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Project No. 1010816.03

May 17, 2006

Ms. Carol Cunninham
Sydney Tar Ponds Agency
1 Inglis Street
PO 1028 Station A
Sydney, NS B1P 6J7

Dear Ms. Carol Cunningham:

Re: Former Septic Separator Tank – Water and Sludge Sampling Old SYSCO Cooling Pond

Jacques Whitford Limited (Jacques Whitford) was retained by the Sydney Tar Ponds Agency (STPA), to collect water and sludge samples from a former septic separator tank located northwest of the Old SYSCO Cooling Pond. The sampling was conducted on April 27, 2006. This letter discusses the objectives and analytical results of this sampling, and offers recommendations and conclusions based on the work conducted.

Objectives and Background

Jacques Whitford collected water and sludge samples from the former septic separator tank located northwest of the Old SYSCO Cooling Pond (Drawing No. 1000897-04, attached). The purpose of this sampling was to investigate the materials contained within the tank. The disposal of the former septic separator tank is a component of the demolition and disposal of the Old SYSCO Cooling Pond. The tank is steel construction and is divided into two chambers. Approximately 12 m³ of sludge material and 45 m³ of water were observed in the eastern chamber of the tank, and approximately 55 m³ of water was observed in the western chamber of the tank. The tank depth, width, and length are provided on Drawing No. 1010816.03-5, attached.

Regulatory Framework

The following guidelines have been used as comparative criteria for the materials examined during this investigation and are consistent with the guidelines specified by the STPA for use during the demolition and disposal of the former SYSCO Cooling Pond:

- Surface Water SSTLs (Site Specific Target Levels) presented in the CBCL/ENSER report - *Remedial Action Evaluation Report (RAER), Tar Ponds Site* (February 2003) from JDAC 2002, for the Cooling Pond.
- CCME, 2005. Canadian Council of Ministers of the Environment (CCME), *Canadian Water Quality Guidelines for the Protection of Aquatic Life* (1999, last updated 2005). These guidelines were applied to surface water parameters for which no SSTLs were developed.

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Content 

- Health Canada, 2006. *Guidelines for Canadian Drinking Water Quality*, Summary Table (updated March 2006). These guidelines were applied to surface water sampled for microbiological parameters, as micro-organisms could pose a potential human health hazard to workers removing the septic separator.
- Soil SSTLs (Site Specific Target Levels) presented in the CBCL/ENSER report – *Remedial Action Evaluation Report (RAER), Tar Ponds Site* (February 2003) from JDAC 2002, for the Cooling Pond. These guidelines were applied to the sludge in the bottom of the septic separator tank.
- CCME, 2004. Canadian Council of Ministers of the Environment (CCME), *Canadian Soil Quality Guidelines*, commercial, non-potable land use (1999, updated 2004). These guidelines were applied to sludge parameters for which no SSTLs were developed, and were used as comparative criteria should the sludge be disposed on-site.
- Nova Scotia Environment and Labour (NSEL), *Guidelines for disposal of contaminated solids and landfills*, Attachment B (March 1994, updated 2003). These guidelines were used as comparative criteria should the sludge be disposed off-site.

Sampling

A water sample was taken from both the eastern and western chambers to assess water quality in both tank chambers. The two water samples were submitted to Maxxam Analytics in Bedford, NS (Maxxam) for analysis of microbiological parameters, metals, polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), total petroleum hydrocarbon (TPH), and benzene, toluene, ethylbenzene, and xylenes (BTEX). One sludge sample was collected from the eastern chamber and submitted to Maxxam for analysis of metals, PCBs, PAHs, TPH, and BTEX. Sample locations are shown in Drawing No. 1010816.03-5, attached.

Analytical Results

Septic Separator Water

As shown on Table 1 (attached), BTEX and TPH concentrations were not detected in either water sample collected. As shown on Table 2 (attached), benzo(a)anthracene, benzo(a)pyrene, fluoranthene, phenanthrene, and pyrene concentrations exceeded applicable guidelines in water sample O/W W-01. Fluoranthene and pyrene concentrations exceeded applicable guidelines in water sample O/W W-02. As shown on Table 3 (attached), PCB concentrations were not detected in either water sample collected. Aluminum, cadmium, iron, lead, and zinc concentrations exceeded the applicable guidelines in sample O/W W-01, and aluminum, copper and zinc concentrations exceeded the applicable guidelines in sample O/W W-02 (refer to Table 4, attached). As shown on Table 5 (attached), total coliform concentrations exceeded guidelines for Canadian

Ms. Carol Cunningham

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Drinking Water Quality (GCDWQ). All other parameters were detected at concentrations below the applicable guidelines.

Analytical summary tables and Laboratory Certificates of analysis are attached.

Septic Separator Sludge

As shown on Table 6 (attached), benzene concentrations were detected above applicable CCME guidelines. BTEX concentrations were below applicable NSEL guidelines. Elevated concentrations of TPH (36000 mg/kg in the gasoline to lube oil range) were detected in the sludge sample collected. Although TPH concentrations did not exceed applicable guidelines, the comparative criteria used in this investigation did not have any values for TPH concentrations. The high level of TPH should be considered during removal and disposal of septic separator sludge. As shown on Table 7 (attached), benzo(a)pyrene was detected at concentrations above CCME guidelines, and total PAH concentrations were detected in excess of applicable NSEL guidelines. As shown on Table 8 (attached), PCB concentrations were detected at levels below applicable guidelines. As shown on Table 9 (attached), arsenic, lead, and sulphur concentrations exceeded the applicable CCME guidelines. Copper and thallium concentrations were found in excess of both CCME and NSEL guidelines. All other parameter concentrations were below applicable guidelines.

Analytical summary tables and Laboratory Certificates of analysis are attached.

Conclusions and Recommendations

Based on the results of this investigation, the following recommendations are made for the disposal of the former septic separator tank:

- Water identified in the septic separator tank should be disposed off-site at a licensed treatment facility or treated on-site through an appropriate facility.
- If the septic tank sludge is to be disposed off-site, perform copper, sulphur, and total PAHs leachate analysis on sludge sample O/W SLUDGE 01 for comparison to NSEL Attachment C Landfill leachate guidelines for disposal purposes. Jacques Whitford recommends that the sludge material be transported to a licensed treatment facility for disposal.

Closure

This report has been prepared for the sole benefit of the Sydney Tar Ponds Agency. This report may not be used by any other person or entity without expressed written consent from the Sydney Tar Ponds Agency and Jacques Whitford Limited.

Any use which a third party makes of this report, or any reliance on 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 based on this report.



Ms. Carol Cunningham

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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 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 encountered 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. The extent of the limited area depends on the soil and groundwater conditions, as well as the history of the site reflecting natural, construction and other activities. In addition, analysis has been carried out for a limited number of chemical parameters, and it should not be inferred that other chemical species are not present. Due to the nature of the investigation and the limited data available, Jacques Whitford Limited cannot warrant against undiscovered environmental liabilities.

If any conditions become apparent that differ significantly from our understanding of conditions as presented in this report, we request that we be notified immediately to reassess the conclusions provided herein.

This report was prepared by David Leeder, B.Sc. (Hon.) with technical review by Dan Morehouse, P.Eng. Should you require additional information or clarification please contact David Leeder at (902) 468-7777 at a time that is convenient for you.

Yours truly,

JACQUES WHITFORD LIMITED

ORIGINAL SIGNED

David Leeder, B.Sc. (Hon.)
Project Scientist

DL/dw

Attachments

P:\EnvEng\101xxx\1010816 Cooling Pond Additional Work\1010816.03 - Septic Seperator\letter report_vault.doc

ORIGINAL SIGNED

Dan Morehouse, P.Eng.
Senior Technical Reviewer



ATTACHMENTS

Drawing No. 1000897-04- Septic Separator Tank Location

Drawing No. 1010816.03-5 – Former Septic Separator

Table 1 – Water Petroleum Hydrocarbon Chemistry

Table 2 – Water PAH Chemistry

Table 3 – Water PCB Chemistry

Table 4 – Water Inorganics Chemistry

Table 5 – Water Microbiological Chemistry

Table 6 – Sludge Petroleum Hydrocarbon Chemistry

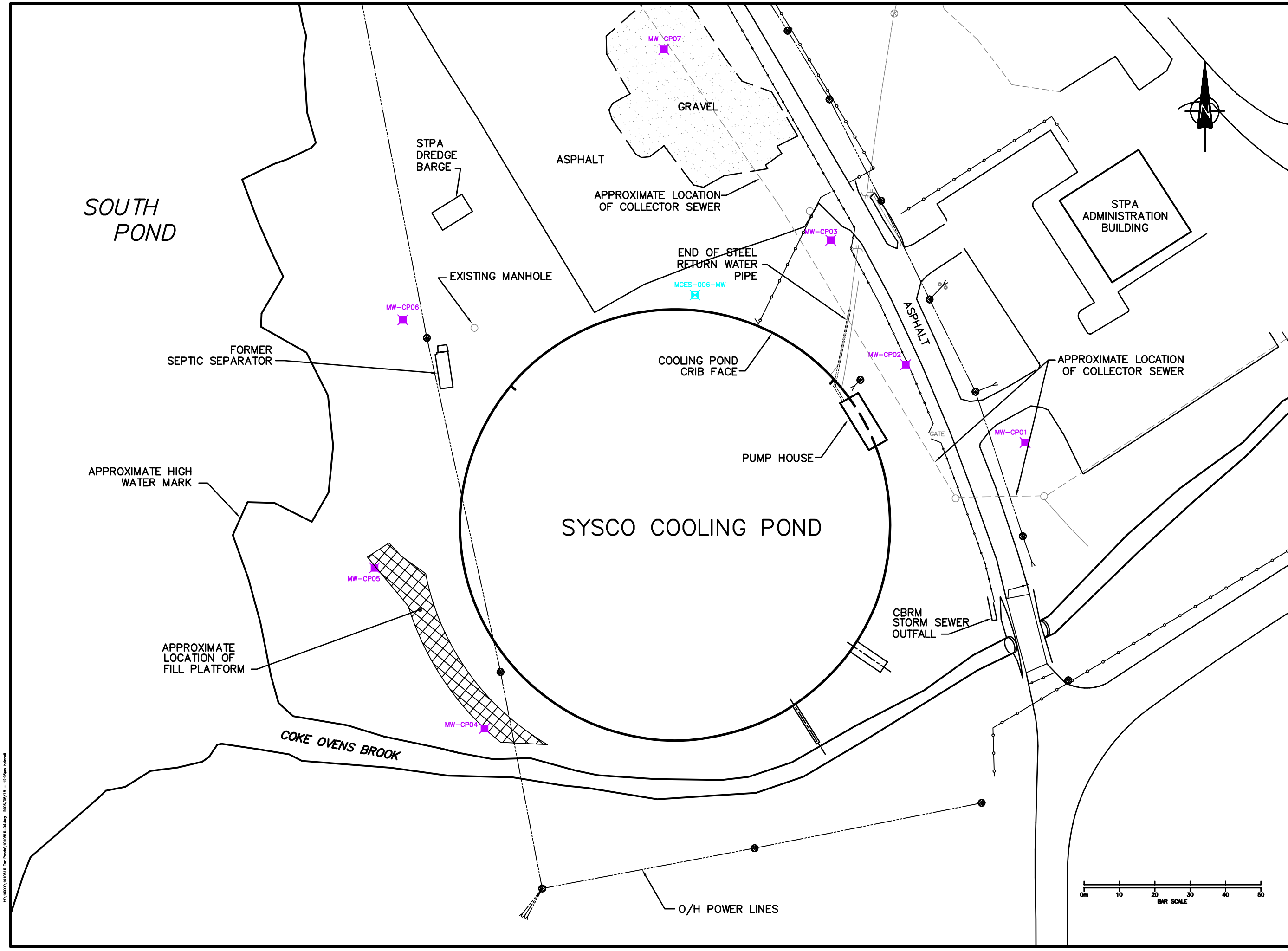
Table 7 – Sludge PAH Chemistry

Table 8 – Sludge PCB Chemistry

Table 9 – Sludge Inorganics Chemistry

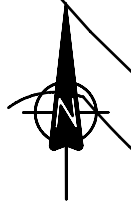
Laboratory Certificates of Analysis





LEGEND:

- MW (Purple square) MONITOR WELL LOCATION, 2006
- MW (Cyan square) MONITOR WELL LOCATION, 2003
- FENCE



"DRAFT"

DRAWING REFERENCE:
 SDMM LTD. PLAN No. 70-478-TP-2/4, FILE No. 16-2 (22952) DATED OCTOBER 29, 2003.
 JACQUES WHITFORD PLAN No. 1000897-03-02 Rev 1, DATED 4 APRIL 2006, REVISED TO 28 APRIL 2006.

