	0.15	ND	0.19	0.17	0.20	0.05	0.06	0.16	ND	0.18	0.14	ND	ND	0.20	0.64	ND			
Acenaphthene	mg/kg	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43	ND	0.00671		
Acenaphthylene	mg/kg	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37	ND	0.00587		
Anthracene	mg/kg	0.05	ND	ND	0.10	ND	0.13	ND	0.20	0.14	0.14	ND	ND	ND	ND	ND	ND	ND	ND	0.30	2.80	ND	0.0469		
Benzo(a)anthracene	mg/kg	0.05	0.1	ND	0.10	0.06	0.16	ND	0.20	0.16	0.19	ND	ND	ND	ND	ND	ND	ND	ND	0.40	2.60	ND	0.0748		
Benzo(a)pyrene	mg/kg	0.05	0.2	ND	0.20	0.07	0.19	ND	0.26	0.16	0.20	ND	ND	ND	ND	ND	ND	ND	0.06	0.70	3.50	0.10	0.0888		
Benzo(b)fluoranthene	mg/kg	0.05	0.1	ND	0.10	ND	0.15	ND	0.18	0.13	0.16	ND	ND	ND	ND	ND	ND	ND	0.06	0.50	2.50	0.10	0.0888		
Benzo g,h,i)perylene	mg/kg	0.05	0.1	ND	ND	ND	0.12	ND	0.17	0.11	0.13	ND	ND	ND	ND	ND	ND	ND	0.05	0.40	1.60	ND			
Benzo(k)fluoranthlene	mg/kg	0.05	0.2	ND	0.20	0.07	0.22	ND	0.28	0.20	0.22	ND	ND	ND	ND	ND	ND	ND	0.07	0.70	3.20	0.10			
Chrysene	mg/kg	0.05	0.1	ND	0.10	ND	0.14	ND	0.20	0.14	0.16	ND	ND	ND	ND	ND	ND	ND	ND	0.40	2.80	0.10	0.108		
Dibenzo(a,h)anthracene	mg/kg	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.10	0.55	ND	0.00622		
Fluoranthene	mg/kg	0.05	0.2	ND	0.30	0.10	0.28	ND	0.41	0.31	0.39	ND	0.07	0.06	ND	0.05	ND	ND	0.09	0.70	4.30	0.20	0.113		
Fluorene	mg/kg	0.05	ND	ND	ND	ND	0.06	ND	0.07	0.07	0.06	ND	0.07	ND	ND	ND	ND	ND	ND	ND	0.75	ND	0.0212		
Indeno)1,2,3-cd)pyrene	mg/kg	0.05	0.1	ND	0.10	ND	0.11	ND	0.15	0.09	0.12	ND	ND	ND	ND	0.05	ND	ND	ND	0.40	1.80	ND		10	
Naphthalene	mg/kg	0.05	ND	ND	ND	ND	0.11	ND	0.14	0.11	0.13	ND	ND	0.08	ND	0.08	0.06	ND	ND	0.20	0.99	ND	0.0346	22	
Perylene	mg/kg	0.05	ND	ND	ND	ND	0.10	0.14	0.15	0.07	0.06	0.05	0.05	ND	ND	ND	ND	ND	ND	0.20	0.84	ND			
Phenanthrene	mg/kg	0.05	0.2	ND	0.30	0.10	0.32	0.05	0.50	0.39	0.41	0.07	0.13	0.12	ND	0.18	0.16	ND	0.10	0.70	5.10	0.30	0.0867	50	
Pyrene	mg/kg	0.05	0.20	ND	0.30	0.11	0.32	ND	0.40	0.31	0.41	ND	0.08	0.08	ND	0.08	0.08	ND	0.10	0.90	5.40	0.20	0.153	100	
Inorganics																									
Total Inorganic Carbon	g/kg	1	5	3	1	3	5	5	3.6	2.7	5	2.7	2	9.1	ND	2	6.7	ND	4.8	3.6	5.6	4.2			
Moisture	%	1	53	28	57	47	48	45	47	39	35	36	41	27	18	21	24	17	45	54	57	51			
Total Organic Carbon (TOC)	g/kg	0.5	14	8	30	26	16	16	17	16	18	13	16	18	1.7	25	24	0.5	20	21	23	17			
Total Carbon	g/kg	0.5	20	8	11	32	29	21	20	20	23	16	18	27	1.4	27	31	0.7	25	24	29	21			

Notes:
ND = not detected above Reportable Detection Limit (RDL)
PAH = polycyclic aromatic hydorcarbons
PCB = polychorinated biphenyls
ISQG = interim sediment quality guideline
nt = not tested
Grey Shading Exceeds CCME Marine Sediment ISQG 2002
Italics exeeds the CEPA Ocean Disposal 1999
Bold exceeds CCME Soil Quality Guidelines 2004

TABLE 1 Sydport Sediment Chemis

Parameter	Units	RDL	2008 October Sampling Event									CCME	CCME	CEPA
			BH1 COMP	BH2 COMP	BH3 COMP	BH4 COMP	BH5 COMP	BH6 COMP	BH7 COMP	BH8 COMP	BH9 COMP	Marine Sediment ISQG (2002)	Soil Quality Guidelines for Industrial Use (2004)	Ocean Disposal (1999)
Metals														
Aluminum	mg/kg	100	nt	nt	nt	nt	nt	nt	nt	nt	nt			
Antimony	mg/kg	2.0	nt	nt	nt	nt	nt	nt	nt	nt	nt			
Arsenic	mg/kg	2.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	7.24	12	
Barium	mg/kg	5.0	nt	nt	nt	nt	nt	nt	nt	nt	nt		2000	
Berylilum	mg/kg	2.0	nt	nt	nt	nt	nt	nt	nt	nt	nt			
Cadmium	mg/kg	0.15	nt	nt	nt	nt	nt	nt	nt	nt	nt	0.7	22	0.6
Chromium	mg/kg	2.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	52.3	87	
Cobalt	mg/kg	1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt			
Copper	mg/kg	2.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	18.7	91	81
Iron	mg/kg	50	nt	nt	nt	nt	nt	nt	nt	nt	nt			
Lead	mg/kg	0.5	nt	nt	nt	nt	nt	nt	nt	nt	nt	30.2	600	66
Manganese	mg/kg	2.0	nt	nt	nt	nt	nt	nt	nt	nt	nt			
Mercury	mg/kg	0.010	nt	nt	nt	nt	nt	nt	nt	nt	nt	13		0.75
Molybdenum	mg/kg	2.0	nt	nt	nt	nt	nt	nt	nt	nt	nt			
Nickel	mg/kg	2.0	nt	nt	nt	nt	nt	nt	nt	nt	nt		50	
Selenium	mg/kg	2.0	nt	nt	nt	nt	nt	nt	nt	nt	nt		3.9	
Strontium	mg/kg	5.0	nt	nt	nt	nt	nt	nt	nt	nt	nt			
Thallium	mg/kg	0.10	nt	nt	nt	nt	nt	nt	nt	nt	nt		1	
Tin	mg/kg	2.0	nt	nt	nt	nt	nt	nt	nt	nt	nt			
Uranium	mg/kg	0.10	nt	nt	nt	nt	nt	nt	nt	nt	nt			
Vanadium	mg/kg	2.0	nt	nt	nt	nt	nt	nt	nt	nt	nt		130	
Zinc	mg/kg	5.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	124	360	
TPH Compounds														
Benzene	mg/kg	0.003	ND	0.008	ND	ND	ND	ND	ND	ND	ND		5.000	
Toluene	mg/kg	0.03	ND	0.03	ND	ND	ND	ND	ND	ND	ND		0.8	
Ethylbenzene	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND		20	
Xylenes	mg/kg	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND		20	
C_6 - C_{10} (less BTEX)	mg/kg	3.00	ND	ND	ND	ND	ND	ND	ND	ND	ND			
$>C_{10}$-C_{21} Hydrocarbons	mg/kg	15.00	25	64	ND	ND	ND	19	ND	ND	ND			
$>C_{21}$-$<C_{32}$ Hydrocarbons	mg/kg	15.00	40	140	ND	ND	ND	61	ND	ND	17			
Modified TPH (Tier 1)	mg/kg	20.00	*65*	*210*	ND	ND	ND	*80*	ND	ND	ND		10	10
PCBs														
o,p DDD	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00354		
p,p DDD	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00354		
o,p DDE	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00142		
p,p DDE	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00142		
o,p DDT	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0019		
p,p DDT	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0019		
Total PCB	mg/kg	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND			
PAHs														
1-Methylnaphthalene	mg/kg	0.05	ND	0.16	ND	ND	ND	0.08	ND	ND	ND			
2-Methylnaphthalene	mg/kg	0.05	0.05	0.19	ND	ND	ND	0.07	ND	ND	ND			
Acenaphthene	mg/kg	0.05	ND	0.06	ND	ND	ND	ND	ND	ND	ND	0.00671		
Acenaphthylene	mg/kg	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00587		
Anthracene	mg/kg	0.05	ND	0.27	ND	ND	ND	ND	ND	ND	ND	0.0469		
Benzo(a)anthracene	mg/kg	0.05	0.06	0.44	ND	ND	ND	ND	ND	ND	ND	0.0748		
Benzo(a)pyrene	mg/kg	0.05	0.06	0.44	ND	ND	ND	ND	ND	ND	ND	0.0888		
Benzo(b)fluoranthene	mg/kg	0.05	0.06	0.40	ND	ND	ND	ND	ND	ND	ND	0.0888		
Benzo g,h,i)perylene	mg/kg	0.05	0.05	0.25	ND	ND	ND	ND	ND	ND	ND			
Benzo(k)fluoranthlene	mg/kg	0.05	0.08	0.42	ND	ND	ND	ND	ND	ND	ND			
Chrysene	mg/kg	0.05	0.05	0.36	ND	ND	ND	ND	ND	ND	ND	0.108		
Dibenzo(a,h)anthracene	mg/kg	0.05	ND	0.07	ND	ND	ND	ND	ND	ND	ND	0.00622		
Fluoranthene	mg/kg	0.05	0.11	0.79	ND	ND	ND	ND	ND	ND	ND	0.113		
Fluorene	mg/kg	0.05	ND	0.12	ND	ND	ND	ND	ND	ND	ND	0.0212		
Indeno)1,2,3-cd)pyrene	mg/kg	0.05	ND	0.27	ND	ND	ND	ND	ND	ND	ND		10	
Naphthalene	mg/kg	0.05	ND	0.16	ND	ND	ND	ND	ND	ND	ND	0.0346	22	
Perylene	mg/kg	0.05	0.08	0.12	ND	ND	ND	ND	ND	ND	ND			
Phenanthrene	mg/kg	0.05	0.09	0.57	0.05	ND	ND	0.08	ND	ND	ND	0.0867	50	
Pyrene	mg/kg	0.05	0.15	0.80	0.05	ND	ND	0.06	ND	ND	ND	0.153	100	
Inorganics														
Total Inorganic Carbon	g/kg	1	4.5	5.2	3.2	2.8	ND	4.2	0.5	1.4	0.7			
Moisture	%	1	50	45	33	27	17	24	12	16	18			
Total Organic Carbon (TOC)	g/kg	0.5	15	27	16	13	3.1	32	2.4	1.3	1.2			
Total Carbon	g/kg	0.5	20	32	19	15	3.2	36	2.9	2.8	2			

