

# Appendix C

**PRELIMINARY RESULTS**

DILLON LIMITED

**ATTN:** ROB KUTA

PO BOX 1409

YELLOWKNIFE NT X1A 2P1

**DATE:** 13-JUL-05 11:32 AM

**Lab Work Order #:** L284184

**Sampled By:** RK

**Date Received:** 06-JUL-05

**Project P.O. #:**

**Project Reference:** 05\_4755\_1000

**Comments:**

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DOUG JOHNSON  
Director of Operations, Edmonton

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RACHEL JONES  
Account Manager

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THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.  
ANY REMAINING SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU  
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

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ENVIRO-TEST ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier	D.L.	Units	Extracted	Analyzed	By	Batch
L284184-1      20050705_05_4755_WL1 WETLANDS OCEAN									
Sample Date: 05-JUL-05    10:30									
Matrix:            SEWAGE									
Ammonia-N		42.3		0.05	mg/L		07-JUL-05	WNG	R300756
Biochemical Oxygen Demand		19		2	mg/L		06-JUL-05	FY	R301814
MF - Fecal Coliforms		90		1	CFU/100mL		08-JUL-05	PB	R302425
Total Suspended Solids		8		3	mg/L		07-JUL-05	SVG	R300750
L284184-2      20050705_05_4755_WL2 WESTLANDS MIDSLOPE									
Sample Date: 05-JUL-05    10:35									
Matrix:            SEWAGE									
Ammonia-N		39.3		0.05	mg/L		07-JUL-05	WNG	R300756
Biochemical Oxygen Demand		34		2	mg/L		06-JUL-05	FY	R301814
MF - Fecal Coliforms		2000		1	CFU/100mL		08-JUL-05	PB	R302425
Total Suspended Solids		11		3	mg/L		07-JUL-05	SVG	R300750
L284184-3      20050705_05_4755_WL3 WETLANDS LOWER B									
Sample Date: 05-JUL-05    10:40									
Matrix:            SEWAGE									
Ammonia-N		65.7		0.05	mg/L		07-JUL-05	WNG	R300756
Biochemical Oxygen Demand		73		2	mg/L		06-JUL-05	FY	R301814
MF - Fecal Coliforms		12000		1	CFU/100mL		08-JUL-05	PB	R302425
Total Suspended Solids		46		3	mg/L		07-JUL-05	SVG	R300750
L284184-4      20050705_05_4755LC1 LOWER CELL									
Sample Date: 05-JUL-05    10:45									
Matrix:            SEWAGE									
Ammonia-N		52.2		0.05	mg/L		07-JUL-05	WNG	R300756
Biochemical Oxygen Demand		70		2	mg/L		06-JUL-05	FY	R301814
MF - Fecal Coliforms		21000		1	CFU/100mL		08-JUL-05	PB	R302425
Total Suspended Solids		20		3	mg/L		07-JUL-05	SVG	R300750
L284184-5      20050705_05_4755_UC1 UPPER CELL NORTH									
Sample Date: 05-JUL-05    10:50									
Matrix:            SEWAGE									
Ammonia-N		64.9		0.05	mg/L		07-JUL-05	WNG	R300756
Biochemical Oxygen Demand		152		2	mg/L		06-JUL-05	FY	R301814
MF - Fecal Coliforms		68000		1	CFU/100mL		08-JUL-05	PB	R302425
Total Suspended Solids		25		3	mg/L		07-JUL-05	SVG	R300750
L284184-6      20050705_05_4755_UC2 UPPER CELL NORTH WATER									
Sample Date: 05-JUL-05    10:55									
Matrix:            SEWAGE									
Ammonia-N		63.9		0.05	mg/L		07-JUL-05	WNG	R300756
Biochemical Oxygen Demand		116		2	mg/L		06-JUL-05	FY	R301814
MF - Fecal Coliforms		120000		1	CFU/100mL		08-JUL-05	PB	R302425
Total Suspended Solids		22		3	mg/L		07-JUL-05	SVG	R300750
L284184-7      20050705_05_4755_UC3 UPPER CELL SOUTH									
Sample Date: 05-JUL-05    11:00									
Matrix:            SEWAGE									