APP'D NO.	DETAILS	DATE
0	ISSUED FOR REVIEW	15/05/06
REVISIONS		

DWG. NO.	DESCRIPTION	DATE

REFERENCE
 SYDNEY TAR PONDS AGENCY

**SOLIDIFICATION/STABILIZATION
 SYSCO COOLING POND**

MUGGAH CREEK, SYDNEY, NOVA SCOTIA

**FORMER SEPTIC
 SEPARATOR
 LOCATION**

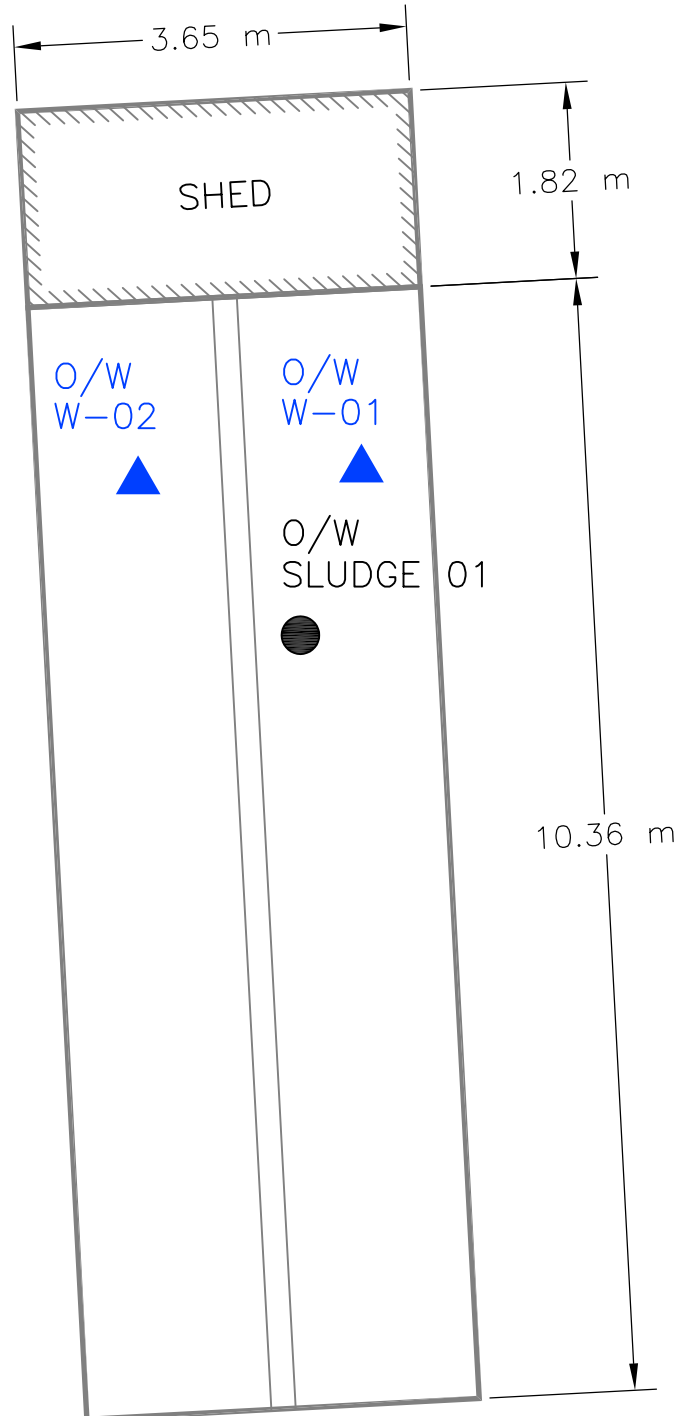


DATE	2006/05/15
SCALE	1:1000
DRAWN BY	BSP
APPROVED BY	

DRAWING NO
1010816-04





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↖
SOUTH
POND

NOTE: TANK DEPTH 3.1m

LEGEND

-  WATER SAMPLE LOCATION
-  SLUDGE SAMPLE LOCATION

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SYDNEY TAR PONDS AGENCY
SOLIDIFICATION/STABILAZATION
SYSCO COOLING POND
 MUGGAH CREEK, SYDNEY, NOVA SCOTIA
FORMER SEPTIC SEPERATOR

Scale:
N.T.S.

Date:
2006/05/17

Dwn. By: S. S00 App'd:



Drawing No.:
1010816.03-5

TABLE 1 WATER PETROLEUM HYDROCARBON CHEMISTRY
Sydney Tar Ponds Agency
SYSCO Cooling Pond, Sydney, NS
Jacques Whitford Project No. 1010816.03

Sample ID	Date Sampled	BTEX Parameters (mg/L or ppm)				Total Petroleum Hydrocarbons (mg/L or ppm)				Resemblance
		Benzene	Toluene	Ethyl-Benzene	Xylenes	C ₆ -C ₁₀ Gas	C ₁₀ -C ₂₁ Fuel	C ₂₁ -C ₃₂ Lube	Modified TPH	
O/W W-01	27-Apr-06	nd	nd	nd	nd	nd	nd	nd	nd	-
O/W W-02	27-Apr-06	nd	nd	nd	nd	nd	nd	nd	nd	-
RDL		0.001	0.001	0.001	0.002	0.01	0.2	0.5	0.5	n/a
Cooling Pond SSTLs ⁸		-	-	-	-	-	-	-	-	n/a
CCME Guidelines (mg/L)		0.37	0.002	0.09	-	-	-	-	-	n/a

Notes:

1. RDL = laboratory's reportable detection limit
2. nd = parameter not detected above RDL
3. Modified TPH = total petroleum hydrocarbons excluding total BTEX
4. n/a = not applicable
5. CCME Guidelines = Canadian Council of Ministers of the Environment *Canadian Water Quality Guidelines for the Protection of Aquatic Life* (1999; last updated 2005); Freshwater
6. Cooling Pond SSTLs = Surface Water SSTLs (Site Specific Target Levels) presented in the CBCL/ENSER report - Remedial Action Evaluation Report (RAER), Tar Ponds Site (February 2003) from JDAC 2002, for the Cooling Pond
7. **Bold & Underlined** = parameter concentrations exceeds applicable guideline
8. Cooling Pond SSTLs take precedence over CCME guidelines.
9. Where no guideline value for SSTLs exist, CCME Guidelines are used as comparative criteria.

TABLE 2

WATER PAH CHEMISTRY
Sydney Tar Ponds Agency
SYSCO Cooling Pond, Sydney, NS
Jacques Whitford Project No. 1010816.03

Parameter	RDL	Units	CCME Guidelines	Cooling Pond SSTLs ⁶	Sample ID	
					O/W W-01	O/W W-02
Sample Date					27-Apr-06	27-Apr-06
1-Methylnaphthalene	0.05	µg/L	-	-	nd	nd
2-Methylnaphthalene	0.05	µg/L	-	-	nd	nd
Acenaphthene	0.05	µg/L	5.8	-	0.08	0.04
Acenaphthylene	0.05	µg/L	-	-	nd	nd
Anthracene	0.05	µg/L	0.012	0.09	0.08	0.04
Benzo(a)anthracene	0.05	µg/L	0.018	-	<u>0.07</u>	0.01
Benzo(a)pyrene	0.05	µg/L	0.015	-	<u>0.03</u>	nd
Benzo(b)fluoranthene	0.05	µg/L	-	-	0.11	0.02
Benzo(g,h,i)perylene	0.05	µg/L	-	-	0.02	nd
Benzo(k)fluoranthene	0.05	µg/L	-	-	0.09	0.01
Chrysene	0.05	µg/L	-	-	0.23	0.07
Dibenzo(a,h)anthracene	0.05	µg/L	-	-	nd	nd
Fluoranthene	0.05	µg/L	0.04	-	<u>1.0</u>	<u>0.32</u>
Fluorene	0.05	µg/L	3.0	-	0.10	0.05
Indeno(1,2,3-cd)pyrene	0.05	µg/L	-	-	0.02	nd
Naphthalene	0.05	µg/L	1.1	-	nd	nd
Perylene	0.05	µg/L	-	-	nd	nd
Phenanthrene	0.05	µg/L	0.4	-	<u>0.57</u>	0.09
Pyrene	0.05	µg/L	0.025	-	<u>0.59</u>	<u>0.11</u>

Notes:

1. RDL = laboratory's reportable detection limit
2. nd = parameter not detected above RDL
3. CCME Guidelines = Canadian Council of Ministers of the Environment, *Canadian Water Quality Guidelines for the Protection of Aquatic Life* (1999; last updated 2005); Freshwater
4. Cooling Pond SSTLs = Surface Water SSTLs (Site Specific Target Levels) presented in the CBCL/ENSER report - Remedial Action Evaluation Report (RAER), Tar Ponds Site (February 2003) from JDAC 2002, for the Cooling Pond
5. **Bold & Underlined** = parameter concentration exceeds the applicable guideline
6. Cooling Pond SSTLs take precedence over CCME guidelines.
7. Where no guideline value for SSTLs exist, CCME Guidelines are used as comparative criteria.

TABLE 3

**WATER PCB CHEMISTRY
 Sydney Tar Ponds Agency
 SYSCO Cooling Pond, Sydney, NS
 Jacques Whitford Project No. 1010816.03**

Parameter	RDL	Units	CCME Guidelines	Cooling Pond SSTLs ⁶	Sample ID	
					O/W W-01	O/W W-02
					Sample Date	
					27-Apr-06	27-Apr-06
Total PCB	0.05	µg/L	-	-	nd	nd

Notes:

1. RDL = laboratory's reportable detection limit
2. nd = parameter not detected above RDL
3. CCME Guidelines = Canadian Council of Ministers of the Environment, *Canadian Water Quality Guidelines for the Protection of Aquatic Life* (1999; last updated 2005); Freshwater
4. Cooling Pond SSTLs = Surface Water SSTLs (Site Specific Target Levels) presented in the CBCL/ENSER report - Remedial Action Evaluation Report (RAER), Tar Ponds Site (February 2003) from JDAC 2002, for the Cooling Pond
5. **Bold & Underlined** = parameter concentration exceeds the applicable guideline
6. Cooling Pond SSTLs take precedence over CCME guidelines.
7. Where no guideline value for SSTLs exist, CCME Guidelines are used as comparative criteria.

TABLE 4 WATER INORGANICS CHEMISTRY
Sydney Tar Ponds Agency
SYSCO Cooling Pond, Sydney, NS
Jacques Whitford Project No. 1010816.03

Parameter	RDL	Units	CCME Guidelines	Cooling Pond SSTLs ⁶	Sample ID	
					O/W W-01	O/W W-02
Sample Date					27-Apr-06	27-Apr-06
Total Calcium (Ca)	0.1	mg/L	-	-	3.2	2.8
Total Magnesium (Mg)	0.1	mg/L	-	-	0.7	0.7
Total Potassium (K)	1	mg/L	-	-	nd	nd
Total Sodium (Na)	1	mg/L	-	-	2	1
Total Aluminum (Al)	5	ug/L	5 ⁸	-	10	5.2
Total Antimony (Sb)	0.4	ug/L	-	-	nd	nd
Total Arsenic (As)	0.6	ug/L	5	-	nd	nd
Total Barium (Ba)	0.4	ug/L	-	-	5.8	4
Total Beryllium (Be)	0.5	ug/L	-	-	nd	nd
Total Bismuth (Bi)	2	ug/L	-	-	nd	nd
Total Boron (B)	100	ug/L	-	-	nd	nd
Total Cadmium (Cd)	0.017	ug/L	0.017	-	0.023	nd
Total Chromium (Cr)	1	ug/L	-	-	2	1.9
Total Cobalt (Co)	1	ug/L	-	-	nd	nd
Total Copper (Cu)	2	ug/L	2 ⁸	9	nd	14
Total Iron (Fe)	100	ug/L	300	1000	1600	320
Total Lead (Pb)	1	ug/L	1 ⁸	-	1.7	nd
Total Lithium (Li)	1	ug/L	-	-	nd	nd
Total Manganese (Mn)	4	ug/L	-	1000	83	31
Total Mercury	0.01	ug/L	0.026	-	nd	nd
Total Molybdenum (Mo)	4	ug/L	73	-	nd	nd
Total Nickel (Ni)	3	ug/L	25 ⁸	-	nd	nd
Total Phosphorus (P)	100	ug/L	-	-	nd	nd
Total Selenium (Se)	1	ug/L	1	-	nd	nd
Total Silver (Ag)	0.1	ug/L	0.1	0.1	nd	nd
Total Strontium (Sr)	2	ug/L	-	-	9.2	8.1
Total Sulphur (S)	3700	ug/L	-	-	nd	nd
Total Thallium (Tl)	0.8	ug/L	0.8	-	nd	nd
Total Tin (Sn)	20	ug/L	-	-	nd	nd
Total Titanium (Ti)	3	ug/L	-	-	nd	nd
Total Uranium (U)	0.15	ug/L	-	-	nd	nd
Total Vanadium (V)	2	ug/L	-	-	nd	nd
Total Zinc (Zn)	2	ug/L	30	-	96	40

Notes:

1. RDL = laboratory's reportable detection limit
2. nd = parameter not detected above RDL
3. CCME Guidelines = Canadian Council of Ministers of the Environment *Canadian Water Quality Guidelines for the Protection of Aquatic Life* (1999; last updated 2005); Freshwater
4. Cooling Pond SSTLs = Surface Water SSTLs (Site Specific Target Levels) presented in the CBCL/ENSER report - Remedial Action Evaluation Report (RAER), Tar Ponds Site (February 2003) from JDAC 2002, for the Cooling Pond
5. **Underlined** = parameter concentration exceeds the applicable guideline
6. Cooling Pond SSTLs take precedence over CCME guidelines.
7. Where no guideline value for SSTLs exist, CCME Guidelines are used as comparative criteria.
8. Guideline is pH dependent. pH value is unknown, therefore the most conservative guideline value is stated.