Notes:
ND = not detected above Reportable Detection Limit (
PAH = polycyclic aromatic hydorcarbons
PCB = polychorinated biphenyls
ISQG = interim sediment quality guideline
nt = not tested
Grey Shading Exceeds CCME Marine Sediment ISQ(
Italics exeeds the CEPA Ocean Disposal 1999
Bold exceeds CCME Soil Quality Guidelines 2004

Your P.O. #: NSD016300
Your Project #: 1044442
Site: SYDNEY MARINE STUDY - SYDNEY
Your C.O.C. #: S 14515

Attention: Willie McNeil
Jacques Whitford Limited
Sydney - Standing Offer
PO Box 1231
Sydney, NS
B1P 6J9

Report Date: 2008/10/23

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A8B6162
Received: 2008/10/07, 14:55

Sample Matrix: Soil
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
TEH in Soil (PIRI)	6	2008/10/09	2008/10/10	ATL SOP 00150	Based on Atl. PIRI
Moisture (1)	6	N/A	2008/10/10	ATL SOP 00001 R2	MOE Handbook 1983
PAH Compounds by GCMS (SIM) (1)	6	2008/10/09	2008/10/10	ATL SOP 00148	Based on EPA8270
PCB/DDT in Soil by GC-ECD (1)	6	2008/10/17	2008/10/23	ATL SOP 00106 R2	Based EPA8082
VPH in Soil - Low Level	6	2008/10/09	2008/10/09	ATL SOP 00152	Based on Atl. PIRI
Total Carbon in Solids by Ind. (1)	6	N/A	2008/10/17	ATL SOP 00044 R2	LECO 203-601-224
TIC in soil (1)	6	N/A	2008/10/17	ATL SOP 00044 R2	LECO 203-601-224
Total Organic Carbon in Soil (1)	6	N/A	2008/10/17	ATL SOP 00044 R2	LECO 203-601-224
ModTPH (T1) Calc. for Soil	6	2008/10/07	2008/10/10	ATL SOP 00150/00152	Based on Atl PIRI

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bedford
(2) Soils are reported on a dry weight basis unless otherwise specified.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

TANYA ADDICOTT, Client Services Representative
Email: tanya.addicott.reports@maxxamanalytics.com
Phone# (902) 567 1255

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For Service Group specific validation please refer to the Validation Signature Page

Total cover pages: 1

This document is in electronic format, hard copy is available on request.

Maxxam Job #: A8B6162
Report Date: 2008/10/23

Jacques Whitford Limited
Client Project #: 1044442
Project name: SYDNEY MARINE STUDY - SYDNEY
Your P.O. #: NSD016300

ATLANTIC TOTAL ORGANIC/INORGANIC CARBON (SOIL)

Maxxam ID		AR9187		AR9400		
Sampling Date		2008/10/03		2008/10/05		
COC Number		S 14515		S 14515		
Registration #						
	Units	**BH1 COMP**	**RDL**	**BH5 COMP**	**RDL**	**QC Batch**
Inorganics						
Total Inorganic Carbon (C)	g/kg	4.5	0.5	ND	0.2	1636118
Organic Carbon (TOC)	g/kg	15	0.5	3.1	0.2	1645675
Total Carbon-combustion IR	g/kg	20	0.5	3.2	0.2	1645676

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		AR9401		AR9402		
Sampling Date		2008/10/05		2008/10/02		
COC Number		S 14515		S 14515		
Registration #						
	Units	**BH6 COMP**	**RDL**	**BH9 COMP**	**RDL**	**QC Batch**
Inorganics						
Total Inorganic Carbon (C)	g/kg	4.2	0.5	0.7	0.2	1636118
Organic Carbon (TOC)	g/kg	32	0.5	1.2	0.2	1645675
Total Carbon-combustion IR	g/kg	36	0.5	2.0	0.2	1645676

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		AR9410		AR9415		
Sampling Date		2008/10/06		2008/10/06		
COC Number		S 14515		S 14515		
Registration #						
	Units	**BH4 COMP**	**RDL**	**BH8 COMP**	**RDL**	**QC Batch**
Inorganics						
Total Inorganic Carbon (C)	g/kg	2.8	0.5	1.4	0.2	1636118
Organic Carbon (TOC)	g/kg	13	0.4	1.3	0.2	1645675
Total Carbon-combustion IR	g/kg	15	0.5	2.8	0.2	1645676

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 90 Esplanade St, Sydney, Nova Scotia Canada B1P 1A1 Tel: 902 567 1255 Toll Free: 888 535 7770 Fax: 902 5396504 www.maxxamanalytics.com

Maxxam Job #: A8B6162
Report Date: 2008/10/23

Jacques Whitford Limited
Client Project #: 1044442
Project name: SYDNEY MARINE STUDY - SYDNEY
Your P.O. #: NSD016300

ATLANTIC MUST (PIRI TIER I) IN SOIL

Maxxam ID		AR9187	AR9400	AR9400	AR9401		
Sampling Date		2008/10/03	2008/10/05	2008/10/05	2008/10/05		
COC Number		S 14515	S 14515	S 14515	S 14515		
Registration #							
	Units	**BH1 COMP**	**BH5 COMP**	**BH5 COMP Lab-Dup**	**BH6 COMP**	**RDL**	**QC Batch**
Petroleum Hydrocarbons							
Benzene	mg/kg	ND	ND	ND	ND	0.003	1639111
Toluene	mg/kg	ND	ND	ND	ND	0.03	1639111
Ethylbenzene	mg/kg	ND	ND	ND	ND	0.01	1639111
Xylene (Total)	mg/kg	ND	ND	ND	ND	0.05	1639111
C6 - C10 (less BTEX)	mg/kg	ND	ND	ND	ND	3	1639111
>C10-C21 Hydrocarbons	mg/kg	25	ND	ND	19	15	1639100
>C21-<C32 Hydrocarbons	mg/kg	40	ND	ND	61	15	1639100
Modified TPH (Tier1)	mg/kg	65	ND		80	20	1637489
Surrogate Recovery (%)							
Isobutylbenzene - Extractable	%	98	90	85	93		1639100
n-Dotriacontane - Extractable	%	92 (1)	90	84	89 (2)		1639100
Isobutylbenzene - Volatile	%	86	97	99	91		1639111

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Weathered fuel oil / lube oil fraction.
(2) Weather fuel oil / lube oil fraction

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Maxxam Job #: A8B6162
Report Date: 2008/10/23

Jacques Whitford Limited
Client Project #: 1044442
Project name: SYDNEY MARINE STUDY - SYDNEY
Your P.O. #: NSD016300

ATLANTIC MUST (PIRI TIER I) IN SOIL

Maxxam ID		AR9402	AR9410	AR9415		
Sampling Date		2008/10/02	2008/10/06	2008/10/06		
COC Number		S 14515	S 14515	S 14515		
Registration #						
	Units	**BH9 COMP**	**BH4 COMP**	**BH8 COMP**	**RDL**	**QC Batch**
Petroleum Hydrocarbons						
Benzene	mg/kg	ND	ND	ND	0.003	1639111
Toluene	mg/kg	ND	ND	ND	0.03	1639111
Ethylbenzene	mg/kg	ND	ND	ND	0.01	1639111
Xylene (Total)	mg/kg	ND	ND	ND	0.05	1639111
C6 - C10 (less BTEX)	mg/kg	ND	ND	ND	3	1639111
>C10-C21 Hydrocarbons	mg/kg	ND	ND	ND	15	1639100
>C21-<C32 Hydrocarbons	mg/kg	17	ND	ND	15	1639100
Modified TPH (Tier1)	mg/kg	ND	ND	ND	20	1637489
Surrogate Recovery (%)						
Isobutylbenzene - Extractable	%	84	93	87		1639100
n-Dotriacontane - Extractable	%	77 (1)	88	77		1639100
Isobutylbenzene - Volatile	%	109	106	95		1639111

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Lube oil fraction

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Report Date: 2008/10/23

Jacques Whitford Limited
Client Project #: 1044442
Project name: SYDNEY MARINE STUDY - SYDNEY
Your P.O. #: NSD016300

RESULTS OF ANALYSES OF SOIL

Maxxam ID		AR9187	AR9400	AR9401	AR9402	AR9410		
Sampling Date		2008/10/03	2008/10/05	2008/10/05	2008/10/02	2008/10/06		
COC Number		S 14515	S 14515	S 14515	S 14515	S 14515		
Registration #								
	Units	**BH1 COMP**	**BH5 COMP**	**BH6 COMP**	**BH9 COMP**	**BH4 COMP**	**RDL**	**QC Batch**
Inorganics								
Moisture	%	50	17	24	18	27	1	1640203

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		AR9415		
Sampling Date		2008/10/06		
COC Number		S 14515		
Registration #				
	Units	**BH8 COMP**	**RDL**	**QC Batch**
Inorganics				
Moisture	%	16	1	1640203

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A8B6162
Report Date: 2008/10/23

Jacques Whitford Limited
Client Project #: 1044442
Project name: SYDNEY MARINE STUDY - SYDNEY
Your P.O. #: NSD016300

PCB'S AND DDT BY GC-ECD (SOIL)

Maxxam ID		AR9187	AR9400	AR9401	AR9402		
Sampling Date		2008/10/03	2008/10/05	2008/10/05	2008/10/02		
COC Number		S 14515	S 14515	S 14515	S 14515		
Registration #							
	Units	**BH1 COMP**	**BH5 COMP**	**BH6 COMP**	**BH9 COMP**	**RDL**	**QC Batch**
PCBs							
o,p-DDD	mg/kg	ND	ND	ND	ND	0.01	1645842
p,p-DDD	mg/kg	ND	ND	ND	ND	0.01	1645842
o,p-DDE	mg/kg	ND	ND	ND	ND	0.01	1645842
p,p-DDE	mg/kg	ND	ND	ND	ND	0.01	1645842
o,p-DDT	mg/kg	ND	ND	ND	ND	0.01	1645842
p,p-DDT	mg/kg	ND	ND	ND	ND	0.01	1645842
Total PCB	mg/kg	ND	ND	ND	ND	0.01	1645842
Surrogate Recovery (%)							
2,4,5,6-Tetrachloro-m-xylene	%	79	88	75	94		1645842
Decachlorobiphenyl	%	79	85	75	81		1645842

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Your P.O. #: NSD016300

PCB'S AND DDT BY GC-ECD (SOIL)

Maxxam ID		AR9410	AR9415		
Sampling Date		2008/10/06	2008/10/06		
COC Number		S 14515	S 14515		
Registration #					
	Units	**BH4 COMP**	**BH8 COMP**	**RDL**	**QC Batch**
PCBs					
o,p-DDD	mg/kg	ND	ND	0.01	1645842
p,p-DDD	mg/kg	ND	ND	0.01	1645842
o,p-DDE	mg/kg	ND	ND	0.01	1645842
p,p-DDE	mg/kg	ND	ND	0.01	1645842
o,p-DDT	mg/kg	ND	ND	0.01	1645842
p,p-DDT	mg/kg	ND	ND	0.01	1645842
Total PCB	mg/kg	ND	ND	0.01	1645842
Surrogate Recovery (%)					
2,4,5,6-Tetrachloro-m-xylene	%	84	83		1645842
Decachlorobiphenyl	%	74	74		1645842

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Jacques Whitford Limited
Client Project #: 1044442
Project name: SYDNEY MARINE STUDY - SYDNEY
Your P.O. #: NSD016300