Sample Details/Parameters		Result	Qualifier	D.L.	Units	Extracted	Analyzed	By	Batch
L284184-7	20050705_05_4755_UC3 UPPER CELL SOUTH								
Sample Date: 05-JUL-05 11:00									
Matrix: SEWAGE									
	Ammonia-N	71.0		0.05	mg/L		07-JUL-05	WNG	R300756
	Biochemical Oxygen Demand	133		2	mg/L		06-JUL-05	FY	R301814
	MF - Fecal Coliforms	62000		1	CFU/100mL		08-JUL-05	PB	R302425
	Total Suspended Solids	19		3	mg/L		07-JUL-05	SVG	R300750
L284184-8	20050705_05_4755_WSI1 WEST SLOPE UPPER CELL								
Sample Date: 05-JUL-05 11:05									
Matrix: SEWAGE									
	Ammonia-N	0.06		0.05	mg/L		06-JUL-05	WNG	R300309
	Biochemical Oxygen Demand	<2		2	mg/L		06-JUL-05	FY	R301814
	MF - Fecal Coliforms	<1		1	CFU/100mL		08-JUL-05	PB	R302425
	Total Suspended Solids	37		3	mg/L		07-JUL-05	SVG	R300750
L284184-9	20050705_05_4755_PWL1 UPPER PROPOSED WET LAND								
Sample Date: 05-JUL-05 14:10									
Matrix: WATER									
	Ammonia-N	<0.05		0.05	mg/L		06-JUL-05	WNG	R300309
	Biochemical Oxygen Demand	<2		2	mg/L		06-JUL-05	FY	R301814
	MF - Fecal Coliforms	<1		1	CFU/100mL		08-JUL-05	PB	R302425
	Total Suspended Solids	<3		3	mg/L		07-JUL-05	SVG	R300750
L284184-10	20050705_05_4755_PWL2 LOWER PROPOSED WET LAND								
Sample Date: 05-JUL-05 14:15									
Matrix: WATER									
	Ammonia-N	<0.05		0.05	mg/L		06-JUL-05	WNG	R300309
	Biochemical Oxygen Demand	<2		2	mg/L		06-JUL-05	FY	R301814
	MF - Fecal Coliforms	<1		1	CFU/100mL		08-JUL-05	PB	R302425
	Total Suspended Solids	<3		3	mg/L		07-JUL-05	SVG	R300750
L284184-11	20050705_05_4755_LF1 LANDFILL RUNOFF								
Sample Date: 05-JUL-05 11:10									
Matrix: WATER									
	Biochemical Oxygen Demand	2		2	mg/L		06-JUL-05	FY	R301814
	Total Suspended Solids	8		3	mg/L		07-JUL-05	SVG	R300750
L284184-12	20050705_05_4755_LF2 LANDFILL PONDING								
Sample Date: 05-JUL-05 11:15									
Matrix: WATER									
	Biochemical Oxygen Demand	322		2	mg/L		06-JUL-05	FY	R301814
	Total Suspended Solids	37		3	mg/L		07-JUL-05	SVG	R300750
L284184-13	BLANK COOLER 1 CONT. CONTROL								
Sample Date: 05-JUL-05 13:00									
Matrix: WATER									
	MF - Fecal Coliforms	<1		1	CFU/100mL		08-JUL-05	PB	R302425

ENVIRO-TEST ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Extracted	Analyzed	By	Batch
L284184-14      BLANK COOLER 2 CONT. CONTROL Sample Date: 05-JUL-05    13:00 Matrix:            WATER  MF - Fecal Coliforms	<1		1	CFU/100mL		08-JUL-05	PB	R302425
Refer to Referenced Information for Qualifiers (if any) and Methodology.								

## Reference Information

### Methods Listed (if applicable):

ETL Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
BOD-ED	Water	Biochemical Oxygen Demand (BOD)		APHA 5210 B-5 day Incub.-O2 electrode
FCC-MF-PB	Water	Fecal Coliform Count-MF		APHA 9222D MF
NH4-ED	Water	Ammonia-N		APHA4500NH3F Colorimetry
SOLIDS-TOTSUS-ED	Water	Total Suspended Solids		APHA 2540 D-Gravimetric

\*\* Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

### Chain of Custody numbers:

204285

204286

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
ED	Enviro-Test Laboratories - Edmonton, Alberta, Canada	PB	PBR LABORATORIES

### GLOSSARY OF REPORT TERMS

*Surr* - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds. The reported surrogate recovery value provides a measure of method efficiency. The Laboratory warning units are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million

mg/L (units) - unit of concentration based on volume, parts per million

< - Less than

D.L. - Detection Limit

N/A - Result not available. Refer to qualifier code and definition for explanation

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.

Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

Enviro-Test Laboratories has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, Enviro-Test Laboratories assumes no liability for the use or interpretation of the results.