TABLE 5 WATER MICROBIOLOGICAL CHEMISTRY
Sydney Tar Ponds Agency
SYSCO Cooling Pond, Sydney, NS
Jacques Whitford Project No. 1010816.03

Parameter	RDL	Units	GCDWQ	Sample ID	
				O/W W-01	O/W W-02
Sample Date				27-Apr-06	27-Apr-06
Escherichia coli	10	CFU/100 mL	0	nd	nd
Total Coliforms	10	CFU/100 mL	0	<u>840</u>	<u>560</u>

Notes:

1. RDL = laboratory's reportable detection limit
2. nd = parameter not detected above RDL
3. GCDWQ = Guidelines for Canadian Drinking Water Quality - Summary Table, Health Canada, updated March 2006
4. **Bold & Underlined** = parameter concentration exceeds the applicable guideline

TABLE 6 SLUDGE PETROLEUM HYDROCARBON CHEMISTRY
Sydney Tar Ponds Agency
SYSCO Cooling Pond, Sydney, NS
Jacques Whitford Project No. 1010816.03

Sample ID	Date Sampled	BTEX Parameters (mg/kg or ppm)				Total Petroleum Hydrocarbons (mg/kg or ppm)				Resemblance
		Benzene	Toluene	Ethyl-Benzene	Xylenes	C ₆ -C ₁₀ Gas	C ₁₀ -C ₂₁ Fuel	C ₂₁ -C ₃₂ Lube	Modified TPH	
O/W SLUDGE 01	27-Apr-06	<u>0.098</u>	0.23	0.02	4.4	180	16000	20000	36000	Gasoline fraction; weathered fuel oil fraction
RDL		0.003	0.03	0.01	0.05	3	15	15	20	n/a
Cooling Pond SSTLs ⁹		-	-	-	-	-	-	-	-	n/a
CCME Guidelines ¹⁰		0.03	0.37	0.082	11	-	-	-	-	n/a
NSEL Standards		5	30	50	50	-	-	-	-	n/a

Notes:

1. RDL = laboratory's reportable detection limit
2. nd = parameter not detected above RDL
3. Modified TPH = total petroleum hydrocarbons excluding total BTEX
4. n/a = not applicable
5. Cooling Pond SSTLs = Soil SSTLs (Site Specific Target Levels) presented in the CBCL/ENSER report – Remedial Action Evaluation Report (RAER), Tar Ponds Site (February 2003) from JDAC 2002, for the Cooling Pond.
6. CCME Guidelines = Canadian Council of Ministers of the Environment, *Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health* (1999; last updated 2004), commercial land use, coarse grained soil
7. NSEL Landfill Guidelines = Nova Scotia Department of Environment and Labour Guidelines for disposal of contaminated solids and landfills, Attachment B, March 1994, Updated 2003
8. **Bold & Underlined** = parameter concentrations exceeds CCME guideline
9. Cooling Pond SSTLs take precedence over CCME guidelines.
10. Where no guideline value for Cooling Pond SSTLs exist, CCME guidelines are used as comparative criteria.

TABLE 7

SLUDGE PAH CHEMISTRY
Sydney Tar Ponds Agency
SYSCO Cooling Pond, Sydney, NS
Jacques Whitford Project No. 1010816.03

Parameter	RDL	Units	Cooling Pond SSTLs ⁸	CCME Guidelines ⁹	NSEL Standards	Sample ID
						O/W SLUDGE 01
						Sample Date
						27-Apr-06
1-Methylnaphthalene	0.3	mg/kg	-	-	10	0.6
2-Methylnaphthalene	0.3	mg/kg	-	-	10	0.8
Acenaphthene	0.3	mg/kg	-	-	10	0.7
Acenaphthylene	0.3	mg/kg	-	-	10	nd
Anthracene	0.3	mg/kg	-	-	10	1.7
Benzo(a)anthracene	0.3	mg/kg	-	10	10	3.2
Benzo(a)pyrene	0.3	mg/kg	-	0.7	10	<u>2.7</u>
Benzo(b)fluoranthene	0.3	mg/kg	-	10	10	2.7
Benzo(g,h,i)perylene	0.3	mg/kg	-	-	10	1.7
Benzo(k)fluoranthene	0.3	mg/kg	-	10	10	3.3
Chrysene	0.3	mg/kg	-	-	10	4.9
Dibenzo(a,h)anthracene	0.3	mg/kg	-	10	10	0.6
Fluoranthene	0.3	mg/kg	53	-	10	9.2
Fluorene	0.3	mg/kg	-	-	10	1.4
Indeno(1,2,3-cd)pyrene	0.3	mg/kg	-	10	10	2.2
Naphthalene	0.3	mg/kg	-	22	10	1.2
Perylene	0.3	mg/kg	-	-	10	0.7
Phenanthrene	0.3	mg/kg	50.2	50	10	6.5
Pyrene	0.3	mg/kg	28.2	100	10	8.7
Total PAHs	n/a	mg/kg	-	-	50	<u>52.8</u>

Notes:

1. RDL = laboratory's reportable detection limit
2. nd = parameter not detected above RDL
3. Cooling Pond SSTLs = Soil SSTLs (Site Specific Target Levels) presented in the CBCL/ENSER report – Remedial Action Evaluation Report (RAER), Tar Ponds Site (February 2003) from JDAC 2002, for the Cooling Pond.
4. CCME Guidelines = Canadian Council of Ministers of the Environment, *Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health* (1999; last updated 2004), commercial land use, coarse grained soil
5. NSEL Landfill Guidelines = Nova Scotia Department of Environment and Labour Guidelines for disposal of contaminated solids and landfills, Attachment B, March 1994, Updated 2003
6. **Bold & Underlined** = parameter concentration exceeds CCME guideline
7. **Bold & Underlined (Italicized)** = parameter concentration exceeds NSEL guideline
8. Cooling Pond SSTLs take precedence over CCME guidelines.
9. Where no guideline value for Cooling Pond SSTLs exist, CCME guidelines are used as comparative criteria.

TABLE 8 **SLUDGE PCB CHEMISTRY**
Sydney Tar Ponds Agency
SYSCO Cooling Pond, Sydney, NS
Jacques Whitford Project No. 1010816.03

Parameter	RDL	Units	Cooling Pond SSTLs ⁷	CCME Guidelines ⁸	NSEL Standards	Sample ID
						O/W SLUDGE 01
						Sample Date
Total PCB	0.05	mg/kg	-	33	50	27-Apr-06

Notes:

1. RDL = laboratory's reportable detection limit
2. nd = parameter not detected above RDL
3. Cooling Pond SSTLs = Soil SSTLs (Site Specific Target Levels) presented in the CBCL/ENSER report – Remedial Action Evaluation Report (RAER), Tar Ponds Site (February 2003) from JDAC 2002, for the Cooling Pond.
4. CCME Guidelines = Canadian Council of Ministers of the Environment, *Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health* (1999; last updated 2004), commercial land use, coarse grained soil
5. NSEL Landfill Guidelines = Nova Scotia Department of Environment and Labour Guidelines for disposal of contaminated solids and landfills, Attachment B, March 1994, Updated 2003
6. **Bold & Underlined** = parameter concentration exceeds the applicable guideline
7. Cooling Pond SSTLs take precedence over CCME guidelines.
8. Where no guideline value for Cooling Pond SSTLs exist, CCME guidelines are used as comparative criteria.

TABLE 9

SLUDGE INORGANICS CHEMISTRY
Sydney Tar Ponds Agency
SYSCO Cooling Pond, Sydney, NS
Jacques Whitford Project No. 1010816.03

Parameter	RDL	Units	Cooling Pond SSTLs ⁸	CCME Guidelines ⁹	NSEL Standards	Sample ID
						O/W SLUDGE 01
Sample Date						27-Apr-06
Chromium (VI)	0.05	ug/g	-	1.4	8	nd
Mercury (Hg)	0.05	mg/kg	-	24	10	2.3
Aluminum (Al)	80	mg/kg	-	-	-	11000
Antimony (Sb)	1	mg/kg	-	-	40	2
Arsenic (As)	1	mg/kg	-	12	50	15
Barium (Ba)	10	mg/kg	-	2000	2000	300
Beryllium (Be)	1	mg/kg	-	-	8	1
Boron (B)	20	mg/kg	-	-	2	nd
Cadmium (Cd)	0.2	mg/kg	-	22	20	5.2
Calcium (Ca)	300	mg/kg	-	-	-	14000
Chromium (Cr)	1	mg/kg	-	87	800	87
Cobalt (Co)	1	mg/kg	-	-	300	11
Copper (Cu)	10	mg/kg	-	91	500	890
Iron (Fe)	30	mg/kg	-	-	-	31000
Lead (Pb)	1	mg/kg	-	260	1000	360
Lithium (Li)	1	mg/kg	-	-	-	21
Magnesium (Mg)	80	mg/kg	-	-	-	7500
Manganese (Mn)	10	mg/kg	-	-	-	850
Molybdenum (Mo)	1	mg/kg	-	-	40	11
Nickel (Ni)	2	mg/kg	-	50	500	27
Phosphorus (P)	20	mg/kg	-	-	-	3900
Potassium (K)	400	mg/kg	-	-	-	1600
Selenium (Se)	0.6	mg/kg	-	3.9	10	3.5
Silver (Ag)	1	mg/kg	-	-	40	2
Sodium (Na)	400	mg/kg	-	-	-	nd
Strontium (Sr)	2	mg/kg	-	-	-	44
Sulphur (S)	1000	mg/kg	-	-	500	6900
Thallium (Tl)	0.7	mg/kg	-	1	1	3.5
Tin (Sn)	10	mg/kg	-	-	300	nd
Titanium (Ti)	1	mg/kg	-	-	-	150
Uranium (U)	1	mg/kg	-	-	-	3
Vanadium (V)	1	mg/kg	-	130	200	39
Zinc (Zn)	50	mg/kg	-	360	1500	1000

Notes:

1. RDL = laboratory's reportable detection limit
2. nd = parameter not detected above RDL
3. **Bold & Underlined** = parameter concentration exceeds CCME guideline
4. **Bold & Underlined (Italicized)** = parameter concentration exceeds both applicable guidelines.
5. Cooling Pond SSTLs = Soil SSTLs (Site Specific Target Levels) presented in the CBCL/ENSER report – Remedial Action Evaluation Report (RAER), Tar Ponds Site (February 2003) from JDAC 2002, for the Cooling Pond.
6. CCME Guidelines = Canadian Council of Ministers of the Environment, *Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health* (1999; last updated 2004), commercial land use, coarse grained soil
7. NSEL Landfill Guidelines = Nova Scotia Department of Environment and Labour Guidelines for disposal of contaminated solids and landfills, Attachment B, March 1994, Updated 2003
8. Cooling Pond SSTLs take precedence over CCME guidelines.
9. Where no guideline value for Cooling Pond SSTLs exist, CCME guidelines are used as comparative criteria.

Your P.O. #: NSD016400
Your Project #: 1010816
Site: COOLING PONDS - SYSCO
Your C.O.C. #: 303782

Attention: David Leeder
Jacques Whitford Limited {NR}
3 Spectacle Lake Dr
Dartmouth, NS
B3B 1W8

Report Date: 2006/04/28

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A638374

Received: 2006/04/27, 15:26

Sample Matrix: SEWAGE
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Colilert - Coliform (MPN) in water \emptyset	2	N/A	2006/04/28	METH3001	Based on SM9223

(1) SCC Accredited

Encryption Key

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

NATALIE BURKE, Sr. Project Manager
Email: natalie.burke@maxxamanalytics.com
Phone# (902) 567 1255

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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.

Total cover pages: 1

Page 1 of 4

Maxxam Job #: A638374
Report Date: 2006/04/28

Jacques Whitford Limited {NR}
Client Project #: 1010816
Project name: COOLING PONDS - SYSCO
Your P.O. #: NSD016400
Sampler Initials:

MICROBIOLOGY (SEWAGE)

Maxxam ID		L74248	L74254		
Sampling Date		2006/04/27	2006/04/27		
COC Number		303782	303782		
	Units	O/W W-01	O/W W-02	RDL	QC Batch

MICROBIOLOGICAL					
Escherichia coli	CFU/100mL	ND	ND	10	958728
Total Coliforms	CFU/100mL	840	560	10	958728

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

Maxxam Job #: A638374
Report Date: 2006/04/28

Jacques Whitford Limited {NR}
Client Project #: 1010816
Project name: COOLING PONDS - SYSCO
Your P.O. #: NSD016400
Sampler Initials:

GENERAL COMMENTS

Results relate only to the items tested.