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Maxxam ID		AR9187	AR9400	AR9400	AR9401		
Sampling Date		2008/10/03	2008/10/05	2008/10/05	2008/10/05		
COC Number		S 14515	S 14515	S 14515	S 14515		
Registration #							
	Units	**BH1 COMP**	**BH5 COMP**	**BH5 COMP Lab-Dup**	**BH6 COMP**	**RDL**	**QC Batch**
Polyaromatic Hydrocarbons							
1-Methylnaphthalene	mg/kg	ND	ND	ND	0.08	0.05	1639222
2-Methylnaphthalene	mg/kg	0.05	ND	ND	0.07	0.05	1639222
Acenaphthene	mg/kg	ND	ND	ND	ND	0.05	1639222
Acenaphthylene	mg/kg	ND	ND	ND	ND	0.05	1639222
Anthracene	mg/kg	ND	ND	ND	ND	0.05	1639222
Benzo(a)anthracene	mg/kg	0.06	ND	ND	ND	0.05	1639222
Benzo(a)pyrene	mg/kg	0.06	ND	ND	ND	0.05	1639222
Benzo(b)fluoranthene	mg/kg	0.06	ND	ND	ND	0.05	1639222
Benzo(g,h,i)perylene	mg/kg	0.05	ND	ND	ND	0.05	1639222
Benzo(k)fluoranthene	mg/kg	0.08	ND	ND	ND	0.05	1639222
Chrysene	mg/kg	0.05	ND	ND	ND	0.05	1639222
Dibenz(a,h)anthracene	mg/kg	ND	ND	ND	ND	0.05	1639222
Fluoranthene	mg/kg	0.11	ND	ND	ND	0.05	1639222
Fluorene	mg/kg	ND	ND	ND	ND	0.05	1639222
Indeno(1,2,3-cd)pyrene	mg/kg	ND	ND	ND	ND	0.05	1639222
Naphthalene	mg/kg	ND	ND	ND	ND	0.05	1639222
Perylene	mg/kg	0.08	ND	ND	ND	0.05	1639222
Phenanthrene	mg/kg	0.09	ND	ND	0.08	0.05	1639222
Pyrene	mg/kg	0.15	ND	ND	0.06	0.05	1639222
Surrogate Recovery (%)							
D10-Anthracene	%	90	91	97	91		1639222
D14-Terphenyl (FS)	%	84	83	82	84		1639222
D8-Acenaphthylene	%	85	84	84	83		1639222

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A8B6162
Report Date: 2008/10/23

Jacques Whitford Limited
Client Project #: 1044442
Project name: SYDNEY MARINE STUDY - SYDNEY
Your P.O. #: NSD016300

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Maxxam ID		AR9402	AR9410	AR9415		
Sampling Date		2008/10/02	2008/10/06	2008/10/06		
COC Number		S 14515	S 14515	S 14515		
Registration #						
	Units	**BH9 COMP**	**BH4 COMP**	**BH8 COMP**	**RDL**	**QC Batch**
Polyaromatic Hydrocarbons						
1-Methylnaphthalene	mg/kg	ND	ND	ND	0.05	1639222
2-Methylnaphthalene	mg/kg	ND	ND	ND	0.05	1639222
Acenaphthene	mg/kg	ND	ND	ND	0.05	1639222
Acenaphthylene	mg/kg	ND	ND	ND	0.05	1639222
Anthracene	mg/kg	ND	ND	ND	0.05	1639222
Benzo(a)anthracene	mg/kg	ND	ND	ND	0.05	1639222
Benzo(a)pyrene	mg/kg	ND	ND	ND	0.05	1639222
Benzo(b)fluoranthene	mg/kg	ND	ND	ND	0.05	1639222
Benzo(g,h,i)perylene	mg/kg	ND	ND	ND	0.05	1639222
Benzo(k)fluoranthene	mg/kg	ND	ND	ND	0.05	1639222
Chrysene	mg/kg	ND	ND	ND	0.05	1639222
Dibenz(a,h)anthracene	mg/kg	ND	ND	ND	0.05	1639222
Fluoranthene	mg/kg	ND	ND	ND	0.05	1639222
Fluorene	mg/kg	ND	ND	ND	0.05	1639222
Indeno(1,2,3-cd)pyrene	mg/kg	ND	ND	ND	0.05	1639222
Naphthalene	mg/kg	ND	ND	ND	0.05	1639222
Perylene	mg/kg	ND	ND	ND	0.05	1639222
Phenanthrene	mg/kg	ND	ND	ND	0.05	1639222
Pyrene	mg/kg	ND	ND	ND	0.05	1639222
Surrogate Recovery (%)						
D10-Anthracene	%	93	97	89		1639222
D14-Terphenyl (FS)	%	84	80	84		1639222
D8-Acenaphthylene	%	84	82	82		1639222

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A8B6162
Report Date: 2008/10/23

Jacques Whitford Limited
Client Project #: 1044442
Project name: SYDNEY MARINE STUDY - SYDNEY
Your P.O. #: NSD016300

GENERAL COMMENTS

Results relate only to the items tested.

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Jacques Whitford Limited
Attention: Willie McNeil
Client Project #: 1044442
P.O. #: NSD016300
Project name: SYDNEY MARINE STUDY - SYDNEY

Quality Assurance Report

Maxxam Job Number: KA8B6162

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1639100	AHL	MATRIX SPIKE						
		[AR9400-01]	Isobutylbenzene - Extractable	2008/10/10		77	%	30 - 130
			n-Dotriacontane - Extractable	2008/10/10		72	%	30 - 130
			>C10-C21 Hydrocarbons	2008/10/10		91	%	30 - 130
			>C21-<C32 Hydrocarbons	2008/10/10		75	%	30 - 130
		Spiked Blank	Isobutylbenzene - Extractable	2008/10/10		70	%	30 - 130
			n-Dotriacontane - Extractable	2008/10/10		70	%	30 - 130
			>C10-C21 Hydrocarbons	2008/10/10		99	%	30 - 130
			>C21-<C32 Hydrocarbons	2008/10/10		71	%	30 - 130
		Method Blank	Isobutylbenzene - Extractable	2008/10/10		74	%	30 - 130
			n-Dotriacontane - Extractable	2008/10/10		72	%	30 - 130
			>C10-C21 Hydrocarbons	2008/10/10	ND, RDL=15		mg/kg	
			>C21-<C32 Hydrocarbons	2008/10/10	ND, RDL=15		mg/kg	
		RPD [AR9400-01]	>C10-C21 Hydrocarbons	2008/10/10	NC		%	50
			>C21-<C32 Hydrocarbons	2008/10/10	NC		%	50
1639111	AHL	MATRIX SPIKE						
		[AR9400-01]	Isobutylbenzene - Volatile	2008/10/09		92	%	60 - 140
			Benzene	2008/10/09		89	%	40 - 130
			Toluene	2008/10/09		108	%	40 - 130
			Ethylbenzene	2008/10/09		111	%	40 - 130
			Xylene (Total)	2008/10/09		106	%	40 - 130
			C6 - C10 (less BTEX)	2008/10/09		101	%	N/A
		Spiked Blank	Isobutylbenzene - Volatile	2008/10/09		88	%	60 - 140
			Benzene	2008/10/09		94	%	40 - 130
			Toluene	2008/10/09		113	%	40 - 130
			Ethylbenzene	2008/10/09		118	%	40 - 130
			Xylene (Total)	2008/10/09		112	%	40 - 130
			C6 - C10 (less BTEX)	2008/10/09		102	%	N/A
		Method Blank	Isobutylbenzene - Volatile	2008/10/09		96	%	60 - 140
			Benzene	2008/10/09	ND, RDL=0.003		mg/kg	
			Toluene	2008/10/09	ND, RDL=0.025		mg/kg	
			Ethylbenzene	2008/10/09	ND, RDL=0.01		mg/kg	
			Xylene (Total)	2008/10/09	ND, RDL=0.05		mg/kg	
			C6 - C10 (less BTEX)	2008/10/09	ND, RDL=3		mg/kg	
		RPD [AR9400-01]	Benzene	2008/10/09	NC		%	50
			Toluene	2008/10/09	NC		%	50
			Ethylbenzene	2008/10/09	NC		%	50
			Xylene (Total)	2008/10/09	NC		%	50
			C6 - C10 (less BTEX)	2008/10/09	NC		%	50
1639222	TML	MATRIX SPIKE						
		[AR9400-01]	D10-Anthracene	2008/10/10		90	%	30 - 130
			D14-Terphenyl (FS)	2008/10/10		82	%	30 - 130
			D8-Acenaphthylene	2008/10/10		83	%	30 - 130
			1-Methylnaphthalene	2008/10/10		90	%	40 - 140
			2-Methylnaphthalene	2008/10/10		84	%	40 - 140
			Acenaphthene	2008/10/10		84	%	40 - 140
			Acenaphthylene	2008/10/10		88	%	40 - 140
			Anthracene	2008/10/10		91	%	40 - 140
			Benzo(a)anthracene	2008/10/10		82	%	40 - 140
			Benzo(a)pyrene	2008/10/10		87	%	40 - 140
			Benzo(b)fluoranthene	2008/10/10		81	%	40 - 140
			Benzo(g,h,i)perylene	2008/10/10		83	%	40 - 140
			Benzo(k)fluoranthene	2008/10/10		94	%	40 - 140
			Chrysene	2008/10/10		86	%	40 - 140
			Dibenz(a,h)anthracene	2008/10/10		87	%	40 - 140

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Jacques Whitford Limited
Attention: Willie McNeil
Client Project #: 1044442
P.O. #: NSD016300
Project name: SYDNEY MARINE STUDY - SYDNEY

Quality Assurance Report (Continued)

Maxxam Job Number: KA8B6162

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1639222	TML	MATRIX SPIKE						
		[AR9400-01]	Fluoranthene	2008/10/10		86	%	40 - 140
			Fluorene	2008/10/10		82	%	40 - 140
			Indeno(1,2,3-cd)pyrene	2008/10/10		84	%	40 - 140
			Naphthalene	2008/10/10		85	%	40 - 140
			Perylene	2008/10/10		82	%	40 - 140
			Phenanthrene	2008/10/10		86	%	40 - 140
			Pyrene	2008/10/10		84	%	40 - 140
		Spiked Blank	D10-Anthracene	2008/10/10		90	%	30 - 130
			D14-Terphenyl (FS)	2008/10/10		96	%	30 - 130
			D8-Acenaphthylene	2008/10/10		89	%	30 - 130
			1-Methylnaphthalene	2008/10/10		90	%	40 - 140
			2-Methylnaphthalene	2008/10/10		85	%	40 - 140
			Acenaphthene	2008/10/10		92	%	40 - 140
			Acenaphthylene	2008/10/10		93	%	40 - 140
			Anthracene	2008/10/10		97	%	40 - 140
			Benzo(a)anthracene	2008/10/10		91	%	40 - 140
			Benzo(a)pyrene	2008/10/10		94	%	40 - 140
			Benzo(b)fluoranthene	2008/10/10		88	%	40 - 140
			Benzo(g,h,i)perylene	2008/10/10		95	%	40 - 140
			Benzo(k)fluoranthene	2008/10/10		95	%	40 - 140
			Chrysene	2008/10/10		94	%	40 - 140
			Dibenz(a,h)anthracene	2008/10/10		95	%	40 - 140
			Fluoranthene	2008/10/10		98	%	40 - 140
			Fluorene	2008/10/10		93	%	40 - 140
			Indeno(1,2,3-cd)pyrene	2008/10/10		88	%	40 - 140
			Naphthalene	2008/10/10		90	%	40 - 140
			Perylene	2008/10/10		93	%	40 - 140
			Phenanthrene	2008/10/10		89	%	40 - 140
			Pyrene	2008/10/10		98	%	40 - 140
		Method Blank	D10-Anthracene	2008/10/10		98	%	30 - 130
			D14-Terphenyl (FS)	2008/10/10		89	%	30 - 130
			D8-Acenaphthylene	2008/10/10		92	%	30 - 130
			1-Methylnaphthalene	2008/10/10	ND, RDL=0.05		mg/kg	
			2-Methylnaphthalene	2008/10/10	ND, RDL=0.05		mg/kg	
			Acenaphthene	2008/10/10	ND, RDL=0.05		mg/kg	
			Acenaphthylene	2008/10/10	ND, RDL=0.05		mg/kg	
			Anthracene	2008/10/10	ND, RDL=0.05		mg/kg	
			Benzo(a)anthracene	2008/10/10	ND, RDL=0.05		mg/kg	
			Benzo(a)pyrene	2008/10/10	ND, RDL=0.05		mg/kg	
			Benzo(b)fluoranthene	2008/10/10	ND, RDL=0.05		mg/kg	
			Benzo(g,h,i)perylene	2008/10/10	ND, RDL=0.05		mg/kg	
			Benzo(k)fluoranthene	2008/10/10	ND, RDL=0.05		mg/kg	
			Chrysene	2008/10/10	ND, RDL=0.05		mg/kg	
			Dibenz(a,h)anthracene	2008/10/10	ND, RDL=0.05		mg/kg	
			Fluoranthene	2008/10/10	ND, RDL=0.05		mg/kg	
			Fluorene	2008/10/10	ND, RDL=0.05		mg/kg	
			Indeno(1,2,3-cd)pyrene	2008/10/10	ND, RDL=0.05		mg/kg	
			Naphthalene	2008/10/10	ND, RDL=0.05		mg/kg	
			Perylene	2008/10/10	ND, RDL=0.05		mg/kg	
			Phenanthrene	2008/10/10	ND, RDL=0.05		mg/kg	
			Pyrene	2008/10/10	ND, RDL=0.05		mg/kg	
		RPD [AR9400-01]	1-Methylnaphthalene	2008/10/10	NC		%	50
			2-Methylnaphthalene	2008/10/10	NC		%	50
			Acenaphthene	2008/10/10	NC		%	50