## ANALYTICAL REPORT

GOVERNMENT OF NUNAVUT

ATTN: NAVIJIT SIDHU

Reported On: 31-AUG-06 06:11 PM

BAG 200, 2ND FLR

CAMBRIDGE BAY NU X0B 0C0

Lab Work Order #: **L425715**

Date Received: **24-AUG-06**

Project P.O. #:

Job Reference: COMMUNITY & GOVERNMENT SERVICES

Legal Site Desc:

CofC Numbers: 271507

Other Information:

Comments:



A handwritten signature in black ink, appearing to be "Roy Jones", written over a horizontal line.

ROY JONES  
General Manager

For any questions about this report please contact your Account Manager:

**CATHERINE EVARISTO-CORDERO**

\* Refer to Referenced Information for Qualifiers (if any) and Methodology.



Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
BOD-ED	Water	Biochemical Oxygen Demand (BOD)		APHA 5210 B-5 day Incub.-O2 electrode
ECC-MF-PB	Water	Escherchia coli Count (E.coli)-MF		APHA 9221F MF
FCC-MF-PB	Water	Fecal Coliform Count-MF		APHA 9222D MF
N-TOTKJ-ED	Water	Total Kjeldahl Nitrogen		APHA 4500N-C -Dig.-Auto-Colorimetry
NH4-ED	Water	Ammonia-N		APHA4500NH3F Colorimetry
SOLIDS-TOTSUS-ED	Water	Total Suspended Solids		APHA 2540 D-Gravimetric

\*\* Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

271507

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
ED	ALS LABORATORY GROUP - EDMONTON, ALBERTA, CANADA	PB	PBR LABORATORIES

GLOSSARY OF REPORT TERMS

Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds. The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.  
mg/kg (units) - unit of concentration based on mass, parts per million.  
mg/L (units) - unit of concentration based on volume, parts per million.  
< - Less than.  
D.L. - The reporting limit.  
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.  
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.  
UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.  
Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.



**Environmental Division**

**ALS Laboratory Group Quality Control Report**

Workorder: L425715

Report Date: 31-AUG-06

Page 1 of 3

Client: GOVERNMENT OF NUNAVUT  
BAG 200, 2ND FLR  
CAMBRIDGE BAY NU X0B 0C0

Contact: NAVIJIT SIDHU

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<u>BOD-ED</u>		<u>Water</u>						
Batch	R435728							
WG488789-4	DUP	L425460-1						
Biochemical Oxygen Demand		9	9	J	mg/L	0	8	24-AUG-06
WG488789-3	IRM	BOD SEED						
Biochemical Oxygen Demand			0.8		mg/L		0.2-1.7	24-AUG-06
WG488789-2	LCS							
Biochemical Oxygen Demand			108		%		85-115	24-AUG-06
WG488789-1	MB							
Biochemical Oxygen Demand			<0.2		mg/L		0.2	24-AUG-06
<u>N-TOTKJ-ED</u>								
Batch	R435968							
WG488547-5	DUP	L425392-10						
Total Kjeldahl Nitrogen		1.0	0.8	J	mg/L	0.1	0.8	29-AUG-06
WG488547-2	LCS							
Total Kjeldahl Nitrogen			92		%		82-115	29-AUG-06
WG488547-3	LCS							
Total Kjeldahl Nitrogen			91		%		69-131	29-AUG-06
WG488547-4	LCS							
Total Kjeldahl Nitrogen			92		%		83-118	29-AUG-06
WG488547-1	MB							
Total Kjeldahl Nitrogen			<0.2		mg/L		0.2	29-AUG-06
WG488547-6	MS	L423487-3						
Total Kjeldahl Nitrogen			97		%		61-140	29-AUG-06
<u>NH4-ED</u>		<u>Water</u>						
Batch	R434683							
WG487121-5	DUP	L424783-1						
Ammonia-N		<0.05	<0.05	RPD-NA	mg/L	N/A	10	25-AUG-06
WG487121-7	DUP	L425607-1						
Ammonia-N		<0.05	<0.05	RPD-NA	mg/L	N/A	10	25-AUG-06
WG487121-9	DUP	L425392-10						
Ammonia-N		0.56	0.56		mg/L	0.16	10	25-AUG-06
WG487121-2	LCS							
Ammonia-N			103		%		90-111	25-AUG-06
WG487121-1	MB							
Ammonia-N			<0.05		mg/L		0.05	25-AUG-06
WG487121-10	MS	L425392-20						
Ammonia-N			108		%		84-120	25-AUG-06
WG487121-4	MS	L423772-3						