Jacques Whitford Limited (NR)
 Attention: David Leeder
 Client Project #: 1010816
 P.O. #: NSD016400
 Project name: COOLING PONDS - SYSCO

Quality Assurance Report
 Maxxam Job Number: KA638374

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
958728 KKP	Method Blank	Escherichia coli	2006/04/28	ND, RDL=1		CFU/100mL	
		Total Coliforms	2006/04/28	ND, RDL=1		CFU/100mL	
	RPD	Escherichia coli	2006/04/28	0.5		%	25
		Total Coliforms	2006/04/28	6.1		%	25

ND = Not detected
 RPD = Relative Percent Difference

Your P.O. #: NSD016300
Your Project #: 1010816
Site: COOLING PONDS - SYSCO
Your C.O.C. #: 303782

Attention: David Leeder
Jacques Whitford Limited {R}
Dartmouth - Standing Offer
3 Spectacle Lake Dr
Dartmouth, NS
B3B 1W8

Report Date: 2006/05/05

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A638390

Received: 2006/04/27, 15:38

Sample Matrix: SEWAGE
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
TEH in Water (PIRI) (3)	2	2006/05/02	2006/05/02	METH1007	Based on Atl. PIRI
Mercury - Total (CVAA,LL) (4)	2	N/A	2006/05/04	3425_1_2	Based on EPA245.1
Total metals in water ICP-OES	2	N/A	2006/05/03	METH2049	Based on EPA200.7
Elements by ICPMS - low total	2	N/A	2006/05/03	METH2012	Based on EPA6020A
PAH in Water by GC/MS (SIM) (4)	2	2006/04/28	2006/05/03	METH1000	Based on EPA 8270C
PCBs in water by GC/ECD (4)	2	2006/05/02	2006/05/03	8035_1_3	Based on EPA8082
VPH in Water (PIRI) (3)	2	2006/04/28	2006/04/28	METH1007	Based on Atl. PIRI
ModTPH (T1) Calc. for Water (3)	2	N/A	2006/05/05	METH1007	Based on Atl PIRI

- (1) This test was performed by Sydney, NS (ESL)
- (2) This test was performed by Bedford
- (3) SCC/CAEAL

Encryption Key

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

NATALIE BURKE, Sr. Project Manager
Email: natalie.burke@maxxamanalytics.com
Phone# (902) 567 1255

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Total cover pages: 1

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Maxxam Job #: A638390
Report Date: 2006/05/05

Jacques Whitford Limited {R}
Client Project #: 1010816
Project name: COOLING PONDS - SYSCO
Your P.O. #: NSD016300
Sampler Initials:

SYDNEY METAL SCAN TOTAL LL (SEWAGE)

Maxxam ID		L74342	L74421		
Sampling Date		2006/04/27	2006/04/27		
COC Number		303782	303782		
	Units	O/W W-01	O/W W-02	RDL	QC Batch

ELEMENTS					
Total Calcium (Ca)	mg/L	3.2	2.8	0.1	962315
Total Magnesium (Mg)	mg/L	0.7	0.7	0.1	962315
Total Potassium (K)	mg/L	ND	ND	1	962315
Total Sodium (Na)	mg/L	2	1	1	962315
Elements (ICP-MS)					
Total Aluminum (Al)	ug/L	10	5.2	5.0	962338
Total Antimony (Sb)	ug/L	ND	ND	0.40	962338
Total Arsenic (As)	ug/L	ND	ND	0.60	962338
Total Barium (Ba)	ug/L	5.8	4.0	0.40	962338
Total Beryllium (Be)	ug/L	ND	ND	0.50	962338
Total Bismuth (Bi)	ug/L	ND	ND	2.0	962338
Total Boron (B)	ug/L	ND	ND	100	962338
Total Cadmium (Cd)	ug/L	0.023	ND	0.017	962338
Total Chromium (Cr)	ug/L	2.0	1.9	1.0	962338
Total Cobalt (Co)	ug/L	ND	ND	1.0	962338
Total Copper (Cu)	ug/L	ND	14	2.0	962338
Total Iron (Fe)	ug/L	1600	320	100	962338
Total Lead (Pb)	ug/L	1.7	ND	1.0	962338
Total Lithium (Li)	ug/L	ND	ND	1.0	962338
Total Manganese (Mn)	ug/L	83	31	4.0	962338
Total Molybdenum (Mo)	ug/L	ND	ND	4.0	962338
Total Nickel (Ni)	ug/L	ND	ND	3.0	962338
Total Phosphorus (P)	ug/L	ND	ND	100	962338
Total Selenium (Se)	ug/L	ND	ND	1.0	962338
Total Silver (Ag)	ug/L	ND	ND	0.10	962338
Total Strontium (Sr)	ug/L	9.2	8.1	2.0	962338
Total Sulphur (S)	ug/L	ND	ND	3700	962338
Total Thallium (Tl)	ug/L	ND	ND	0.80	962338
Total Tin (Sn)	ug/L	ND	ND	20	962338
Total Titanium (Ti)	ug/L	ND	ND	3.0	962338
Total Uranium (U)	ug/L	ND	ND	0.15	962338

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

Maxxam Job #: A638390
Report Date: 2006/05/05

Jacques Whitford Limited {R}
Client Project #: 1010816
Project name: COOLING PONDS - SYSCO
Your P.O. #: NSD016300
Sampler Initials:

SYDNEY METAL SCAN TOTAL LL (SEWAGE)

Maxxam ID		L74342	L74421		
Sampling Date		2006/04/27	2006/04/27		
COC Number		303782	303782		
	Units	O/W W-01	O/W W-02	RDL	QC Batch

Total Vanadium (V)	ug/L	ND	ND	2.0	962338
Total Zinc (Zn)	ug/L	96	40	2.0	962338

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

Maxxam Job #: A638390
Report Date: 2006/05/05

Jacques Whitford Limited {R}
Client Project #: 1010816
Project name: COOLING PONDS - SYSCO
Your P.O. #: NSD016300
Sampler Initials:

ATLANTIC MUST (PIRI TIER 1) IN WATER

Maxxam ID		L74342	L74421		
Sampling Date		2006/04/27	2006/04/27		
COC Number		303782	303782		
	Units	O/W W-01	O/W W-02	RDL	QC Batch

TPH COMPOUNDS					
Benzene	mg/L	ND	ND	0.001	959532
Toluene	mg/L	ND	ND	0.001	959532
Ethylbenzene	mg/L	ND	ND	0.001	959532
Xylene (Total)	mg/L	ND	ND	0.002	959532
C6 - C10 (less BTEX)	mg/L	ND	ND	0.01	959532
>C10-C21 Hydrocarbons	mg/L	ND	ND	0.2	961355
>C21-<C32 Hydrocarbons	mg/L	ND	ND	0.5	961355
Modified TPH (Tier1)	mg/L	ND	ND	0.5	959533
Surrogate Recovery (%)					
Isobutylbenzene - Extractable	%	84	100		961355
Isobutylbenzene - Volatile	%	99	99		959532
n-Dotriacontane - Extractable	%	88	104		961355

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

Maxxam Job #: A638390
Report Date: 2006/05/05

Jacques Whitford Limited {R}
Client Project #: 1010816
Project name: COOLING PONDS - SYSCO
Your P.O. #: NSD016300
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (SEWAGE)

Maxxam ID		L74342	L74421		
Sampling Date		2006/04/27	2006/04/27		
COC Number		303782	303782		
	Units	O/W W-01	O/W W-02	RDL	QC Batch

ELEMENTS					
Total Mercury (Hg)	ug/L	ND	ND	0.01	963406

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

Maxxam Job #: A638390
Report Date: 2006/05/05

Jacques Whitford Limited {R}
Client Project #: 1010816
Project name: COOLING PONDS - SYSCO
Your P.O. #: NSD016300
Sampler Initials:

SEMI-VOLATILE ORGANICS BY GC-MS (SEWAGE)

Maxxam ID		L74342	L74421		
Sampling Date		2006/04/27	2006/04/27		
COC Number		303782	303782		
	Units	O/W W-01	O/W W-02	RDL	QC Batch

PAHs					
1-Methylnaphthalene	ug/L	ND	ND	0.05	959151
2-Methylnaphthalene	ug/L	ND	ND	0.05	959151
Acenaphthene	ug/L	0.08	0.04	0.01	959151
Acenaphthylene	ug/L	ND	ND	0.01	959151
Anthracene	ug/L	0.08	0.04	0.01	959151
Benzo(a)anthracene	ug/L	0.07	0.01	0.01	959151
Benzo(a)pyrene	ug/L	0.03	ND	0.01	959151
Benzo(b)fluoranthene	ug/L	0.11	0.02	0.01	959151
Benzo(g,h,i)perylene	ug/L	0.02	ND	0.01	959151
Benzo(k)fluoranthene	ug/L	0.09	0.01	0.01	959151
Chrysene	ug/L	0.23	0.07	0.01	959151
Dibenzo(a,h)anthracene	ug/L	ND	ND	0.01	959151
Fluoranthene	ug/L	1.0	0.32	0.01	959151
Fluorene	ug/L	0.10	0.05	0.01	959151
Indeno(1,2,3-cd)pyrene	ug/L	0.02	ND	0.01	959151
Naphthalene	ug/L	ND	ND	0.2	959151
Perylene	ug/L	ND	ND	0.01	959151
Phenanthrene	ug/L	0.57	0.09	0.01	959151
Pyrene	ug/L	0.59	0.11	0.01	959151
Surrogate Recovery (%)					
D10-Anthracene	%	75	82		959151
D14-Terphenyl	%	77	82		959151
D8-Acenaphthylene	%	78	78		959151

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

Maxxam Job #: A638390
Report Date: 2006/05/05

Jacques Whitford Limited {R}
Client Project #: 1010816
Project name: COOLING PONDS - SYSCO
Your P.O. #: NSD016300
Sampler Initials:

POLYCHLORINATED BIPHENYLS BY GC-ECD (SEWAGE)

Maxxam ID		L74342	L74421		
Sampling Date		2006/04/27	2006/04/27		
COC Number		303782	303782		
	Units	O/W W-01	O/W W-02	RDL	QC Batch

PCBs					
Total PCB	ug/L	ND	ND	0.05	961007
Surrogate Recovery (%)					
Decachlorobiphenyl	%	75	55 (1)		961007

ND = Not detected
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) PCB surrogate not within acceptance limits. Analysis was repeated with similar results.

Maxxam Job #: A638390
Report Date: 2006/05/05

Jacques Whitford Limited {R}
Client Project #: 1010816
Project name: COOLING PONDS - SYSCO
Your P.O. #: NSD016300
Sampler Initials:

GENERAL COMMENTS

Results relate only to the items tested.

Quality Assurance Report
 Maxxam Job Number: KA638390

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits		
959151 TML	MATRIX SPIKE	D10-Anthracene	2006/05/03		85	%	30 - 130		
		D14-Terphenyl	2006/05/03		85	%	30 - 130		
		D8-Acenaphthylene	2006/05/03		75	%	30 - 130		
		1-Methylnaphthalene	2006/05/03		81	%	50 - 130		
		2-Methylnaphthalene	2006/05/03		75	%	50 - 130		
		Acenaphthene	2006/05/03		80	%	50 - 130		
		Acenaphthylene	2006/05/03		79	%	50 - 130		
		Anthracene	2006/05/03		76	%	50 - 130		
		Benzo(a)anthracene	2006/05/03		75	%	50 - 130		
		Benzo(a)pyrene	2006/05/03		74	%	50 - 130		
		Benzo(b)fluoranthene	2006/05/03		77	%	50 - 130		
		Benzo(g,h,i)perylene	2006/05/03		76	%	50 - 130		
		Benzo(k)fluoranthene	2006/05/03		75	%	50 - 130		
		Chrysene	2006/05/03		96	%	50 - 130		
		Dibenzo(a,h)anthracene	2006/05/03		73	%	50 - 130		
		Fluoranthene	2006/05/03		78	%	50 - 130		
		Fluorene	2006/05/03		78	%	50 - 130		
		Indeno(1,2,3-cd)pyrene	2006/05/03		74	%	50 - 130		
		Naphthalene	2006/05/03		72	%	50 - 130		
		Perylene	2006/05/03		78	%	50 - 130		
		Phenanthrene	2006/05/03		75	%	50 - 130		
		Pyrene	2006/05/03		95	%	50 - 130		
		Spiked Blank		D10-Anthracene	2006/05/03		92	%	30 - 130
				D14-Terphenyl	2006/05/03		94	%	30 - 130
				D8-Acenaphthylene	2006/05/03		92	%	30 - 130
				1-Methylnaphthalene	2006/05/03		89	%	50 - 130
				2-Methylnaphthalene	2006/05/03		86	%	50 - 130
				Acenaphthene	2006/05/03		91	%	50 - 130
				Acenaphthylene	2006/05/03		83	%	50 - 130
				Anthracene	2006/05/03		92	%	50 - 130
				Benzo(a)anthracene	2006/05/03		91	%	50 - 130
				Benzo(a)pyrene	2006/05/03		90	%	50 - 130
				Benzo(b)fluoranthene	2006/05/03		89	%	50 - 130
Benzo(g,h,i)perylene	2006/05/03				89	%	50 - 130		
Benzo(k)fluoranthene	2006/05/03				90	%	50 - 130		
Chrysene	2006/05/03				84	%	50 - 130		
Dibenzo(a,h)anthracene	2006/05/03				88	%	50 - 130		
Fluoranthene	2006/05/03				90	%	50 - 130		
Fluorene	2006/05/03				84	%	50 - 130		
Indeno(1,2,3-cd)pyrene	2006/05/03				89	%	50 - 130		
Naphthalene	2006/05/03				91	%	50 - 130		
Perylene	2006/05/03				95	%	50 - 130		
Phenanthrene	2006/05/03				89	%	50 - 130		
Pyrene	2006/05/03				88	%	50 - 130		
Method Blank				D10-Anthracene	2006/05/03		92	%	30 - 130
				D14-Terphenyl	2006/05/03		93	%	30 - 130
				D8-Acenaphthylene	2006/05/03		91	%	30 - 130
				1-Methylnaphthalene	2006/05/03	ND, RDL=0.05		ug/L	
				2-Methylnaphthalene	2006/05/03	ND, RDL=0.05		ug/L	
				Acenaphthene	2006/05/03	ND, RDL=0.01		ug/L	
				Acenaphthylene	2006/05/03	ND, RDL=0.01		ug/L	
				Anthracene	2006/05/03	ND, RDL=0.01		ug/L	
				Benzo(a)anthracene	2006/05/03	ND, RDL=0.01		ug/L	
				Benzo(a)pyrene	2006/05/03	ND, RDL=0.01		ug/L	
				Benzo(b)fluoranthene	2006/05/03	ND, RDL=0.01		ug/L	
		Benzo(g,h,i)perylene	2006/05/03	ND, RDL=0.01		ug/L			