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Jacques Whitford Limited
Attention: Willie McNeil
Client Project #: 1044442
P.O. #: NSD016300
Project name: SYDNEY MARINE STUDY - SYDNEY

Quality Assurance Report (Continued)

Maxxam Job Number: KA8B6162

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1639222	TML	RPD [AR9400-01]	Acenaphthylene	2008/10/10	NC		%	50
			Anthracene	2008/10/10	NC		%	50
			Benzo(a)anthracene	2008/10/10	NC		%	50
			Benzo(a)pyrene	2008/10/10	NC		%	50
			Benzo(b)fluoranthene	2008/10/10	NC		%	50
			Benzo(g,h,i)perylene	2008/10/10	NC		%	50
			Benzo(k)fluoranthene	2008/10/10	NC		%	50
			Chrysene	2008/10/10	NC		%	50
			Dibenz(a,h)anthracene	2008/10/10	NC		%	50
			Fluoranthene	2008/10/10	NC		%	50
			Fluorene	2008/10/10	NC		%	50
			Indeno(1,2,3-cd)pyrene	2008/10/10	NC		%	50
			Naphthalene	2008/10/10	NC		%	50
			Perylene	2008/10/10	NC		%	50
			Phenanthrene	2008/10/10	NC		%	50
			Pyrene	2008/10/10	NC		%	50
1645675	CAC	QC STANDARD	Organic Carbon (TOC)	2008/10/17		94	%	75 - 125
		Method Blank	Organic Carbon (TOC)	2008/10/17	ND, RDL=0.2		g/kg	
		RPD	Organic Carbon (TOC)	2008/10/17	1.3		%	35
1645676	CAC	QC STANDARD	Total Carbon-combustion IR	2008/10/17		104	%	75 - 125
		Method Blank	Total Carbon-combustion IR	2008/10/17	ND, RDL=0.2		g/kg	
		RPD	Total Carbon-combustion IR	2008/10/17	22.4		%	35
1645842	CMI	MATRIX SPIKE	2,4,5,6-Tetrachloro-m-xylene	2008/10/23		99	%	70 - 130
			Decachlorobiphenyl	2008/10/23		106	%	70 - 130
			o,p-DDD	2008/10/23		71	%	N/A
			p,p-DDD	2008/10/23		70	%	N/A
			o,p-DDE	2008/10/23		83	%	N/A
			p,p-DDE	2008/10/23		82	%	N/A
			o,p-DDT	2008/10/23		92	%	N/A
			p,p-DDT	2008/10/23		89	%	N/A
			Total PCB	2008/10/23		96	%	70 - 130
		Spiked Blank	2,4,5,6-Tetrachloro-m-xylene	2008/10/23		87	%	70 - 130
			Decachlorobiphenyl	2008/10/23		80	%	70 - 130
			o,p-DDD	2008/10/23		80	%	N/A
			p,p-DDD	2008/10/23		81	%	N/A
			o,p-DDE	2008/10/23		89	%	N/A
			p,p-DDE	2008/10/23		85	%	N/A
			o,p-DDT	2008/10/23		87	%	N/A
			p,p-DDT	2008/10/23		94	%	N/A
			Total PCB	2008/10/23		72	%	70 - 130
		Method Blank	2,4,5,6-Tetrachloro-m-xylene	2008/10/23		83	%	70 - 130
			Decachlorobiphenyl	2008/10/23		89	%	70 - 130
			o,p-DDD	2008/10/23	ND, RDL=0.01		mg/kg	
			p,p-DDD	2008/10/23	ND, RDL=0.01		mg/kg	
			o,p-DDE	2008/10/23	ND, RDL=0.01		mg/kg	
			p,p-DDE	2008/10/23	ND, RDL=0.01		mg/kg	
			o,p-DDT	2008/10/23	ND, RDL=0.01		mg/kg	
			p,p-DDT	2008/10/23	ND, RDL=0.01		mg/kg	
			Total PCB	2008/10/23	ND, RDL=0.01		mg/kg	
		RPD	Decachlorobiphenyl	2008/10/23	20.1		%	N/A
			o,p-DDD	2008/10/23	NC		%	50
			p,p-DDD	2008/10/23	NC		%	50
			o,p-DDE	2008/10/23	NC		%	50
			p,p-DDE	2008/10/23	NC		%	50
			o,p-DDT	2008/10/23	NC		%	50

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Jacques Whitford Limited
Attention: Willie McNeil
Client Project #: 1044442
P.O. #: NSD016300
Project name: SYDNEY MARINE STUDY - SYDNEY

Quality Assurance Report (Continued)

Maxxam Job Number: KA8B6162

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1645842	CMI	RPD	p,p-DDT	2008/10/23	NC		%	50
			Total PCB	2008/10/23	NC		%	50

ND = Not detected
N/A = Not Applicable
NC = Non-calculable
RPD = Relative Percent Difference
QC Standard = Quality Control Standard
SPIKE = Fortified sample

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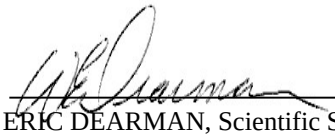
Validation Signature Page

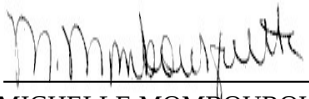
Maxxam Job #: A8B6162

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

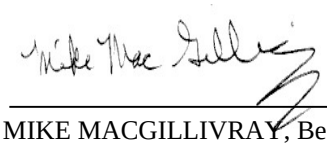
ALAN STEWART, Project Manager



ERIC DEARMAN, Scientific Specialist



MICHELLE MOMBOURQUETTE, Laboratory Manager



MIKE MACGILLIVRAY, Bedford Inorg Spvsr

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CALA have approved this reporting process and electronic report format.

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Your P.O. #: NSD016300
Your Project #: 1044442/Z9100
Site Location: SYDPORT MARINE PROGRAM - SYDNEY
Your C.O.C. #: S 14521

Attention: Willie McNeil
Jacques Whitford Limited
Sydney - Standing Offer
PO Box 1231
Sydney, NS
B1P 6J9

Report Date: 2008/10/23

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A8B8445
Received: 2008/10/10, 15:05

Sample Matrix: Soil
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
TEH in Soil (PIRI)	2	2008/10/15	2008/10/16	ATL SOP 00150	Based on Atl. PIRI
Moisture (1)	2	N/A	2008/10/15	ATL SOP 00001 R2	MOE Handbook 1983
PAH Compounds by GCMS (SIM) (1)	2	2008/10/15	2008/10/16	ATL SOP 00148	Based on EPA8270
PCB/DDT in Soil by GC-ECD (1)	2	2008/10/17	2008/10/23	ATL SOP 00106 R2	Based EPA8082
VPH in Soil - Low Level	2	2008/10/15	2008/10/16	ATL SOP 00152	Based on Atl. PIRI
Total Carbon in Solids by Ind. (1)	2	N/A	2008/10/17	ATL SOP 00044 R2	LECO 203-601-224
TIC in soil (1)	2	N/A	2008/10/17	ATL SOP 00044 R2	LECO 203-601-224
Total Organic Carbon in Soil (1)	2	N/A	2008/10/17	ATL SOP 00044 R2	LECO 203-601-224
ModTPH (T1) Calc. for Soil	2	2008/10/10	2008/10/16	ATL SOP 00150/00152	Based on Atl PIRI

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bedford
(2) Soils are reported on a dry weight basis unless otherwise specified.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

TANYA ADDICOTT, Client Services Representative
Email: tanya.addicott.reports@maxxamanalytics.com
Phone# (902) 567 1255

==========

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For Service Group specific validation please refer to the Validation Signature Page

Total cover pages: 1

Maxxam Job #: A8B8445
Report Date: 2008/10/23

Jacques Whitford Limited
Client Project #: 1044442/Z9100
Project name: SYDPORT MARINE PROGRAM - SYDNEY
Your P.O. #: NSD016300

ATLANTIC TOTAL ORGANIC/INORGANIC CARBON (SOIL)

Maxxam ID		AT0529		AT0567		
Sampling Date						
COC Number		S 14521		S 14521		
Registration #						
	Units	**BH 2 COMP**	**RDL**	**BH 3 COMP**	**RDL**	**QC Batch**
Inorganics						
Total Inorganic Carbon (C)	g/kg	5.2	0.6	3.2	0.5	1641019
Organic Carbon (TOC)	g/kg	27	0.6	16	0.4	1645675
Total Carbon-combustion IR	g/kg	32	0.5	19	0.5	1645676

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A8B8445
Report Date: 2008/10/23

Jacques Whitford Limited
Client Project #: 1044442/Z9100
Project name: SYDPORT MARINE PROGRAM - SYDNEY
Your P.O. #: NSD016300

ATLANTIC MUST (PIRI TIER I) IN SOIL

Maxxam ID		AT0529	AT0567	AT0567		
Sampling Date						
COC Number		S 14521	S 14521	S 14521		
Registration #						
	Units	**BH 2 COMP**	**BH 3 COMP**	**BH 3 COMP Lab-Dup**	**RDL**	**QC Batch**
Petroleum Hydrocarbons						
Benzene	mg/kg	0.008	ND	ND	0.003	1643293
Toluene	mg/kg	0.03	ND	ND	0.03	1643293
Ethylbenzene	mg/kg	ND	ND	ND	0.01	1643293
Xylene (Total)	mg/kg	ND	ND	ND	0.05	1643293
C6 - C10 (less BTEX)	mg/kg	ND	ND	ND	3	1643293
>C10-C21 Hydrocarbons	mg/kg	64	ND	ND	15	1643285
>C21-<C32 Hydrocarbons	mg/kg	140	ND	ND	15	1643285
Modified TPH (Tier1)	mg/kg	210	ND		20	1641024
Surrogate Recovery (%)						
Isobutylbenzene - Extractable	%	97	97	96		1643285
n-Dotriacontane - Extractable	%	121 (1)	102	104		1643285
Isobutylbenzene - Volatile	%	119	119	118		1643293

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Weathered fuel oil / lube oil fraction.