## ALS Laboratory Group Quality Control Report

Workorder: L425715

Report Date: 31-AUG-06

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b><u>NH4-ED</u></b>		<b><u>Water</u></b>						
<b>Batch</b>	<b>R434683</b>							
<b>WG487121-4</b>	<b>MS</b>	<b>L423772-3</b>						
Ammonia-N			110		%		84-120	25-AUG-06
<b>WG487121-6</b>	<b>MS</b>	<b>L424792-7</b>						
Ammonia-N			107		%		84-120	25-AUG-06
<b>WG487121-8</b>	<b>MS</b>	<b>L424792-1</b>						
Ammonia-N			109		%		84-120	25-AUG-06
<b><u>SOLIDS-TOTSUS-ED</u></b>		<b><u>Water</u></b>						
<b>Batch</b>	<b>R434619</b>							
<b>WG487067-3</b>	<b>DUP</b>	<b>L425393-6</b>						
Total Suspended Solids		<3	<3	RPD-NA	mg/L	N/A	14	25-AUG-06
<b>WG487067-4</b>	<b>DUP</b>	<b>L425647-1</b>						
Total Suspended Solids		3	<3	RPD-NA	mg/L	N/A	14	25-AUG-06
<b>WG487067-2</b>	<b>LCS</b>							
Total Suspended Solids			102		%		83-111	25-AUG-06
<b>WG487067-1</b>	<b>MB</b>							
Total Suspended Solids			<3		mg/L		3	25-AUG-06

## **ALS Laboratory Group Quality Control Report**

Workorder: L425715

Report Date: 31-AUG-06

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### Legend:

Limit	99% Confidence Interval (Laboratory Control Limits)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

### Qualifier:

RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.
A	Method blank exceeds acceptance limit. Blank correction not applied, unless the qualifier "RAMB" (result adjusted for method blank) appears in the Analytical Report.
B	Method blank result exceeds acceptance limit, however, it is less than 5% of sample concentration. Blank correction not applied.
E	Matrix spike recovery may fall outside the acceptance limits due to high sample background.
F	Silver recovery low, likely due to elevated chloride levels in sample.
G	Outlier - No assignable cause for nonconformity has been determined.
J	Duplicate results and limit(s) are expressed in terms of absolute difference.
K	The sample referenced above is of a non-standard matrix type; standard QC acceptance criteria may not be achievable.

**PBR**  
Laboratories Inc.**MICROBIOLOGY ANALYSIS REPORT****REPORT #:** 060830-6**FILE:** ALS-060830-6**WO #:** 06-CDL**P.O #:** 425715**CLIENT:** ALS Laboratory Group  
9936-67 Ave  
Edmonton, AB, T6E 0P5**ATTENTION:** ALS-ED Reporting  
PH: 780-413-5227  
Fax: 780-437-2680**SAMPLE DESCRIPTION:** Water Samples.**DATE & TIME OF SAMPLE RECEIPT:** August 24, 2006 / 4:00 PM.**TESTS PERFORMED:** Fecal Coliform & *E. coli* by MF.**TEST START DATE:** August 24, 2006**COMPLETION DATE:** August 26, 2006**CERTIFICATE OF ANALYSIS:** Please see page 2.

The report shall not be reproduced, except in full, without the written authority of PBR Laboratories.

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PBR has accreditation from Standards Council of Canada (SCC) under the International Standard ISO/IEC 17025 (CAN-P-4D) for the registered tests.

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9960 - 67 Avenue NW, Edmonton, Alberta, Canada T6E 0P5 • Telephone (780) 450-3957 • Fax (780) 450-3960  
E-mail: pbr@pbr.ca Web Site: www.pbr.ca Toll free: 1-866-450-3957

**CERTIFICATE OF ANALYSIS****Table 1. Water Samples: Fecal Coliform & *E. coli*.**

PBR ID	Client Sample No.	Client ID	CFU / 100ml (APHA -9222D & 9222G)	
			Fecal Coliform	<i>E. coli</i>
06-CDL-01	L425715-1	25M U/S OF OCEAN KUGARRUK	7	7
06-CDL-02	L425715-2	MIDDLE OF LAGOON KUGARRUK	10	10
06-CDL-03	L425715-3	OUTSIDE OF LAGOON KUGARRUK	$1.1 \times 10^5$	$9.0 \times 10^4$

*Note: Microbial count is expressed as CFU (Colony Forming Unit).*

*\*No Counts were detected.*

Warren Schmidt

Warren Schmidt (Analyst)

DATE: 060830

Approved by:

Narayan Pokharel

Narayan Pokharel, Ph.D.

DATE: 30 Aug 06

[illegible]