Quality Assurance Report (Continued)

Maxxam Job Number: KA638390

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits		
959151	TML	Method Blank	Benzo(k)fluoranthene	2006/05/03	ND, RDL=0.01	ug/L			
		Chrysene	2006/05/03	ND, RDL=0.01	ug/L				
		Dibenzo(a,h)anthracene	2006/05/03	ND, RDL=0.01	ug/L				
		Fluoranthene	2006/05/03	ND, RDL=0.01	ug/L				
		Fluorene	2006/05/03	ND, RDL=0.01	ug/L				
		Indeno(1,2,3-cd)pyrene	2006/05/03	ND, RDL=0.01	ug/L				
		Naphthalene	2006/05/03	ND, RDL=0.2	ug/L				
		Perylene	2006/05/03	ND, RDL=0.01	ug/L				
		Phenanthrene	2006/05/03	ND, RDL=0.01	ug/L				
		Pyrene	2006/05/03	ND, RDL=0.01	ug/L				
		RPD	1-Methylnaphthalene	2006/05/03	NC	%	40		
			2-Methylnaphthalene	2006/05/03	NC	%	40		
			Acenaphthene	2006/05/03	NC	%	40		
	Acenaphthylene		2006/05/03	NC	%	40			
	Anthracene		2006/05/03	NC	%	40			
	Benzo(a)anthracene		2006/05/03	NC	%	40			
	Benzo(a)pyrene		2006/05/03	NC	%	40			
	Benzo(b)fluoranthene		2006/05/03	NC	%	40			
	Benzo(g,h,i)perylene		2006/05/03	NC	%	40			
	Benzo(k)fluoranthene		2006/05/03	NC	%	40			
	Chrysene		2006/05/03	10.5	%	40			
	Dibenzo(a,h)anthracene		2006/05/03	NC	%	40			
	Fluoranthene		2006/05/03	8.7	%	40			
	Fluorene		2006/05/03	NC	%	40			
	Indeno(1,2,3-cd)pyrene		2006/05/03	NC	%	40			
	Naphthalene		2006/05/03	NC	%	40			
	Perylene		2006/05/03	NC	%	40			
	Phenanthrene		2006/05/03	NC	%	40			
	Pyrene		2006/05/03	22.2	%	40			
	959532		JLY	MATRIX SPIKE	Isobutylbenzene - Volatile	2006/04/28		101	%
		Benzene		2006/04/28		102	%	50 - 130	
		Toluene		2006/04/28		102	%	50 - 130	
		Ethylbenzene		2006/04/28		101	%	50 - 130	
Xylene (Total)		2006/04/28			100	%	50 - 130		
C6 - C10 (less BTEX)		2006/04/28			88	%	N/A		
Spiked Blank		Isobutylbenzene - Volatile		2006/04/28		94	%	70 - 130	
		Benzene		2006/04/28		101	%	50 - 130	
		Toluene		2006/04/28		100	%	50 - 130	
		Ethylbenzene		2006/04/28		101	%	50 - 130	
		Xylene (Total)	2006/04/28		98	%	50 - 130		
		C6 - C10 (less BTEX)	2006/04/28		84	%	N/A		
Method Blank		Isobutylbenzene - Volatile	2006/04/28		101	%	70 - 130		
		Benzene	2006/04/28	ND, RDL=0.001	mg/L				
		Toluene	2006/04/28	ND, RDL=0.001	mg/L				
		Ethylbenzene	2006/04/28	ND, RDL=0.001	mg/L				
		Xylene (Total)	2006/04/28	ND, RDL=0.002	mg/L				
		C6 - C10 (less BTEX)	2006/04/28	ND, RDL=0.01	mg/L				
		RPD	Benzene	2006/04/28	NC	%	40		
			Toluene	2006/04/28	NC	%	40		
			Ethylbenzene	2006/04/28	NC	%	40		
			Xylene (Total)	2006/04/28	NC	%	40		
			C6 - C10 (less BTEX)	2006/04/28	NC	%	40		
961007		RST	MATRIX SPIKE	Decachlorobiphenyl	2006/05/03		84	%	30 - 130
			Total PCB	2006/05/03		86	%	70 - 130	
		Spiked Blank	Decachlorobiphenyl	2006/05/03		45 (1)	%	30 - 130	
	Total PCB		2006/05/03		112	%	70 - 130		

Quality Assurance Report (Continued)

Maxxam Job Number: KA638390

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits		
961007 RST	Method Blank	Decachlorobiphenyl	2006/05/03		44 (1)	%	30 - 130		
		Total PCB	2006/05/03	ND, RDL=0.05		ug/L			
	RPD	Decachlorobiphenyl	2006/05/03	9.6		%	N/A		
		Total PCB	2006/05/03	NC		%	40		
961355 KMO	MATRIX SPIKE	Isobutylbenzene - Extractable	2006/05/02		86	%	30 - 130		
		n-Dotriacontane - Extractable	2006/05/02		87	%	30 - 130		
		>C10-C21 Hydrocarbons	2006/05/02		67	%	40 - 130		
		>C21-<C32 Hydrocarbons	2006/05/02		28 (2)	%	40 - 130		
	Spiked Blank	Isobutylbenzene - Extractable	2006/05/02		106	%	30 - 130		
		n-Dotriacontane - Extractable	2006/05/02		118	%	30 - 130		
		>C10-C21 Hydrocarbons	2006/05/02		99	%	40 - 130		
		>C21-<C32 Hydrocarbons	2006/05/02		91	%	40 - 130		
	Method Blank	Isobutylbenzene - Extractable	2006/05/02		99	%	30 - 130		
		n-Dotriacontane - Extractable	2006/05/02		104	%	30 - 130		
		>C10-C21 Hydrocarbons	2006/05/02	ND, RDL=0.16		mg/L			
		>C21-<C32 Hydrocarbons	2006/05/02	ND, RDL=0.51		mg/L			
	RPD	>C10-C21 Hydrocarbons	2006/05/02	NC		%	40		
		>C21-<C32 Hydrocarbons	2006/05/02	NC		%	40		
		962315 TMD	MATRIX SPIKE	Total Calcium (Ca)	2006/05/03		113	%	70 - 130
				Total Magnesium (Mg)	2006/05/03		106	%	70 - 130
Total Potassium (K)	2006/05/03				87	%	70 - 130		
Total Sodium (Na)	2006/05/03				100	%	70 - 130		
QC STANDARD	Total Calcium (Ca)		2006/05/03		97	%	70 - 130		
	Total Magnesium (Mg)		2006/05/03		97	%	70 - 130		
	Total Potassium (K)		2006/05/03		85	%	70 - 130		
	Total Sodium (Na)		2006/05/03		108	%	70 - 130		
Spiked Blank	Total Calcium (Ca)		2006/05/03		109	%	70 - 130		
	Total Magnesium (Mg)		2006/05/03		106	%	70 - 130		
	Total Potassium (K)		2006/05/03		91	%	70 - 130		
	Total Sodium (Na)		2006/05/03		95	%	70 - 130		
Method Blank	Total Calcium (Ca)		2006/05/03	ND, RDL=0.1		mg/L			
	Total Magnesium (Mg)		2006/05/03	ND, RDL=0.1		mg/L			
	Total Potassium (K)		2006/05/03	ND, RDL=1		mg/L			
	Total Sodium (Na)		2006/05/03	ND, RDL=1		mg/L			
	RPD	Total Calcium (Ca)	2006/05/03	10.5		%	30		
		Total Magnesium (Mg)	2006/05/03	8.5		%	30		
		Total Potassium (K)	2006/05/03	NC		%	30		
		Total Sodium (Na)	2006/05/03	NC		%	30		
962338 SMK	MATRIX SPIKE	Total Aluminum (Al)	2006/05/03		-	%	75 - 125		
		Total Antimony (Sb)	2006/05/03		91	%	75 - 125		
		Total Arsenic (As)	2006/05/03		113	%	75 - 125		
		Total Barium (Ba)	2006/05/03		-	%	75 - 125		
		Total Beryllium (Be)	2006/05/03		106	%	75 - 125		
		Total Bismuth (Bi)	2006/05/03		112	%	75 - 125		
		Total Boron (B)	2006/05/03		110	%	75 - 125		
		Total Cadmium (Cd)	2006/05/03		104	%	75 - 125		
		Total Chromium (Cr)	2006/05/03		91	%	75 - 125		
		Total Cobalt (Co)	2006/05/03		85	%	75 - 125		
		Total Copper (Cu)	2006/05/03		86	%	75 - 125		
		Total Iron (Fe)	2006/05/03		98	%	75 - 125		
		Total Lead (Pb)	2006/05/03		112	%	75 - 125		
		Total Lithium (Li)	2006/05/03		85	%	75 - 125		
		Total Manganese (Mn)	2006/05/03		101	%	75 - 125		
		Total Molybdenum (Mo)	2006/05/03		107	%	75 - 125		
		Total Nickel (Ni)	2006/05/03		82	%	75 - 125		
		Total Phosphorus (P)	2006/05/03		122	%	75 - 125		

Quality Assurance Report (Continued)

Maxxam Job Number: KA638390

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits	
962338 SMK	MATRIX SPIKE	Total Selenium (Se)	2006/05/03		102	%	75 - 125	
		Total Silver (Ag)	2006/05/03		97	%	75 - 125	
		Total Strontium (Sr)	2006/05/03		98	%	75 - 125	
		Total Sulphur (S)	2006/05/03		108	%	75 - 125	
		Total Thallium (Tl)	2006/05/03		109	%	75 - 125	
		Total Tin (Sn)	2006/05/03		106	%	75 - 125	
		Total Titanium (Ti)	2006/05/03		93	%	75 - 125	
		Total Uranium (U)	2006/05/03		104	%	75 - 125	
		Total Vanadium (V)	2006/05/03		95	%	75 - 125	
		Total Zinc (Zn)	2006/05/03		-	%	75 - 125	
		QC STANDARD	Total Aluminum (Al)	2006/05/03		122	%	75 - 125
			Total Antimony (Sb)	2006/05/03		115	%	75 - 125
			Total Arsenic (As)	2006/05/03		105	%	75 - 125
			Total Barium (Ba)	2006/05/03		104	%	75 - 125
			Total Beryllium (Be)	2006/05/03		109	%	75 - 125
			Total Bismuth (Bi)	2006/05/03		96	%	75 - 125
			Total Boron (B)	2006/05/03		115	%	75 - 125
	Total Cadmium (Cd)		2006/05/03		93	%	75 - 125	
	Total Chromium (Cr)		2006/05/03		90	%	75 - 125	
	Total Cobalt (Co)		2006/05/03		91	%	75 - 125	
	Total Copper (Cu)		2006/05/03		84	%	75 - 125	
	Total Iron (Fe)		2006/05/03		-	%	75 - 125	
	Total Lead (Pb)		2006/05/03		97	%	75 - 125	
	Total Lithium (Li)		2006/05/03		91	%	75 - 125	
	Total Manganese (Mn)		2006/05/03		92	%	75 - 125	
	Total Molybdenum (Mo)		2006/05/03		113	%	75 - 125	
	Total Nickel (Ni)	2006/05/03		88	%	75 - 125		
	Total Phosphorus (P)	2006/05/03		-	%	N/A		
	Total Selenium (Se)	2006/05/03		103	%	75 - 125		
	Total Silver (Ag)	2006/05/03		104	%	75 - 125		
	Total Strontium (Sr)	2006/05/03		101	%	75 - 125		
	Total Sulphur (S)	2006/05/03		-	%	N/A		
	Total Thallium (Tl)	2006/05/03		97	%	75 - 125		
Total Tin (Sn)	2006/05/03		-	%	N/A			
Total Titanium (Ti)	2006/05/03		-	%	N/A			
Total Uranium (U)	2006/05/03		-	%	N/A			
Total Vanadium (V)	2006/05/03		93	%	75 - 125			
Total Zinc (Zn)	2006/05/03		121	%	75 - 125			
Spiked Blank	Total Aluminum (Al)	2006/05/03		113	%	75 - 125		
	Total Antimony (Sb)	2006/05/03		99	%	75 - 125		
	Total Arsenic (As)	2006/05/03		107	%	75 - 125		
	Total Barium (Ba)	2006/05/03		120	%	75 - 125		
	Total Beryllium (Be)	2006/05/03		102	%	75 - 125		
	Total Bismuth (Bi)	2006/05/03		97	%	75 - 125		
	Total Boron (B)	2006/05/03		101	%	75 - 125		
	Total Cadmium (Cd)	2006/05/03		101	%	75 - 125		
	Total Chromium (Cr)	2006/05/03		88	%	75 - 125		
	Total Cobalt (Co)	2006/05/03		83	%	75 - 125		
	Total Copper (Cu)	2006/05/03		85	%	75 - 125		
	Total Iron (Fe)	2006/05/03		92	%	75 - 125		
	Total Lead (Pb)	2006/05/03		113	%	75 - 125		
	Total Lithium (Li)	2006/05/03		83	%	75 - 125		
	Total Manganese (Mn)	2006/05/03		98	%	75 - 125		
	Total Molybdenum (Mo)	2006/05/03		99	%	75 - 125		
Total Nickel (Ni)	2006/05/03		80	%	75 - 125			
Total Phosphorus (P)	2006/05/03		116	%	75 - 125			