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Maxxam Job #: A8B8445
Report Date: 2008/10/23

Jacques Whitford Limited
Client Project #: 1044442/Z9100
Project name: SYDPORT MARINE PROGRAM - SYDNEY
Your P.O. #: NSD016300

RESULTS OF ANALYSES OF SOIL

Maxxam ID		AT0529	AT0567		
Sampling Date					
COC Number		S 14521	S 14521		
Registration #					
	Units	**BH 2 COMP**	**BH 3 COMP**	**RDL**	**QC Batch**
Inorganics					
Moisture	%	45	33	1	1644205

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Your P.O. #: NSD016300

PCB'S AND DDT BY GC-ECD (SOIL)

Maxxam ID		AT0529	AT0567	AT0567		
Sampling Date						
COC Number		S 14521	S 14521	S 14521		
Registration #						
	Units	**BH 2 COMP**	**BH 3 COMP**	**BH 3 COMP Lab-Dup**	**RDL**	**QC Batch**
PCBs						
o,p-DDD	mg/kg	ND	ND	ND	0.01	1645842
p,p-DDD	mg/kg	ND	ND	ND	0.01	1645842
o,p-DDE	mg/kg	ND	ND	ND	0.01	1645842
p,p-DDE	mg/kg	ND	ND	ND	0.01	1645842
o,p-DDT	mg/kg	ND	ND	ND	0.01	1645842
p,p-DDT	mg/kg	ND	ND	ND	0.01	1645842
Total PCB	mg/kg	ND	ND	ND	0.01	1645842
Surrogate Recovery (%)						
2,4,5,6-Tetrachloro-m-xylene	%	76	83	103		1645842
Decachlorobiphenyl	%	81	86	106		1645842

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A8B8445
Report Date: 2008/10/23

Jacques Whitford Limited
Client Project #: 1044442/Z9100
Project name: SYDPORT MARINE PROGRAM - SYDNEY
Your P.O. #: NSD016300

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Maxxam ID		AT0529	AT0567	AT0567		
Sampling Date						
COC Number		S 14521	S 14521	S 14521		
Registration #						
	Units	**BH 2 COMP**	**BH 3 COMP**	**BH 3 COMP Lab-Dup**	**RDL**	**QC Batch**
Polyaromatic Hydrocarbons						
1-Methylnaphthalene	mg/kg	0.16	ND	ND	0.05	1643728
2-Methylnaphthalene	mg/kg	0.19	ND	ND	0.05	1643728
Acenaphthene	mg/kg	0.06	ND	ND	0.05	1643728
Acenaphthylene	mg/kg	ND	ND	ND	0.05	1643728
Anthracene	mg/kg	0.27	ND	ND	0.05	1643728
Benzo(a)anthracene	mg/kg	0.44	ND	ND	0.05	1643728
Benzo(a)pyrene	mg/kg	0.44	ND	ND	0.05	1643728
Benzo(b)fluoranthene	mg/kg	0.40	ND	ND	0.05	1643728
Benzo(g,h,i)perylene	mg/kg	0.25	ND	ND	0.05	1643728
Benzo(k)fluoranthene	mg/kg	0.42	ND	ND	0.05	1643728
Chrysene	mg/kg	0.36	ND	ND	0.05	1643728
Dibenz(a,h)anthracene	mg/kg	0.07	ND	ND	0.05	1643728
Fluoranthene	mg/kg	0.79	ND	ND	0.05	1643728
Fluorene	mg/kg	0.12	ND	ND	0.05	1643728
Indeno(1,2,3-cd)pyrene	mg/kg	0.27	ND	ND	0.05	1643728
Naphthalene	mg/kg	0.16	ND	ND	0.05	1643728
Perylene	mg/kg	0.12	ND	ND	0.05	1643728
Phenanthrene	mg/kg	0.57	ND	0.05	0.05	1643728
Pyrene	mg/kg	0.80	ND	0.05	0.05	1643728
Surrogate Recovery (%)						
D10-Anthracene	%	83	85	81		1643728
D14-Terphenyl (FS)	%	76	80	79		1643728
D8-Acenaphthylene	%	75	81	81		1643728

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A8B8445
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Jacques Whitford Limited
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Project name: SYDPORT MARINE PROGRAM - SYDNEY
Your P.O. #: NSD016300

GENERAL COMMENTS

Results relate only to the items tested.

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Jacques Whitford Limited
Attention: Willie McNeil
Client Project #: 1044442/Z9100
P.O. #: NSD016300
Site Location: SYDPORT MARINE PROGRAM - SYDNEY

Quality Assurance Report

Maxxam Job Number: KA8B8445

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1643285	AHL	MATRIX SPIKE						
		[AT0529-01]	Isobutylbenzene - Extractable	2008/10/16		91	%	30 - 130
			n-Dotriacontane - Extractable	2008/10/16		104	%	30 - 130
			>C10-C21 Hydrocarbons	2008/10/16		95	%	30 - 130
			>C21-<C32 Hydrocarbons	2008/10/16		71	%	30 - 130
		Spiked Blank	Isobutylbenzene - Extractable	2008/10/16		70	%	30 - 130
			n-Dotriacontane - Extractable	2008/10/16		77	%	30 - 130
			>C10-C21 Hydrocarbons	2008/10/16		97	%	30 - 130
			>C21-<C32 Hydrocarbons	2008/10/16		72	%	30 - 130
		Method Blank	Isobutylbenzene - Extractable	2008/10/16		75	%	30 - 130
			n-Dotriacontane - Extractable	2008/10/16		74	%	30 - 130
			>C10-C21 Hydrocarbons	2008/10/16	ND, RDL=15		mg/kg	
			>C21-<C32 Hydrocarbons	2008/10/16	ND, RDL=15		mg/kg	
		RPD [AT0567-01]	>C10-C21 Hydrocarbons	2008/10/16	NC		%	50
			>C21-<C32 Hydrocarbons	2008/10/16	NC		%	50
1643293	AHL	MATRIX SPIKE						
		[AT0529-01]	Isobutylbenzene - Volatile	2008/10/16		125	%	60 - 140
			Benzene	2008/10/16		80	%	40 - 130
			Toluene	2008/10/16		82	%	40 - 130
			Ethylbenzene	2008/10/16		80	%	40 - 130
		Spiked Blank	Isobutylbenzene - Volatile	2008/10/16		108	%	60 - 140
			Benzene	2008/10/16		90	%	40 - 130
			Toluene	2008/10/16		92	%	40 - 130
			Ethylbenzene	2008/10/16		88	%	40 - 130
		Method Blank	Isobutylbenzene - Volatile	2008/10/16		103	%	60 - 140
			Benzene	2008/10/16	ND, RDL=0.003		mg/kg	
			Toluene	2008/10/16	ND, RDL=0.025		mg/kg	
			Ethylbenzene	2008/10/16	ND, RDL=0.01		mg/kg	
			Xylene (Total)	2008/10/16	ND, RDL=0.05		mg/kg	
			C6 - C10 (less BTEX)	2008/10/16	ND, RDL=3		mg/kg	
		RPD [AT0567-01]	Benzene	2008/10/16	NC		%	50
			Toluene	2008/10/16	NC		%	50
			Ethylbenzene	2008/10/16	NC		%	50
			Xylene (Total)	2008/10/16	NC		%	50
			C6 - C10 (less BTEX)	2008/10/16	NC		%	50
1643728	TML	MATRIX SPIKE						
		[AT0567-01]	D10-Anthracene	2008/10/16		78	%	30 - 130
			D14-Terphenyl (FS)	2008/10/16		84	%	30 - 130
			D8-Acenaphthylene	2008/10/16		77	%	30 - 130
			1-Methylnaphthalene	2008/10/16		84	%	40 - 140
			2-Methylnaphthalene	2008/10/16		80	%	40 - 140
			Acenaphthene	2008/10/16		88	%	40 - 140
			Acenaphthylene	2008/10/16		84	%	40 - 140
			Anthracene	2008/10/16		95	%	40 - 140
			Benzo(a)anthracene	2008/10/16		90	%	40 - 140
			Benzo(a)pyrene	2008/10/16		84	%	40 - 140
			Benzo(b)fluoranthene	2008/10/16		81	%	40 - 140
			Benzo(g,h,i)perylene	2008/10/16		85	%	40 - 140
			Benzo(k)fluoranthene	2008/10/16		85	%	40 - 140
			Chrysene	2008/10/16		89	%	40 - 140
			Dibenz(a,h)anthracene	2008/10/16		82	%	40 - 140
			Fluoranthene	2008/10/16		91	%	40 - 140
			Fluorene	2008/10/16		83	%	40 - 140
			Indeno(1,2,3-cd)pyrene	2008/10/16		79	%	40 - 140
			Naphthalene	2008/10/16		78	%	40 - 140

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Jacques Whitford Limited
Attention: Willie McNeil
Client Project #: 1044442/Z9100
P.O. #: NSD016300
Site Location: SYDPORT MARINE PROGRAM - SYDNEY

Quality Assurance Report (Continued)

Maxxam Job Number: KA8B8445

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1643728	TML	MATRIX SPIKE						
		[AT0567-01]	Perylene	2008/10/16		79	%	40 - 140
			Phenanthrene	2008/10/16		79	%	40 - 140
			Pyrene	2008/10/16		88	%	40 - 140
		Spiked Blank	D10-Anthracene	2008/10/16		92	%	30 - 130
			D14-Terphenyl (FS)	2008/10/16		96	%	30 - 130
			D8-Acenaphthylene	2008/10/16		81	%	30 - 130
			1-Methylnaphthalene	2008/10/16		88	%	40 - 140
			2-Methylnaphthalene	2008/10/16		87	%	40 - 140
			Acenaphthene	2008/10/16		86	%	40 - 140
			Acenaphthylene	2008/10/16		86	%	40 - 140
			Anthracene	2008/10/16		91	%	40 - 140
			Benzo(a)anthracene	2008/10/16		92	%	40 - 140
			Benzo(a)pyrene	2008/10/16		88	%	40 - 140
			Benzo(b)fluoranthene	2008/10/16		84	%	40 - 140
			Benzo(g,h,i)perylene	2008/10/16		90	%	40 - 140
			Benzo(k)fluoranthene	2008/10/16		81	%	40 - 140
			Chrysene	2008/10/16		88	%	40 - 140
			Dibenz(a,h)anthracene	2008/10/16		83	%	40 - 140
			Fluoranthene	2008/10/16		97	%	40 - 140
			Fluorene	2008/10/16		85	%	40 - 140
			Indeno(1,2,3-cd)pyrene	2008/10/16		81	%	40 - 140
			Naphthalene	2008/10/16		84	%	40 - 140
			Perylene	2008/10/16		81	%	40 - 140
			Phenanthrene	2008/10/16		91	%	40 - 140
			Pyrene	2008/10/16		98	%	40 - 140
		Method Blank	D10-Anthracene	2008/10/16		80	%	30 - 130
			D14-Terphenyl (FS)	2008/10/16		82	%	30 - 130
			D8-Acenaphthylene	2008/10/16		79	%	30 - 130
			1-Methylnaphthalene	2008/10/16	ND, RDL=0.05		mg/kg	
			2-Methylnaphthalene	2008/10/16	ND, RDL=0.05		mg/kg	
			Acenaphthene	2008/10/16	ND, RDL=0.05		mg/kg	
			Acenaphthylene	2008/10/16	ND, RDL=0.05		mg/kg	
			Anthracene	2008/10/16	ND, RDL=0.05		mg/kg	
			Benzo(a)anthracene	2008/10/16	ND, RDL=0.05		mg/kg	
			Benzo(a)pyrene	2008/10/16	ND, RDL=0.05		mg/kg	
			Benzo(b)fluoranthene	2008/10/16	ND, RDL=0.05		mg/kg	
			Benzo(g,h,i)perylene	2008/10/16	ND, RDL=0.05		mg/kg	
			Benzo(k)fluoranthene	2008/10/16	ND, RDL=0.05		mg/kg	
			Chrysene	2008/10/16	ND, RDL=0.05		mg/kg	
			Dibenz(a,h)anthracene	2008/10/16	ND, RDL=0.05		mg/kg	
			Fluoranthene	2008/10/16	ND, RDL=0.05		mg/kg	
			Fluorene	2008/10/16	ND, RDL=0.05		mg/kg	
			Indeno(1,2,3-cd)pyrene	2008/10/16	ND, RDL=0.05		mg/kg	
			Naphthalene	2008/10/16	ND, RDL=0.05		mg/kg	
			Perylene	2008/10/16	ND, RDL=0.05		mg/kg	
			Phenanthrene	2008/10/16	ND, RDL=0.05		mg/kg	
			Pyrene	2008/10/16	ND, RDL=0.05		mg/kg	
		RPD [AT0567-01]	1-Methylnaphthalene	2008/10/16	NC		%	50
			2-Methylnaphthalene	2008/10/16	NC		%	50
			Acenaphthene	2008/10/16	NC		%	50
			Acenaphthylene	2008/10/16	NC		%	50
			Anthracene	2008/10/16	NC		%	50
			Benzo(a)anthracene	2008/10/16	NC		%	50
			Benzo(a)pyrene	2008/10/16	NC		%	50

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Jacques Whitford Limited
Attention: Willie McNeil
Client Project #: 1044442/Z9100
P.O. #: NSD016300
Site Location: SYDPORT MARINE PROGRAM - SYDNEY

Quality Assurance Report (Continued)

Maxxam Job Number: KA8B8445

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1643728	TML	RPD [AT0567-01]	Benzo(b)fluoranthene	2008/10/16	NC		%	50
			Benzo(g,h,i)perylene	2008/10/16	NC		%	50
			Benzo(k)fluoranthene	2008/10/16	NC		%	50
			Chrysene	2008/10/16	NC		%	50
			Dibenz(a,h)anthracene	2008/10/16	NC		%	50
			Fluoranthene	2008/10/16	NC		%	50
			Fluorene	2008/10/16	NC		%	50
			Indeno(1,2,3-cd)pyrene	2008/10/16	NC		%	50
			Naphthalene	2008/10/16	NC		%	50
			Perylene	2008/10/16	NC		%	50
			Phenanthrene	2008/10/16	NC		%	50
			Pyrene	2008/10/16	NC		%	50
1645675	CAC	QC STANDARD	Organic Carbon (TOC)	2008/10/17		94	%	75 - 125
		Method Blank	Organic Carbon (TOC)	2008/10/17	ND, RDL=0.2		g/kg	
		RPD	Organic Carbon (TOC)	2008/10/17	1.3		%	35
1645676	CAC	QC STANDARD	Total Carbon-combustion IR	2008/10/17		104	%	75 - 125
		Method Blank	Total Carbon-combustion IR	2008/10/17	ND, RDL=0.2		g/kg	
		RPD	Total Carbon-combustion IR	2008/10/17	22.4		%	35
1645842	CMI	MATRIX SPIKE [AT0567-01]	2,4,5,6-Tetrachloro-m-xylene	2008/10/23		99	%	70 - 130
			Decachlorobiphenyl	2008/10/23		106	%	70 - 130
			o,p-DDD	2008/10/23		71	%	N/A
			p,p-DDD	2008/10/23		70	%	N/A
			o,p-DDE	2008/10/23		83	%	N/A
			p,p-DDE	2008/10/23		82	%	N/A
			o,p-DDT	2008/10/23		92	%	N/A
			p,p-DDT	2008/10/23		89	%	N/A
			Total PCB	2008/10/23		96	%	70 - 130
		Spiked Blank	2,4,5,6-Tetrachloro-m-xylene	2008/10/23		87	%	70 - 130
			Decachlorobiphenyl	2008/10/23		80	%	70 - 130
			o,p-DDD	2008/10/23		80	%	N/A
			p,p-DDD	2008/10/23		81	%	N/A
			o,p-DDE	2008/10/23		89	%	N/A
			p,p-DDE	2008/10/23		85	%	N/A
			o,p-DDT	2008/10/23		87	%	N/A
			p,p-DDT	2008/10/23		94	%	N/A
			Total PCB	2008/10/23		72	%	70 - 130
		Method Blank	2,4,5,6-Tetrachloro-m-xylene	2008/10/23		83	%	70 - 130
			Decachlorobiphenyl	2008/10/23		89	%	70 - 130
			o,p-DDD	2008/10/23	ND, RDL=0.01		mg/kg	
			p,p-DDD	2008/10/23	ND, RDL=0.01		mg/kg	
			o,p-DDE	2008/10/23	ND, RDL=0.01		mg/kg	
			p,p-DDE	2008/10/23	ND, RDL=0.01		mg/kg	
			o,p-DDT	2008/10/23	ND, RDL=0.01		mg/kg	
			p,p-DDT	2008/10/23	ND, RDL=0.01		mg/kg	
			Total PCB	2008/10/23	ND, RDL=0.01		mg/kg	
		RPD [AT0567-01]	o,p-DDD	2008/10/23	NC		%	50
			p,p-DDD	2008/10/23	NC		%	50
			o,p-DDE	2008/10/23	NC		%	50
			p,p-DDE	2008/10/23	NC		%	50
			o,p-DDT	2008/10/23	NC		%	50
			p,p-DDT	2008/10/23	NC		%	50
			Total PCB	2008/10/23	NC		%	50

ND = Not detected
N/A = Not Applicable

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Jacques Whitford Limited
Attention: Willie McNeil
Client Project #: 1044442/Z9100
P.O. #: NSD016300
Site Location: SYDPORT MARINE PROGRAM - SYDNEY

Quality Assurance Report (Continued)

Maxxam Job Number: KA8B8445

NC = Non-calculable
RPD = Relative Percent Difference
QC Standard = Quality Control Standard
SPIKE = Fortified sample

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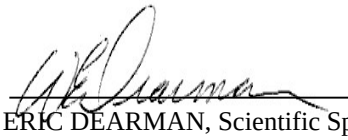
Validation Signature Page

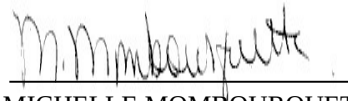
Maxxam Job #: A8B8445

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

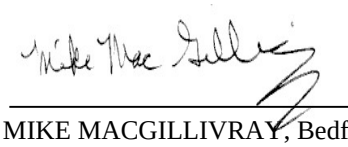
ALAN STEWART, Project Manager



ERIC DEARMAN, Scientific Specialist



MICHELLE MOMBOURQUETTE, Laboratory Manager



MIKE MACGILLIVRAY, Bedford Inorg Spvsr

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CALA have approved this reporting process and electronic report format.

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Your P.O. #: NSD016300
Your Project #: 1044442/Z9100
Site Location: SYDPORT MARIN TERMINAL - SYDNEY
Your C.O.C. #: S 12281

Attention: Willie McNeil
Jacques Whitford Limited
Sydney - Standing Offer
PO Box 1231
Sydney, NS
B1P 6J9

Report Date: 2008/10/22

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A8C2708
Received: 2008/10/21, 13:14

Sample Matrix: SEDIMENT
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
TEH in Soil (PIRI)	1	2008/10/22	2008/10/22	ATL SOP 00150	Based on Atl. PIRI
Moisture	1	N/A	2008/10/22	ATL SOP 00194	MOE Handbook 1983
VPH in Soil - Low Level	1	2008/10/22	2008/10/22	ATL SOP 00152	Based on Atl. PIRI
ModTPH (T1) Calc. for Soil	1	2008/10/21	2008/10/22	ATL SOP 00150/00152	Based on Atl PIRI

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

TANYA ADDICOTT, Client Services Representative
Email: tanya.addicott.reports@maxxamanalytics.com
Phone# (902) 567 1255

==========

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For Service Group specific validation please refer to the Validation Signature Page

Total cover pages: 1

This document is in electronic format, hard copy is available on request.

Maxxam Job #: A8C2708
Report Date: 2008/10/22

Jacques Whitford Limited
Client Project #: 1044442/Z9100
Project name: SYDPORT MARIN TERMINAL - SYDNEY
Your P.O. #: NSD016300

ATLANTIC MUST (PIRI TIER I) IN SOIL

Maxxam ID		AV2406		
Sampling Date		2008/10/14		
COC Number		S 12281		
Registration #				
	Units	**BH7 COMP**	**RDL**	**QC Batch**
Inorganics				
Moisture	%	12	1	1649974
Petroleum Hydrocarbons				
Benzene	mg/kg	ND	0.003	1649319
Toluene	mg/kg	ND	0.03	1649319
Ethylbenzene	mg/kg	ND	0.01	1649319
Xylene (Total)	mg/kg	ND	0.05	1649319
C6 - C10 (less BTEX)	mg/kg	ND	3	1649319
>C10-C21 Hydrocarbons	mg/kg	ND	15	1649316
>C21-<C32 Hydrocarbons	mg/kg	ND	15	1649316
Modified TPH (Tier1)	mg/kg	ND	20	1649357
Surrogate Recovery (%)				
Isobutylbenzene - Extractable	%	109		1649316
n-Dotriacontane - Extractable	%	114		1649316
Isobutylbenzene - Volatile	%	103		1649319

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A8C2708
Report Date: 2008/10/22

Jacques Whitford Limited
Client Project #: 1044442/Z9100
Project name: SYDPORT MARIN TERMINAL - SYDNEY
Your P.O. #: NSD016300

GENERAL COMMENTS

Results relate only to the items tested.