Quality Assurance Report (Continued)

Maxxam Job Number: KA638390

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits	
962338 SMK	Spiked Blank	Total Selenium (Se)	2006/05/03		100	%	75 - 125	
		Total Silver (Ag)	2006/05/03		92	%	75 - 125	
		Total Strontium (Sr)	2006/05/03		95	%	75 - 125	
		Total Sulphur (S)	2006/05/03		104	%	75 - 125	
		Total Thallium (Tl)	2006/05/03		99	%	75 - 125	
		Total Tin (Sn)	2006/05/03		111	%	75 - 125	
		Total Titanium (Ti)	2006/05/03		91	%	75 - 125	
		Total Uranium (U)	2006/05/03		97	%	75 - 125	
		Total Vanadium (V)	2006/05/03		91	%	75 - 125	
		Total Zinc (Zn)	2006/05/03		121	%	75 - 125	
	Method Blank	Total Aluminum (Al)	2006/05/03		ND, RDL=5.0		ug/L	
		Total Antimony (Sb)	2006/05/03		ND, RDL=0.40		ug/L	
		Total Arsenic (As)	2006/05/03		ND, RDL=0.60		ug/L	
		Total Barium (Ba)	2006/05/03		ND, RDL=0.40		ug/L	
		Total Beryllium (Be)	2006/05/03		ND, RDL=0.50		ug/L	
		Total Bismuth (Bi)	2006/05/03		ND, RDL=2.0		ug/L	
		Total Boron (B)	2006/05/03		ND, RDL=100		ug/L	
		Total Cadmium (Cd)	2006/05/03		ND, RDL=0.017		ug/L	
		Total Chromium (Cr)	2006/05/03		ND, RDL=1.0		ug/L	
		Total Cobalt (Co)	2006/05/03		ND, RDL=1.0		ug/L	
		Total Copper (Cu)	2006/05/03		ND, RDL=2.0		ug/L	
		Total Iron (Fe)	2006/05/03		ND, RDL=100		ug/L	
		Total Lead (Pb)	2006/05/03		ND, RDL=1.0		ug/L	
		Total Lithium (Li)	2006/05/03		ND, RDL=1.0		ug/L	
		Total Manganese (Mn)	2006/05/03		ND, RDL=4.0		ug/L	
		Total Molybdenum (Mo)	2006/05/03		ND, RDL=4.0		ug/L	
		Total Nickel (Ni)	2006/05/03		ND, RDL=3.0		ug/L	
		Total Phosphorus (P)	2006/05/03		ND, RDL=100		ug/L	
		Total Selenium (Se)	2006/05/03		ND, RDL=1.0		ug/L	
		Total Silver (Ag)	2006/05/03		ND, RDL=0.10		ug/L	
		Total Strontium (Sr)	2006/05/03		ND, RDL=2.0		ug/L	
		Total Sulphur (S)	2006/05/03		ND, RDL=3700		ug/L	
		Total Thallium (Tl)	2006/05/03		ND, RDL=0.80		ug/L	
Total Tin (Sn)		2006/05/03		ND, RDL=20		ug/L		
Total Titanium (Ti)		2006/05/03		ND, RDL=3.0		ug/L		
Total Uranium (U)		2006/05/03		ND, RDL=0.15		ug/L		
Total Vanadium (V)		2006/05/03		ND, RDL=2.0		ug/L		
Total Zinc (Zn)		2006/05/03		3.9, RDL=2.0		ug/L		
RPD		Total Aluminum (Al)	2006/05/03		10.2		%	25
		Total Antimony (Sb)	2006/05/03		NC		%	25
		Total Arsenic (As)	2006/05/03		NC		%	25
		Total Barium (Ba)	2006/05/03		1.2		%	25
	Total Beryllium (Be)	2006/05/03		NC		%	25	
	Total Bismuth (Bi)	2006/05/03		NC		%	25	
	Total Boron (B)	2006/05/03		NC		%	25	
	Total Cadmium (Cd)	2006/05/03		NC		%	25	
	Total Chromium (Cr)	2006/05/03		NC		%	25	
	Total Cobalt (Co)	2006/05/03		NC		%	25	
	Total Copper (Cu)	2006/05/03		NC		%	25	
	Total Iron (Fe)	2006/05/03		0.7		%	25	
	Total Lead (Pb)	2006/05/03		NC		%	25	
	Total Lithium (Li)	2006/05/03		NC		%	25	
	Total Molybdenum (Mo)	2006/05/03		NC		%	25	
	Total Nickel (Ni)	2006/05/03		NC		%	25	
	Total Phosphorus (P)	2006/05/03		NC		%	25	
	Total Selenium (Se)	2006/05/03		NC		%	25	

Quality Assurance Report (Continued)

Maxxam Job Number: KA638390

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
962338 SMK	RPD	Total Silver (Ag)	2006/05/03	NC		%	25
		Total Strontium (Sr)	2006/05/03	1.9		%	25
		Total Sulphur (S)	2006/05/03	NC		%	25
		Total Thallium (Tl)	2006/05/03	NC		%	25
		Total Tin (Sn)	2006/05/03	NC		%	25
		Total Uranium (U)	2006/05/03	NC		%	25
		Total Vanadium (V)	2006/05/03	NC		%	25
963406 SSI	MATRIX SPIKE QC STANDARD Spiked Blank Method Blank RPD	Total Zinc (Zn)	2006/05/03	8.3		%	25
		Total Mercury (Hg)	2006/05/04		103	%	80 - 120
		Total Mercury (Hg)	2006/05/04		103	%	80 - 120
		Total Mercury (Hg)	2006/05/04		103	%	80 - 120
		Total Mercury (Hg)	2006/05/04	ND, RDL=0.013		ug/L	
		Total Mercury (Hg)	2006/05/04	NC		%	25

ND = Not detected
 N/A = Not Applicable
 NC = Non-calculable
 RPD = Relative Percent Difference
 QC Standard = Quality Control Standard
 SPIKE = Fortified sample
 (1) PCB surrogate not within acceptance limits.
 (2)

Your P.O. #: NSD016300
Your Project #: 1010816
Site: COOLING PONDS - SYSCO
Your C.O.C. #: 303782

Attention: Blair MacVicar
Jacques Whitford Limited {R}
Dartmouth - Standing Offer
3 Spectacle Lake Dr
Dartmouth, NS
B3B 1W8

Report Date: 2006/05/17

This report dated: 2006/05/17 supersedes previous report dated: 2006/05/11

CERTIFICATE OF ANALYSIS

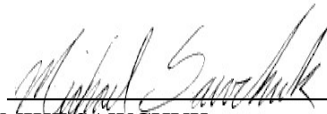
MAXXAM JOB #: A638414

Received: 2006/04/27, 15:55

Sample Matrix: Soil
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Chromium (VI) in Soil (1)	1	2006/05/03	2006/05/03	Ont SOP 0104	EPA 7196
TEH in Soil (PIRI) (2)	1	2006/04/28	2006/04/28	METH1007	Based on Atl. PIRI
Mercury (CVAA) (3)	1	N/A	2006/05/03	3425_1_2	Based on EPA245.5
Elements by ICPMS in soil (4)	1	N/A	2006/05/01	METH2013	Based on EPA6020
Moisture (5)	1	N/A	N/A		MOE Handbook 1983
MOISTURE (6)	1	N/A	2006/05/02	Ont SOP-0114	MOE HANDBOOK(1983)
PAH Compounds by GCMS (SIM) (7)	1	2006/05/01	2006/05/03	METH1000	Based on EPA8270
PCBs in soil by GC/ECD (8)	1	N/A	2006/05/03	8024_1_5	Based on EPA8082
VPH in Soil - Low Level (9)	1	N/A	2006/05/02	SOP1025_1_2	Based on Atl PIRI
ModTPH (T1) Calc. for Soil (10)	1	2006/04/28	2006/05/05	METH1007	Based on Atl PIRI

- (1) This test was performed by Maxxam Analytics Mississauga
- (2) This test was performed by Sydney, NS (ESL)
- (3) This test was performed by Bedford
- (4) SCC/CAEAL

Validated by : 
MIKE SAWCHUK
Inorganics Team Leader

Total cover pages: 1

Maxxam Job #: A638414
Report Date: 2006/05/17

Jacques Whitford Limited {R}
Client Project #: 1010816
Project name: COOLING PONDS - SYSCO
Your P.O. #: NSD016300
Sampler Initials:

ATLANTIC PCBS IN SOIL (SOIL)

Maxxam ID		L74452		
Sampling Date		2006/04/27		
COC Number		303782		
	Units	O/W	RDL	QC Batch
		SLUDGE 01		

INORGANICS				
Moisture	%	80	1	960550
PCBs				
Total PCB	ug/g	10 (1)	0.05	961779
Surrogate Recovery (%)				
Decachlorobiphenyl	%	112		961779
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Aroclor 1254,1260.				

Maxxam Job #: A638414
Report Date: 2006/05/17

Jacques Whitford Limited {R}
Client Project #: 1010816
Project name: COOLING PONDS - SYSCO
Your P.O. #: NSD016300
Sampler Initials:

ATLANTIC MUST (PIRI TIER I) IN SOIL

Maxxam ID		L74452		
Sampling Date		2006/04/27		
COC Number		303782		
	Units	O/W	RDL	QC Batch
		SLUDGE 01		

TPH COMPOUNDS				
Benzene	mg/kg	0.098	0.003	961909
Toluene	mg/kg	0.23	0.03	961909
Ethylbenzene	mg/kg	0.02	0.01	961909
Xylene (Total)	mg/kg	4.4	0.05	961909
C6 - C10 (less BTEX)	mg/kg	180	3	961909
>C10-C21 Hydrocarbons	mg/kg	16000	15	959280
>C21-<C32 Hydrocarbons	mg/kg	20000	15	959280
Modified TPH (Tier1)	mg/kg	36000	20	959547
Surrogate Recovery (%)				
Isobutylbenzene - Extractable	%	303 (1)		959280
Isobutylbenzene - Volatile	%	N/A***** (2)		961909
n-Dotriacontane - Extractable	%	127 (3)		959280

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Please refer to General Comments page for specific clarification.
(2) VPH surrogate not within acceptance limits due to matrix interference.
(3) Gasoline fraction; weathered fuel oil fraction eluting in the fuel oil and lube oil ranges. TEH surrogate not within acceptance limits due to sample dilution / product interference.