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Jacques Whitford Limited
Attention: Willie McNeil
Client Project #: 1044442/Z9100
P.O. #: NSD016300
Site Location: SYDPORT MARIN TERMINAL - SYDNEY

Quality Assurance Report

Maxxam Job Number: KA8C2708

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1649316	AHL	Spiked Blank	Isobutylbenzene - Extractable	2008/10/22		97	%	30 - 130
			n-Dotriacontane - Extractable	2008/10/22		102	%	30 - 130
			>C10-C21 Hydrocarbons	2008/10/22		94	%	30 - 130
			>C21-<C32 Hydrocarbons	2008/10/22		74	%	30 - 130
		Method Blank	Isobutylbenzene - Extractable	2008/10/22		83	%	30 - 130
			n-Dotriacontane - Extractable	2008/10/22		84	%	30 - 130
			>C10-C21 Hydrocarbons	2008/10/22	ND, RDL=15		mg/kg	
			>C21-<C32 Hydrocarbons	2008/10/22	ND, RDL=15		mg/kg	
		RPD	>C10-C21 Hydrocarbons	2008/10/22	NC		%	50
			>C21-<C32 Hydrocarbons	2008/10/22	NC		%	50
1649319	AHL	MATRIX SPIKE	Isobutylbenzene - Volatile	2008/10/22		101	%	60 - 140
			Benzene	2008/10/22		92	%	40 - 130
			Toluene	2008/10/22		94	%	40 - 130
			Ethylbenzene	2008/10/22		93	%	40 - 130
			Xylene (Total)	2008/10/22		93	%	40 - 130
			C6 - C10 (less BTEX)	2008/10/22		99	%	N/A
		Spiked Blank	Isobutylbenzene - Volatile	2008/10/22		96	%	60 - 140
			Benzene	2008/10/22		88	%	40 - 130
			Toluene	2008/10/22		91	%	40 - 130
			Ethylbenzene	2008/10/22		89	%	40 - 130
			Xylene (Total)	2008/10/22		88	%	40 - 130
			C6 - C10 (less BTEX)	2008/10/22		100	%	N/A
		Method Blank	Isobutylbenzene - Volatile	2008/10/22		100	%	60 - 140
			Benzene	2008/10/22	ND, RDL=0.003		mg/kg	
			Toluene	2008/10/22	ND, RDL=0.025		mg/kg	
			Ethylbenzene	2008/10/22	ND, RDL=0.01		mg/kg	
			Xylene (Total)	2008/10/22	ND, RDL=0.05		mg/kg	
			C6 - C10 (less BTEX)	2008/10/22	ND, RDL=3		mg/kg	
		RPD	Benzene	2008/10/22	NC		%	50
			Toluene	2008/10/22	NC		%	50
			Ethylbenzene	2008/10/22	NC		%	50
			Xylene (Total)	2008/10/22	NC		%	50
			C6 - C10 (less BTEX)	2008/10/22	NC		%	50
1649974	AHL	Method Blank	Moisture	2008/10/22	ND, RDL=1		%	
		RPD	Moisture	2008/10/22	1.7		%	25

ND = Not detected
N/A = Not Applicable
NC = Non-calculable
RPD = Relative Percent Difference
SPIKE = Fortified sample

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Validation Signature Page

Maxxam Job #: A8C2708

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

MICHELLE MOMBOURQUETTE, Laboratory Manager

==========

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Your P.O. #: NSD016300
Your Project #: 1044442/Z9100
Site Location: SYDPORT MARINE TERMINAL-SYDNEY
Your C.O.C. #: S 12281

Attention: Willie McNeil
Jacques Whitford Limited
Sydney - Standing Offer
PO Box 1231
Sydney, NS
B1P 6J9

Report Date: 2008/10/29

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A8C2763
Received: 2008/10/21, 13:03

Sample Matrix: SEDIMENT
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Moisture	1	N/A	2008/10/22	ATL SOP 00194	MOE Handbook 1983
PAH Compounds by GCMS (SIM) (2)	1	2008/10/22	2008/10/23	ATL SOP 00148	Based on EPA8270
PCB/DDT in Soil by GC-ECD (1)	1	2008/10/28	2008/10/29	ATL SOP 00106 R2	Based EPA8082
Total Carbon in Solids by Ind. (1)	1	N/A	2008/10/23	ATL SOP 00044 R2	LECO 203-601-224
TIC in soil (1)	1	N/A	2008/10/27	ATL SOP 00044 R2	LECO 203-601-224
Total Organic Carbon in Soil (1)	1	N/A	2008/10/23	ATL SOP 00044 R2	LECO 203-601-224

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bedford
(2) Soils are reported on a dry weight basis unless otherwise specified.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

TANYA ADDICOTT, Client Services Representative
Email: tanya.addicott.reports@maxxamanalytics.com
Phone# (902) 567 1255

==========

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Maxxam Job #: A8C2763
Report Date: 2008/10/29

Jacques Whitford Limited
Client Project #: 1044442/Z9100
Project name: SYDPORT MARINE TERMINAL-SYDNEY
Your P.O. #: NSD016300

ATLANTIC TOTAL ORGANIC/INORGANIC CARBON (SEDIMENT)

Maxxam ID		AV2608		
Sampling Date		2008/10/14		
COC Number		S 12281		
Registration #				
	Units	**BH7 COMP**	**RDL**	**QC Batch**
Inorganics				
Total Inorganic Carbon (C)	g/kg	0.5	0.2	1649225
Organic Carbon (TOC)	g/kg	2.4	0.2	1654347
Total Carbon-combustion IR	g/kg	2.9	0.2	1651289

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A8C2763
Report Date: 2008/10/29

Jacques Whitford Limited
Client Project #: 1044442/Z9100
Project name: SYDPORT MARINE TERMINAL-SYDNEY
Your P.O. #: NSD016300

RESULTS OF ANALYSES OF SEDIMENT

Maxxam ID		AV2608		
Sampling Date		2008/10/14		
COC Number		S 12281		
Registration #				
	Units	**BH7 COMP**	**RDL**	**QC Batch**
Inorganics				
Moisture	%	12	1	1651355

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A8C2763
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Jacques Whitford Limited
Client Project #: 1044442/Z9100
Project name: SYDPORT MARINE TERMINAL-SYDNEY
Your P.O. #: NSD016300

PCB'S AND DDT BY GC-ECD (SEDIMENT)

Maxxam ID		AV2608		
Sampling Date		2008/10/14		
COC Number		S 12281		
Registration #				
	Units	**BH7 COMP**	**RDL**	**QC Batch**
PCBs				
o,p-DDD	mg/kg	ND	0.01	1655567
p,p-DDD	mg/kg	ND	0.01	1655567
o,p-DDE	mg/kg	ND	0.01	1655567
p,p-DDE	mg/kg	ND	0.01	1655567
o,p-DDT	mg/kg	ND	0.01	1655567
p,p-DDT	mg/kg	ND	0.01	1655567
Total PCB	mg/kg	ND	0.01	1655567
Surrogate Recovery (%)				
2,4,5,6-Tetrachloro-m-xylene	%	80		1655567
Decachlorobiphenyl	%	91		1655567

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A8C2763
Report Date: 2008/10/29

Jacques Whitford Limited
Client Project #: 1044442/Z9100
Project name: SYDPORT MARINE TERMINAL-SYDNEY
Your P.O. #: NSD016300

SEMI-VOLATILE ORGANICS BY GC-MS (SEDIMENT)

Maxxam ID		AV2608		
Sampling Date		2008/10/14		
COC Number		S 12281		
Registration #				
	Units	**BH7 COMP**	**RDL**	**QC Batch**
Polyaromatic Hydrocarbons				
1-Methylnaphthalene	mg/kg	ND	0.05	1650553
2-Methylnaphthalene	mg/kg	ND	0.05	1650553
Acenaphthene	mg/kg	ND	0.05	1650553
Acenaphthylene	mg/kg	ND	0.05	1650553
Anthracene	mg/kg	ND	0.05	1650553
Benzo(a)anthracene	mg/kg	ND	0.05	1650553
Benzo(a)pyrene	mg/kg	ND	0.05	1650553
Benzo(b)fluoranthene	mg/kg	ND	0.05	1650553
Benzo(g,h,i)perylene	mg/kg	ND	0.05	1650553
Benzo(k)fluoranthene	mg/kg	ND	0.05	1650553
Chrysene	mg/kg	ND	0.05	1650553
Dibenz(a,h)anthracene	mg/kg	ND	0.05	1650553
Fluoranthene	mg/kg	ND	0.05	1650553
Fluorene	mg/kg	ND	0.05	1650553
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.05	1650553
Naphthalene	mg/kg	ND	0.05	1650553
Perylene	mg/kg	ND	0.05	1650553
Phenanthrene	mg/kg	ND	0.05	1650553
Pyrene	mg/kg	ND	0.05	1650553
Surrogate Recovery (%)				
D10-Anthracene	%	77		1650553
D14-Terphenyl (FS)	%	78		1650553
D8-Acenaphthylene	%	84		1650553

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Project name: SYDPORT MARINE TERMINAL-SYDNEY
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GENERAL COMMENTS

Results relate only to the items tested.

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Jacques Whitford Limited
Attention: Willie McNeil
Client Project #: 1044442/Z9100
P.O. #: NSD016300
Site Location: SYDPORT MARINE TERMINAL-SYDNEY

Quality Assurance Report

Maxxam Job Number: KA8C2763

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1650553 TML	MATRIX SPIKE	D10-Anthracene	2008/10/23		78	%	30 - 130
		D14-Terphenyl (FS)	2008/10/23		80	%	30 - 130
		D8-Acenaphthylene	2008/10/23		80	%	30 - 130
		1-Methylnaphthalene	2008/10/23		90	%	40 - 140
		2-Methylnaphthalene	2008/10/23		86	%	40 - 140
		Acenaphthene	2008/10/23		92	%	40 - 140
		Acenaphthylene	2008/10/23		92	%	40 - 140
		Anthracene	2008/10/23		80	%	40 - 140
		Benzo(a)anthracene	2008/10/23		75	%	40 - 140
		Benzo(a)pyrene	2008/10/23		74	%	40 - 140
		Benzo(b)fluoranthene	2008/10/23		84	%	40 - 140
		Benzo(g,h,i)perylene	2008/10/23		79	%	40 - 140
		Benzo(k)fluoranthene	2008/10/23		87	%	40 - 140
		Chrysene	2008/10/23		80	%	40 - 140
		Dibenz(a,h)anthracene	2008/10/23		86	%	40 - 140
		Fluoranthene	2008/10/23		82	%	40 - 140
		Fluorene	2008/10/23		89	%	40 - 140
		Indeno(1,2,3-cd)pyrene	2008/10/23		77	%	40 - 140
		Naphthalene	2008/10/23		86	%	40 - 140
		Perylene	2008/10/23		77	%	40 - 140
		Phenanthrene	2008/10/23		85	%	40 - 140
		Pyrene	2008/10/23		82	%	40 - 140
	Spiked Blank	D10-Anthracene	2008/10/23		82	%	30 - 130
		D14-Terphenyl (FS)	2008/10/23		93	%	30 - 130
		D8-Acenaphthylene	2008/10/23		83	%	30 - 130
		1-Methylnaphthalene	2008/10/23		91	%	40 - 140
		2-Methylnaphthalene	2008/10/23		92	%	40 - 140
		Acenaphthene	2008/10/23		96	%	40 - 140
		Acenaphthylene	2008/10/23		92	%	40 - 140
		Anthracene	2008/10/23		87	%	40 - 140
		Benzo(a)anthracene	2008/10/23		91	%	40 - 140
		Benzo(a)pyrene	2008/10/23		97	%	40 - 140
		Benzo(b)fluoranthene	2008/10/23		93	%	40 - 140
		Benzo(g,h,i)perylene	2008/10/23		94	%	40 - 140
		Benzo(k)fluoranthene	2008/10/23		91	%	40 - 140
		Chrysene	2008/10/23		90	%	40 - 140
		Dibenz(a,h)anthracene	2008/10/23		96	%	40 - 140
		Fluoranthene	2008/10/23		95	%	40 - 140
		Fluorene	2008/10/23		97	%	40 - 140
		Indeno(1,2,3-cd)pyrene	2008/10/23		93	%	40 - 140
		Naphthalene	2008/10/23		94	%	40 - 140
		Perylene	2008/10/23		98	%	40 - 140
		Phenanthrene	2008/10/23		91	%	40 - 140
		Pyrene	2008/10/23		91	%	40 - 140
	Method Blank	D10-Anthracene	2008/10/23		80	%	30 - 130
		D14-Terphenyl (FS)	2008/10/23		83	%	30 - 130
		D8-Acenaphthylene	2008/10/23		82	%	30 - 130
		1-Methylnaphthalene	2008/10/23	ND, RDL=0.05		mg/kg	
		2-Methylnaphthalene	2008/10/23	ND, RDL=0.05		mg/kg	
		Acenaphthene	2008/10/23	ND, RDL=0.05		mg/kg	
		Acenaphthylene	2008/10/23	ND, RDL=0.05		mg/kg	
		Anthracene	2008/10/23	ND, RDL=0.05		mg/kg	
		Benzo(a)anthracene	2008/10/23	ND, RDL=0.05		mg/kg	
		Benzo(a)pyrene	2008/10/23	ND, RDL=0.05		mg/kg	
		Benzo(b)fluoranthene	2008/10/23	ND, RDL=0.05		mg/kg	

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Jacques Whitford Limited
Attention: Willie McNeil
Client Project #: 1044442/Z9100
P.O. #: NSD016300
Site Location: SYDPORT MARINE TERMINAL-SYDNEY

Quality Assurance Report (Continued)

Maxxam Job Number: KA8C2763

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1650553	TML	Method Blank	Benzo(g,h,i)perylene	2008/10/23	ND, RDL=0.05		mg/kg	
			Benzo(k)fluoranthene	2008/10/23	ND, RDL=0.05		mg/kg	
			Chrysene	2008/10/23	ND, RDL=0.05		mg/kg	
			Dibenz(a,h)anthracene	2008/10/23	ND, RDL=0.05		mg/kg	
			Fluoranthene	2008/10/23	ND, RDL=0.05		mg/kg	
			Fluorene	2008/10/23	ND, RDL=0.05		mg/kg	
			Indeno(1,2,3-cd)pyrene	2008/10/23	ND, RDL=0.05		mg/kg	
			Naphthalene	2008/10/23	ND, RDL=0.05		mg/kg	
			Perylene	2008/10/23	ND, RDL=0.05		mg/kg	
			Phenanthrene	2008/10/23	ND, RDL=0.05		mg/kg	
			Pyrene	2008/10/23	ND, RDL=0.05		mg/kg	
		RPD	1-Methylnaphthalene	2008/10/23	NC		%	50
			2-Methylnaphthalene	2008/10/23	NC		%	50
			Acenaphthene	2008/10/23	NC		%	50
			Acenaphthylene	2008/10/23	NC		%	50
			Anthracene	2008/10/23	NC		%	50
			Benzo(a)anthracene	2008/10/23	NC		%	50
			Benzo(a)pyrene	2008/10/23	NC		%	50
			Benzo(b)fluoranthene	2008/10/23	NC		%	50
			Benzo(g,h,i)perylene	2008/10/23	NC		%	50
			Benzo(k)fluoranthene	2008/10/23	NC		%	50
			Chrysene	2008/10/23	NC		%	50
			Dibenz(a,h)anthracene	2008/10/23	NC		%	50
			Fluoranthene	2008/10/23	NC		%	50
			Fluorene	2008/10/23	NC		%	50
			Indeno(1,2,3-cd)pyrene	2008/10/23	NC		%	50
			Naphthalene	2008/10/23	NC		%	50
			Perylene	2008/10/23	NC		%	50
			Phenanthrene	2008/10/23	NC		%	50
			Pyrene	2008/10/23	NC		%	50
1651289	CAC	QC STANDARD	Total Carbon-combustion IR	2008/10/23		106	%	75 - 125
		Method Blank	Total Carbon-combustion IR	2008/10/23	ND, RDL=0.2		g/kg	
		RPD	Total Carbon-combustion IR	2008/10/23	18.5		%	35
1654347	CAC	QC STANDARD	Organic Carbon (TOC)	2008/10/27		88	%	75 - 125
		Method Blank	Organic Carbon (TOC)	2008/10/27	ND, RDL=0.2		g/kg	
1655567	CMI	MATRIX SPIKE						
		[AV2608-01]	2,4,5,6-Tetrachloro-m-xylene	2008/10/29		101	%	70 - 130
			Decachlorobiphenyl	2008/10/29		116	%	70 - 130
			o,p-DDD	2008/10/29		94	%	N/A
			p,p-DDD	2008/10/29		93	%	N/A
			o,p-DDE	2008/10/29		99	%	N/A
			p,p-DDE	2008/10/29		99	%	N/A
			o,p-DDT	2008/10/29		89	%	N/A
			p,p-DDT	2008/10/29		104	%	N/A
			Total PCB	2008/10/29		124	%	70 - 130
		Spiked Blank	2,4,5,6-Tetrachloro-m-xylene	2008/10/29		92	%	70 - 130
			Decachlorobiphenyl	2008/10/29		105	%	70 - 130
			o,p-DDD	2008/10/29		94	%	N/A
			p,p-DDD	2008/10/29		93	%	N/A
			o,p-DDE	2008/10/29		95	%	N/A
			p,p-DDE	2008/10/29		77	%	N/A
			o,p-DDT	2008/10/29		90	%	N/A
			p,p-DDT	2008/10/29		102	%	N/A
			Total PCB	2008/10/29		124	%	70 - 130
		Method Blank	2,4,5,6-Tetrachloro-m-xylene	2008/10/29		83	%	70 - 130

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Jacques Whitford Limited
Attention: Willie McNeil
Client Project #: 1044442/Z9100
P.O. #: NSD016300
Site Location: SYDPORT MARINE TERMINAL-SYDNEY

Quality Assurance Report (Continued)

Maxxam Job Number: KA8C2763

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1655567	CMI	Method Blank	Decachlorobiphenyl	2008/10/29		96	%	70 - 130
			o,p-DDD	2008/10/29	ND, RDL=0.01		mg/kg	
			p,p-DDD	2008/10/29	ND, RDL=0.01		mg/kg	
			o,p-DDE	2008/10/29	ND, RDL=0.01		mg/kg	
			p,p-DDE	2008/10/29	ND, RDL=0.01		mg/kg	
			o,p-DDT	2008/10/29	ND, RDL=0.01		mg/kg	
			p,p-DDT	2008/10/29	ND, RDL=0.01		mg/kg	
			Total PCB	2008/10/29	ND, RDL=0.01		mg/kg	
		RPD	Decachlorobiphenyl	2008/10/29	10.2		%	N/A
			Total PCB	2008/10/29	NC		%	50

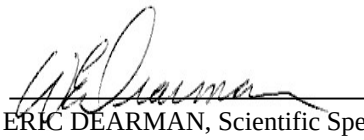
ND = Not detected
N/A = Not Applicable
NC = Non-calculable
RPD = Relative Percent Difference
QC Standard = Quality Control Standard
SPIKE = Fortified sample

Maxxam Analytics International Corporation o/a Maxxam Analytics 90 Esplanade St, Sydney, Nova Scotia Canada B1P 1A1 Tel: 902 567 1255 Toll Free: 888 535 7770 Fax: 902 5396504 www.maxxamanalytics.com

Validation Signature Page

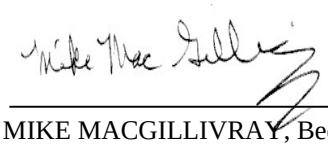
Maxxam Job #: A8C2763

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



ERIC DEARMAN, Scientific Specialist

MICHELLE MOMBOURQUETTE, Laboratory Manager



MIKE MACGILLIVRAY, Bedford Inorg Spvsr

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CALA have approved this reporting process and electronic report format.

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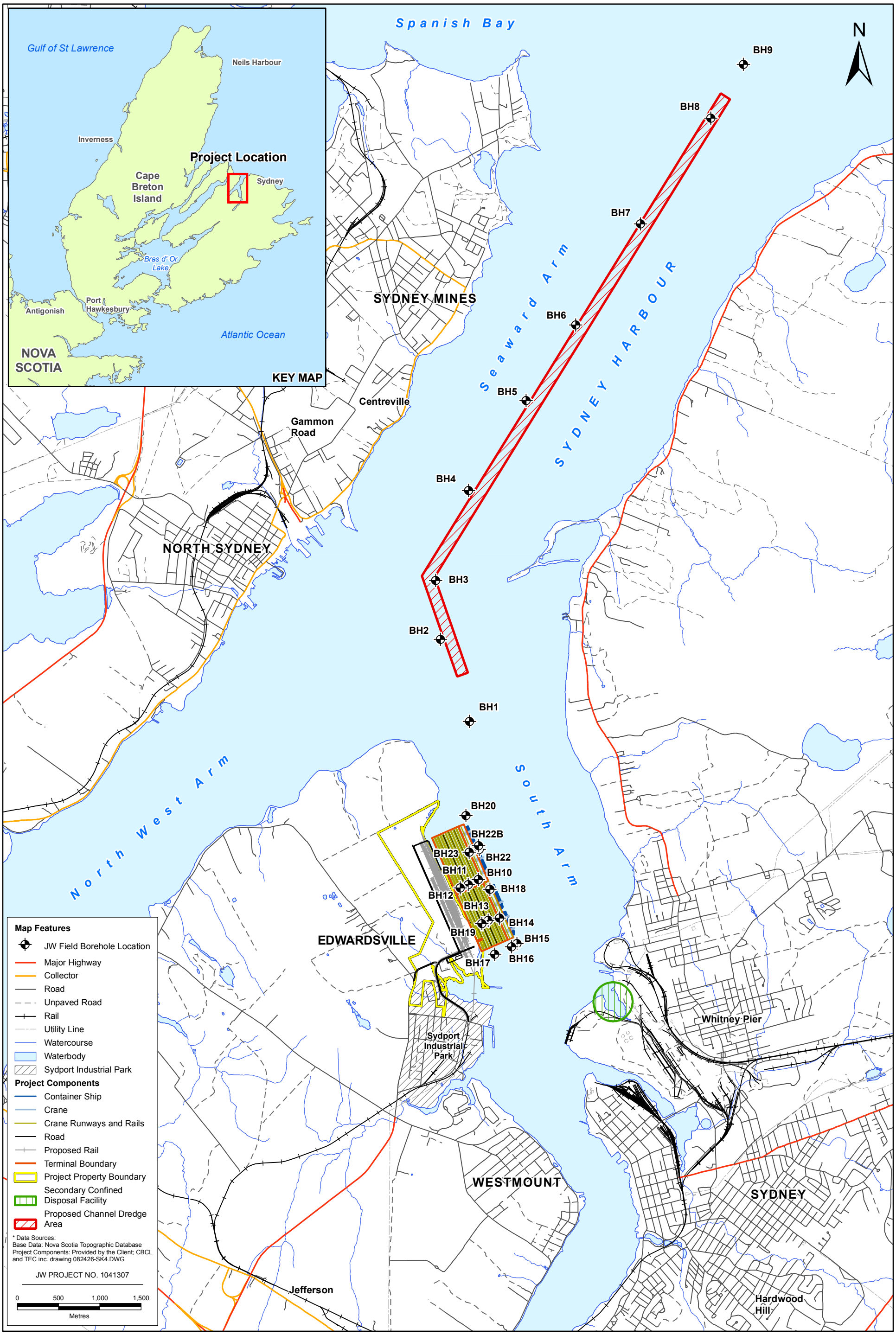

DATE: 03/12/2008	Sydney Harbour Access Channel Deepening and the Proposed Sydport Container Terminal	FIGURE NO: **Figure 1**
PREPARED BY: L. Kendell	**Geotechnical Borehole Investigation Locations - October, 2008**	
LAURENTIAN ENERGY		Jacques Whitford