Maxxam Job #: A638414
Report Date: 2006/05/17

Jacques Whitford Limited {R}
Client Project #: 1010816
Project name: COOLING PONDS - SYSCO
Your P.O. #: NSD016300
Sampler Initials:

RESULTS OF ANALYSES OF SOIL

Maxxam ID		L74452		
Sampling Date		2006/04/27		
COC Number		303782		
	Units	O/W	RDL	QC Batch
		SLUDGE 01		

INORGANICS				
Moisture	%	80	0.2	961725

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Job #: A638414
Report Date: 2006/05/17

Jacques Whitford Limited {R}
Client Project #: 1010816
Project name: COOLING PONDS - SYSCO
Your P.O. #: NSD016300
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Maxxam ID		L74452		
Sampling Date		2006/04/27		
COC Number		303782		
	Units	O/W SLUDGE 01	RDL	QC Batch

METALS				
Chromium (VI)	ug/g	ND	0.05	963037
ELEMENTS				
Mercury (Hg)	mg/kg	2.3	0.05	962335
Elements (ICP-MS)				
Aluminum (Al)	mg/kg	11000	80	960843
Antimony (Sb)	mg/kg	2	1	960843
Arsenic (As)	mg/kg	15	1	960843
Barium (Ba)	mg/kg	300	10	960843
Beryllium (Be)	mg/kg	1	1	960843
Boron (B)	mg/kg	ND	20	960843
Cadmium (Cd)	mg/kg	5.2	0.2	960843
Calcium (Ca)	mg/kg	14000	300	960843
Chromium (Cr)	mg/kg	87	1	960843
Cobalt (Co)	mg/kg	11	1	960843
Copper (Cu)	mg/kg	890	10	960843
Iron (Fe)	mg/kg	31000	30	960843
Lead (Pb)	mg/kg	360	1	960843
Lithium (Li)	mg/kg	21	1	960843
Magnesium (Mg)	mg/kg	7500	80	960843
Manganese (Mn)	mg/kg	850	10	960843
Molybdenum (Mo)	mg/kg	11	1	960843
Nickel (Ni)	mg/kg	27	2	960843
Phosphorus (P)	mg/kg	3900	20	960843
Potassium (K)	mg/kg	1600	400	960843
Selenium (Se)	mg/kg	3.5	0.6	960843
Silver (Ag)	mg/kg	2	1	960843
Sodium (Na)	mg/kg	ND	400	960843
Strontium (Sr)	mg/kg	44	2	960843
Sulphur (S)	mg/kg	6900	1000	960843
Thallium (Tl)	mg/kg	3.5	0.7	960843
ND = Not detected RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

Maxxam Job #: A638414
Report Date: 2006/05/17

Jacques Whitford Limited {R}
Client Project #: 1010816
Project name: COOLING PONDS - SYSCO
Your P.O. #: NSD016300
Sampler Initials:

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Maxxam ID		L74452		
Sampling Date		2006/04/27		
COC Number		303782		
	Units	O/W	RDL	QC Batch
		SLUDGE 01		

Tin (Sn)	mg/kg	ND	10	960843
Titanium (Ti)	mg/kg	150	1	960843
Uranium (U)	mg/kg	3	1	960843
Vanadium (V)	mg/kg	39	1	960843
Zinc (Zn)	mg/kg	1000	50	960843

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

Maxxam Job #: A638414
Report Date: 2006/05/17

Jacques Whitford Limited {R}
Client Project #: 1010816
Project name: COOLING PONDS - SYSCO
Your P.O. #: NSD016300
Sampler Initials:

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Maxxam ID		L74452		
Sampling Date		2006/04/27		
COC Number		303782		
	Units	O/W	RDL	QC Batch
		SLUDGE 01		

PAHs				
1-Methylnaphthalene	mg/kg	0.6	0.3	960587
2-Methylnaphthalene	mg/kg	0.8	0.3	960587
Acenaphthene	mg/kg	0.7	0.3	960587
Acenaphthylene	mg/kg	ND	0.3	960587
Anthracene	mg/kg	1.7	0.3	960587
Benzo(a)anthracene	mg/kg	3.2	0.3	960587
Benzo(a)pyrene	mg/kg	2.7	0.3	960587
Benzo(b)fluoranthene	mg/kg	2.7	0.3	960587
Benzo(g,h,i)perylene	mg/kg	1.7	0.3	960587
Benzo(k)fluoranthene	mg/kg	3.3	0.3	960587
Chrysene	mg/kg	4.9	0.3	960587
Dibenzo(a,h)anthracene	mg/kg	0.6	0.3	960587
Fluoranthene	mg/kg	9.2	0.3	960587
Fluorene	mg/kg	1.4	0.3	960587
Indeno(1,2,3-cd)pyrene	mg/kg	2.2	0.3	960587
Naphthalene	mg/kg	1.2	0.3	960587
Perylene	mg/kg	0.7	0.3	960587
Phenanthrene	mg/kg	6.5	0.3	960587
Pyrene	mg/kg	8.7	0.3	960587
Surrogate Recovery (%)				
D10-Anthracene	%	98		960587
D14-Terphenyl (FS)	%	87		960587
D8-Acenaphthylene	%	97		960587
ND = Not detected RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

Maxxam Job #: A638414
Report Date: 2006/05/17

Jacques Whitford Limited {R}
Client Project #: 1010816
Project name: COOLING PONDS - SYSCO
Your P.O. #: NSD016300
Sampler Initials:

GENERAL COMMENTS

Sample L74452-01: Elevated PAH RDL's due to matrix.

Results relate only to the items tested.

Quality Assurance Report
 Maxxam Job Number: KA638414

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits		
959280 KMO	MATRIX SPIKE	Isobutylbenzene - Extractable	2006/04/28		86	%	30 - 130		
		n-Dotriacontane - Extractable	2006/04/28		100	%	30 - 130		
		>C10-C21 Hydrocarbons	2006/04/28		85	%	30 - 130		
		>C21-<C32 Hydrocarbons	2006/04/28		77	%	30 - 130		
	Spiked Blank	Isobutylbenzene - Extractable	2006/04/28			88	%	30 - 130	
		n-Dotriacontane - Extractable	2006/04/28			84	%	30 - 130	
		>C10-C21 Hydrocarbons	2006/04/28			91	%	30 - 130	
		>C21-<C32 Hydrocarbons	2006/04/28			82	%	30 - 130	
	Method Blank	Isobutylbenzene - Extractable	2006/04/28			83	%	30 - 130	
		n-Dotriacontane - Extractable	2006/04/28			80	%	30 - 130	
		>C10-C21 Hydrocarbons	2006/04/28		ND, RDL=15		mg/kg		
		>C21-<C32 Hydrocarbons	2006/04/28		ND, RDL=15		mg/kg		
	RPD	>C10-C21 Hydrocarbons	2006/04/28		NC		%	50	
		>C21-<C32 Hydrocarbons	2006/04/28		NC		%	50	
960587 TML	MATRIX SPIKE	D10-Anthracene	2006/05/03		97	%	30 - 130		
		D14-Terphenyl (FS)	2006/05/03		99	%	30 - 130		
		D8-Acenaphthylene	2006/05/03		99	%	30 - 130		
		1-Methylnaphthalene	2006/05/03		99	%	40 - 140		
		2-Methylnaphthalene	2006/05/03		96	%	40 - 140		
		Acenaphthene	2006/05/03		96	%	40 - 140		
		Acenaphthylene	2006/05/03		97	%	40 - 140		
		Anthracene	2006/05/03		98	%	40 - 140		
		Benzo(a)anthracene	2006/05/03		97	%	40 - 140		
		Benzo(a)pyrene	2006/05/03		89	%	40 - 140		
		Benzo(b)fluoranthene	2006/05/03		97	%	40 - 140		
		Benzo(g,h,i)perylene	2006/05/03		92	%	40 - 140		
		Benzo(k)fluoranthene	2006/05/03		95	%	40 - 140		
		Chrysene	2006/05/03		97	%	40 - 140		
		Dibenzo(a,h)anthracene	2006/05/03		94	%	40 - 140		
		Fluoranthene	2006/05/03		96	%	40 - 140		
		Fluorene	2006/05/03		94	%	40 - 140		
		Indeno(1,2,3-cd)pyrene	2006/05/03		98	%	40 - 140		
		Naphthalene	2006/05/03		99	%	40 - 140		
		Perylene	2006/05/03		96	%	40 - 140		
		Phenanthrene	2006/05/03		100	%	40 - 140		
		Pyrene	2006/05/03		94	%	40 - 140		
		Spiked Blank	D10-Anthracene	2006/05/03			99	%	30 - 130
			D14-Terphenyl (FS)	2006/05/03			96	%	30 - 130
			D8-Acenaphthylene	2006/05/03			98	%	30 - 130
			1-Methylnaphthalene	2006/05/03			97	%	40 - 140
			2-Methylnaphthalene	2006/05/03			94	%	40 - 140
			Acenaphthene	2006/05/03			97	%	40 - 140
			Acenaphthylene	2006/05/03			93	%	40 - 140
			Anthracene	2006/05/03			97	%	40 - 140
			Benzo(a)anthracene	2006/05/03			96	%	40 - 140
			Benzo(a)pyrene	2006/05/03			93	%	40 - 140
			Benzo(b)fluoranthene	2006/05/03			98	%	40 - 140
			Benzo(g,h,i)perylene	2006/05/03			92	%	40 - 140
			Benzo(k)fluoranthene	2006/05/03			94	%	40 - 140
			Chrysene	2006/05/03			97	%	40 - 140
			Dibenzo(a,h)anthracene	2006/05/03			92	%	40 - 140
			Fluoranthene	2006/05/03			94	%	40 - 140
Fluorene	2006/05/03				95	%	40 - 140		
Indeno(1,2,3-cd)pyrene	2006/05/03				97	%	40 - 140		
Naphthalene	2006/05/03			94	%	40 - 140			
Perylene	2006/05/03			98	%	40 - 140			

Quality Assurance Report (Continued)

Maxxam Job Number: KA638414

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits	
960587 TML	Spiked Blank	Phenanthrene	2006/05/03		98	%	40 - 140	
		Pyrene	2006/05/03		94	%	40 - 140	
	Method Blank	D10-Anthracene	2006/05/03		97	%	30 - 130	
		D14-Terphenyl (FS)	2006/05/03		96	%	30 - 130	
		D8-Acenaphthylene	2006/05/03		98	%	30 - 130	
		1-Methylnaphthalene	2006/05/03	ND, RDL=0.05			mg/kg	
		2-Methylnaphthalene	2006/05/03	ND, RDL=0.05			mg/kg	
		Acenaphthene	2006/05/03	ND, RDL=0.05			mg/kg	
		Acenaphthylene	2006/05/03	ND, RDL=0.05			mg/kg	
		Anthracene	2006/05/03	ND, RDL=0.05			mg/kg	
		Benzo(a)anthracene	2006/05/03	ND, RDL=0.05			mg/kg	
		Benzo(a)pyrene	2006/05/03	ND, RDL=0.05			mg/kg	
		Benzo(b)fluoranthene	2006/05/03	ND, RDL=0.05			mg/kg	
		Benzo(g,h,i)perylene	2006/05/03	ND, RDL=0.05			mg/kg	
		Benzo(k)fluoranthene	2006/05/03	ND, RDL=0.05			mg/kg	
		Chrysene	2006/05/03	ND, RDL=0.05			mg/kg	
		Dibenzo(a,h)anthracene	2006/05/03	ND, RDL=0.05			mg/kg	
		Fluoranthene	2006/05/03	ND, RDL=0.05			mg/kg	
		Fluorene	2006/05/03	ND, RDL=0.05			mg/kg	
		Indeno(1,2,3-cd)pyrene	2006/05/03	ND, RDL=0.05			mg/kg	
		Naphthalene	2006/05/03	ND, RDL=0.05			mg/kg	
	Perylene	2006/05/03	ND, RDL=0.05			mg/kg		
	Phenanthrene	2006/05/03	ND, RDL=0.05			mg/kg		
	Pyrene	2006/05/03	ND, RDL=0.05			mg/kg		
	RPD	1-Methylnaphthalene	2006/05/03	NC			%	50
		2-Methylnaphthalene	2006/05/03	NC			%	50
		Acenaphthene	2006/05/03	NC			%	50
		Acenaphthylene	2006/05/03	NC			%	50
		Anthracene	2006/05/03	NC			%	50
		Benzo(a)anthracene	2006/05/03	NC			%	50
		Benzo(a)pyrene	2006/05/03	NC			%	50
		Benzo(b)fluoranthene	2006/05/03	NC			%	50
		Benzo(g,h,i)perylene	2006/05/03	NC			%	50
Benzo(k)fluoranthene		2006/05/03	NC			%	50	
Chrysene		2006/05/03	NC			%	50	
D14-Terphenyl (FS)		2006/05/03	1.0			%	N/A	
Dibenzo(a,h)anthracene		2006/05/03	NC			%	50	
Fluoranthene		2006/05/03	NC			%	50	
Fluorene		2006/05/03	NC			%	50	
Indeno(1,2,3-cd)pyrene		2006/05/03	NC			%	50	
Naphthalene		2006/05/03	NC			%	50	
Perylene		2006/05/03	NC			%	50	
Phenanthrene		2006/05/03	NC			%	50	
Pyrene	2006/05/03	NC			%	50		
960843 SMK MATRIX SPIKE	Aluminum (Al)	2006/05/01			-	%	60 - 130	
	Antimony (Sb)	2006/05/01			-	%	60 - 130	
	Arsenic (As)	2006/05/01			85	%	60 - 130	
	Barium (Ba)	2006/05/01			98	%	60 - 130	
	Beryllium (Be)	2006/05/01			94	%	60 - 130	
	Boron (B)	2006/05/01			-	%	60 - 130	
	Cadmium (Cd)	2006/05/01			93	%	60 - 130	
	Calcium (Ca)	2006/05/01			97	%	60 - 130	
	Chromium (Cr)	2006/05/01			108	%	60 - 130	
	Cobalt (Co)	2006/05/01			100	%	60 - 130	
	Copper (Cu)	2006/05/01			95	%	60 - 130	
	Iron (Fe)	2006/05/01			-	%	60 - 130	

Quality Assurance Report (Continued)

Maxxam Job Number: KA638414

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
960843 SMK	MATRIX SPIKE	Lead (Pb)	2006/05/01		90	%	60 - 130
		Lithium (Li)	2006/05/01		80	%	60 - 130
		Magnesium (Mg)	2006/05/01		109	%	60 - 130
		Manganese (Mn)	2006/05/01		84	%	60 - 130
		Molybdenum (Mo)	2006/05/01		120	%	60 - 130
		Nickel (Ni)	2006/05/01		95	%	60 - 130
		Phosphorus (P)	2006/05/01		83	%	60 - 130
		Potassium (K)	2006/05/01		124	%	60 - 130
		Selenium (Se)	2006/05/01		82	%	60 - 130
		Silver (Ag)	2006/05/01		87	%	60 - 130
		Sodium (Na)	2006/05/01		104	%	60 - 130
		Strontium (Sr)	2006/05/01		91	%	60 - 130
		Sulphur (S)	2006/05/01		-	%	60 - 130
		Thallium (Tl)	2006/05/01		91	%	60 - 130
		Tin (Sn)	2006/05/01		-	%	60 - 130
		Titanium (Ti)	2006/05/01		100	%	60 - 130
		Uranium (U)	2006/05/01		97	%	60 - 130
		Vanadium (V)	2006/05/01		79	%	60 - 130
		Zinc (Zn)	2006/05/01		112	%	60 - 130
		QC STANDARD	Aluminum (Al)	2006/05/01		-	%
Antimony (Sb)	2006/05/01			-	%	60 - 130	
Arsenic (As)	2006/05/01			85	%	60 - 130	
Barium (Ba)	2006/05/01			102	%	60 - 130	
Beryllium (Be)	2006/05/01			-	%	60 - 130	
Boron (B)	2006/05/01			-	%	60 - 130	
Cadmium (Cd)	2006/05/01			112	%	60 - 130	
Calcium (Ca)	2006/05/01			91	%	60 - 130	
Chromium (Cr)	2006/05/01			102	%	60 - 130	
Cobalt (Co)	2006/05/01			110	%	60 - 130	
Copper (Cu)	2006/05/01			100	%	60 - 130	
Iron (Fe)	2006/05/01			92	%	60 - 130	
Lead (Pb)	2006/05/01			99	%	60 - 130	
Lithium (Li)	2006/05/01			95	%	60 - 130	
Magnesium (Mg)	2006/05/01			95	%	60 - 130	
Manganese (Mn)	2006/05/01			98	%	60 - 130	
Molybdenum (Mo)	2006/05/01			99	%	60 - 130	
Nickel (Ni)	2006/05/01			103	%	60 - 130	
Phosphorus (P)	2006/05/01			93	%	60 - 130	
Potassium (K)	2006/05/01			-	%	60 - 130	
Selenium (Se)	2006/05/01		-	%	60 - 130		
Silver (Ag)	2006/05/01		-	%	60 - 130		
Sodium (Na)	2006/05/01		-	%	60 - 130		
Strontium (Sr)	2006/05/01		84	%	60 - 130		
Sulphur (S)	2006/05/01		-	%	60 - 130		
Thallium (Tl)	2006/05/01		-	%	60 - 130		
Tin (Sn)	2006/05/01		-	%	60 - 130		
Titanium (Ti)	2006/05/01		81	%	60 - 130		
Uranium (U)	2006/05/01		76	%	60 - 130		
Vanadium (V)	2006/05/01		124	%	60 - 130		
Zinc (Zn)	2006/05/01		111	%	60 - 130		
Spiked Blank	Aluminum (Al)	2006/05/01		-	%	N/A	
	Antimony (Sb)	2006/05/01		77	%	N/A	
	Arsenic (As)	2006/05/01		96	%	N/A	
	Barium (Ba)	2006/05/01		95	%	N/A	
	Beryllium (Be)	2006/05/01		108	%	N/A	
	Boron (B)	2006/05/01		98	%	N/A	

Quality Assurance Report (Continued)

Maxxam Job Number: KA638414

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
960843 SMK	Spiked Blank	Cadmium (Cd)	2006/05/01		97	%	N/A
		Calcium (Ca)	2006/05/01		106	%	N/A
		Chromium (Cr)	2006/05/01		115	%	N/A
		Cobalt (Co)	2006/05/01		111	%	N/A
		Copper (Cu)	2006/05/01		106	%	N/A
		Iron (Fe)	2006/05/01		106	%	N/A
		Lead (Pb)	2006/05/01		93	%	N/A
		Lithium (Li)	2006/05/01		98	%	N/A
		Magnesium (Mg)	2006/05/01		120	%	N/A
		Manganese (Mn)	2006/05/01		98	%	N/A
		Molybdenum (Mo)	2006/05/01		123	%	N/A
		Nickel (Ni)	2006/05/01		105	%	N/A
		Phosphorus (P)	2006/05/01		96	%	N/A
		Potassium (K)	2006/05/01		106	%	N/A
		Selenium (Se)	2006/05/01		95	%	N/A
		Silver (Ag)	2006/05/01		90	%	N/A
		Sodium (Na)	2006/05/01		108	%	N/A
		Strontium (Sr)	2006/05/01		100	%	N/A
		Sulphur (S)	2006/05/01		87	%	N/A
		Thallium (Tl)	2006/05/01		93	%	N/A
		Tin (Sn)	2006/05/01		86	%	N/A
		Titanium (Ti)	2006/05/01		116	%	N/A
		Uranium (U)	2006/05/01		98	%	N/A
		Vanadium (V)	2006/05/01		94	%	N/A
		Zinc (Zn)	2006/05/01		116	%	N/A
		Method Blank	Method Blank	Aluminum (Al)	2006/05/01	ND, RDL=80	
Antimony (Sb)	2006/05/01			ND, RDL=1		mg/kg	
Arsenic (As)	2006/05/01			ND, RDL=1		mg/kg	
Barium (Ba)	2006/05/01			ND, RDL=10		mg/kg	
Beryllium (Be)	2006/05/01			ND, RDL=1		mg/kg	
Boron (B)	2006/05/01			ND, RDL=20		mg/kg	
Cadmium (Cd)	2006/05/01			ND, RDL=0.2		mg/kg	
Calcium (Ca)	2006/05/01			ND, RDL=300		mg/kg	
Chromium (Cr)	2006/05/01			ND, RDL=1		mg/kg	
Cobalt (Co)	2006/05/01			ND, RDL=1		mg/kg	
Copper (Cu)	2006/05/01			ND, RDL=10		mg/kg	
Iron (Fe)	2006/05/01			ND, RDL=30		mg/kg	
Lead (Pb)	2006/05/01			ND, RDL=1		mg/kg	
Lithium (Li)	2006/05/01			ND, RDL=1		mg/kg	
Magnesium (Mg)	2006/05/01			ND, RDL=80		mg/kg	
Manganese (Mn)	2006/05/01			ND, RDL=10		mg/kg	
Molybdenum (Mo)	2006/05/01			ND, RDL=1		mg/kg	
Nickel (Ni)	2006/05/01			ND, RDL=2		mg/kg	
Phosphorus (P)	2006/05/01			ND, RDL=20		mg/kg	
Potassium (K)	2006/05/01			ND, RDL=400		mg/kg	
Selenium (Se)	2006/05/01			ND, RDL=0.6		mg/kg	
Silver (Ag)	2006/05/01			ND, RDL=1		mg/kg	
Sodium (Na)	2006/05/01			ND, RDL=400		mg/kg	
Strontium (Sr)	2006/05/01			ND, RDL=2		mg/kg	
Sulphur (S)	2006/05/01			ND, RDL=1000		mg/kg	
Thallium (Tl)	2006/05/01			ND, RDL=0.7		mg/kg	
Tin (Sn)	2006/05/01	ND, RDL=10		mg/kg			
Titanium (Ti)	2006/05/01	ND, RDL=1		mg/kg			
Uranium (U)	2006/05/01	ND, RDL=1		mg/kg			
Vanadium (V)	2006/05/01	ND, RDL=1		mg/kg			
Zinc (Zn)	2006/05/01	ND, RDL=50		mg/kg			

Quality Assurance Report (Continued)

Maxxam Job Number: KA638414

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
960843 SMK	RPD	Aluminum (Al)	2006/05/01	0.4		%	35
		Antimony (Sb)	2006/05/01	NC		%	35
		Arsenic (As)	2006/05/01	5.1		%	35
		Barium (Ba)	2006/05/01	6.2		%	35
		Beryllium (Be)	2006/05/01	NC		%	35
		Boron (B)	2006/05/01	NC		%	35
		Cadmium (Cd)	2006/05/01	NC		%	35
		Calcium (Ca)	2006/05/01	9.9		%	35
		Chromium (Cr)	2006/05/01	5.6		%	35
		Cobalt (Co)	2006/05/01	3.0		%	35
		Copper (Cu)	2006/05/01	NC		%	35
		Iron (Fe)	2006/05/01	2.2		%	35
		Lead (Pb)	2006/05/01	13.7		%	35
		Lithium (Li)	2006/05/01	3.2		%	35
		Magnesium (Mg)	2006/05/01	14.4		%	35
		Manganese (Mn)	2006/05/01	9.4		%	35
		Molybdenum (Mo)	2006/05/01	NC		%	35
		Nickel (Ni)	2006/05/01	6.7		%	35
		Phosphorus (P)	2006/05/01	6.4		%	35
		Potassium (K)	2006/05/01	NC		%	35
		Selenium (Se)	2006/05/01	NC		%	35
		Silver (Ag)	2006/05/01	NC		%	35
		Sodium (Na)	2006/05/01	NC		%	35
		Strontium (Sr)	2006/05/01	NC		%	35
		Sulphur (S)	2006/05/01	NC		%	35
		Thallium (Tl)	2006/05/01	NC		%	35
		Tin (Sn)	2006/05/01	NC		%	35
		Titanium (Ti)	2006/05/01	5.8		%	35
		Uranium (U)	2006/05/01	NC		%	35
		Vanadium (V)	2006/05/01	2.5		%	35
		Zinc (Zn)	2006/05/01	NC		%	35
961725 DAN	RPD	Moisture	2006/05/02	14.5		%	50
961779 RST	MATRIX SPIKE	Decachlorobiphenyl	2006/05/03		111	%	30 - 130
		Total PCB	2006/05/03		104	%	70 - 130
	Spiked Blank	Decachlorobiphenyl	2006/05/03		100	%	30 - 130
		Total PCB	2006/05/03		100	%	70 - 130
	Method Blank	Decachlorobiphenyl	2006/05/03		105	%	30 - 130
		Total PCB	2006/05/03	ND, RDL=0.05		ug/g	
	RPD	Decachlorobiphenyl	2006/05/03	15.1		%	N/A
		Total PCB	2006/05/03	NC		%	50
961909 JLY	MATRIX SPIKE	Isobutylbenzene - Volatile	2006/05/02		103	%	60 - 140
		Benzene	2006/05/02		88	%	40 - 130
		Toluene	2006/05/02		90	%	40 - 130
		Ethylbenzene	2006/05/02		89	%	40 - 130
		Xylene (Total)	2006/05/02		90	%	40 - 130
		C6 - C10 (less BTEX)	2006/05/02		103	%	N/A
	Spiked Blank	Isobutylbenzene - Volatile	2006/05/02		100	%	60 - 140
		Benzene	2006/05/02		94	%	40 - 130
		Toluene	2006/05/02		94	%	40 - 130
		Ethylbenzene	2006/05/02		91	%	40 - 130
		Xylene (Total)	2006/05/02		92	%	40 - 130
		C6 - C10 (less BTEX)	2006/05/02		108	%	N/A
	Method Blank	Isobutylbenzene - Volatile	2006/05/02		99	%	60 - 140
		Benzene	2006/05/02	ND, RDL=0.003		mg/kg	
		Toluene	2006/05/02	ND, RDL=0.025		mg/kg	
		Ethylbenzene	2006/05/02	ND, RDL=0.01		mg/kg	

Quality Assurance Report (Continued)

Maxxam Job Number: KA638414

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
961909 JLY	Method Blank	Xylene (Total)	2006/05/02	ND, RDL=0.05		mg/kg	
		C6 - C10 (less BTEX)	2006/05/02	ND, RDL=3		mg/kg	
	RPD	Benzene	2006/05/02	NC		%	50
		Toluene	2006/05/02	NC		%	50
		Ethylbenzene	2006/05/02	NC		%	50
		Xylene (Total)	2006/05/02	NC		%	50
962335 SSI	MATRIX SPIKE	C6 - C10 (less BTEX)	2006/05/02	NC		%	50
	QC STANDARD	Mercury (Hg)	2006/05/03		85	%	75 - 125
	Spiked Blank	Mercury (Hg)	2006/05/03		89	%	75 - 125
	Method Blank	Mercury (Hg)	2006/05/03		102	%	75 - 125
	RPD	Mercury (Hg)	2006/05/03	ND, RDL=0.01		mg/kg	
963037 TJO	MATRIX SPIKE	Mercury (Hg)	2006/05/03	NC		%	35
	QC STANDARD	Chromium (VI)	2006/05/03		97	%	75 - 125
	Spiked Blank	Chromium (VI)	2006/05/03		97	%	85 - 115
	Method Blank	Chromium (VI)	2006/05/03		102	%	75 - 125
	RPD	Chromium (VI)	2006/05/03	ND, RDL=0.05		ug/g	
		Chromium (VI)	2006/05/03	NC		%	35

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