



PHILIP ANALYTICAL
19-Sep-00
Page 1 of 7

Certificate of Analysis

8577 Commerce Court
Burnaby, B.C.
Canada V5A 4N5
Tel 604 444 4808
Fax 604 444 4511

Reported To :

HEALTH CANADA

Client Code CE

220 - 177 VICTORIA STREET
PRINCE GEORGE, BC
V2L 5R8

Phone : (250) 561-5384
FAX : (250) 564-3272

Project Information :

Project ID : ALEXANDRIA WEST; SYSTEM NEW WELL
Submitted By: I. BAIRD

Requisition Forms :

Form 08055183 logged on 12-Sep-00 completed on 19-Sep-00

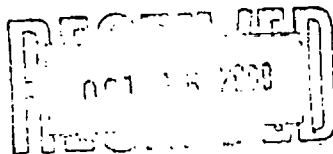
Remarks :

- ☞ All organic data is blank corrected except for PCDD/F, Hi-res MS and CLP volatile analyses
- ☞ 'MDL' = Method Detection Limit, '<' = Less than MDL, '---' = Not analyzed
- ☞ 'CDWG' = Canadian Drinking Water Guidelines
- ☞ Solids results are based on dry weight except Biota Analyses & Special Waste Oil & Grease
- ☞ Organic analyses are not corrected for extraction recovery standards except for Isotope Dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
- ☞ All Groundwater samples except BTEX/VOC's or Purgeable Hydrocarbons are decanted and/or filtered prior to analysis unless otherwise mandated by regulatory agency
- ☞ This report shall not be reproduced except in full, without the written approval of the laboratory

Methods used by Philip are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', 20th Edition, published by the American Public Health Association, or on US EPA protocols found in the 'Test Methods For Evaluating Solid Waste, Physical/Chemical Method, SW846', 3rd Edition. Other procedures are based on methodologies accepted by the appropriate regulatory agency. Methodology briefs are available by written request.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Liability for any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at Philip for a period of 30 days from receipt of data or as per contract.

PHILIP Project Manager: James Teshima





PHILIP ANALYTICAL

19-Sep-00
Page 2 of 7

ANALYTICAL REPORT

Client : HEALTH CANADA
Project : ALEXANDRIA WEST: SYSTEM NEW WELL
Sampling site :
Submitted by : I. BAIRD

COMMUNITY WELL
↓
PRIVATE
↓

Philip ID : 10057652 10057653
Client ID : JOHN'S HO DICK'S
 USE (NEW) WELL 23M

Sparcode	Parameter	Unit	MDL	CDWG		
PHYSICAL						
00041220	pH	pH units	0.1	6.5-8.5	8.2	8.3
00021300	Color True	Col.Unit	5	15	< 5	< 5
00111160	Specific Conductance	uS/cm	1	---	820	670
SCCACALC	Computed Conductance	uS/cm		---	964	786
CCPDCALC	Conductance % Diff.	%		---	16.2	15.9
007H1035	Residue Filterable 1.0u (TDS)	mg/L	10	500	538 ←	428
CTDSCALC	Computed TDS	mg/L		---	552	426
TDSRCALC	TDS % Diff.	%		---	2.5	-0.5
00151140	Turbidity	NTU	0.10	1.0	0.20	1.08 ←
0107CALC	Hardness Total -T	mg/L		500	45.0	179
GENERAL INORGANICS						
01011211	Alkalinity Phen. 8.3 as CaCO3	mg/L	1	---	< 1	3
01021210	Alkalinity Total as CaCO3	mg/L	1	---	471	255
CO3-CALC	Carbonate as CO3=	mg/L		---	< 0.5	3.6
HCO3CALC	Bicarbonate as HCO3-	mg/L		---	574	304
OH--CALC	Hydroxide as OH-	mg/L		---	< 0.5	< 0.5
ANIONS						
11041334	Chloride Dissolved	mg/L	1.0	< 250	13	2.6
11061341	Fluoride Dissolved	mg/L	0.10	1.5	2.23 ←	0.19
IonBCALC	Ion Balance	%		---	-6.9	0.7
AnnsCALC	Total Anions	meq/L		---	10.76	7.59
CtnsCALC	Total Cations	meq/L		---	9.37	7.70
LangCALC	Langelier Index	pH units		---	0.5	0.8
pHSACALC	Saturation pH	pH units		---	7.7	7.5
NITROGEN						
1110CALC	Nitrate Nitrogen Dissolved (N)	mg/L		10.0	0.03	0.06
11091350	Nitrate+Nitrite (N)	mg/L	0.02	10.0	0.03	0.06
11111354	Nitrite Nitrogen (N)	mg/L	0.005	1.0	< 0.005	< 0.005

Matrix : Water Water
Sampled on: 00/09/08 08:55 00/09/08 09:30

CONTINUED on page 3



PHILIP ANALYTICAL

19-Sep-00
Page 3 of 7

ANALYTICAL REPORT

Client : HEALTH CANADA
Project : ALEXANDRIA WEST; SYSTEM NEW WELL
Sampling site :
Submitted by : I. BAJRD

Philip ID : 10057652 10057653
Client ID : JOHN'S HO DICK'S
USE (NEW) WELL 23M

Sparcode	Parameter	Unit	MDL	CDWG		
SULFATE						
11211405	Sulfate	mg/L	1.0	< 500	41.0	115
METALS TOTAL						
Al-T0031	Aluminum	mg/L	0.02	—	< 0.02	< 0.02
As-TMS31	Arsenic	mg/L	0.001	0.025	0.007	0.005
Ba-T0031	Barium	mg/L	0.001	1.0	0.034	0.036
B--T0031	Boron	mg/L	0.008	5.0	0.282	0.037
Cd-TMS31	Cadmium	mg/L	0.0001	0.005	< 0.0001	< 0.0001
Ca-T0031	Calcium	mg/L	0.05	—	13.4	39.0
Cr-T0031	Chromium	mg/L	0.002	0.05	0.002	0.002
Cu-T0031	Copper	mg/L	0.001	1.0	0.006	0.002
Fe-T0031	Iron	mg/L	0.005	0.3	0.013	0.059
Pb-TMS31	Lead	mg/L	0.001	0.01	< 0.001	< 0.001
Mg-T0031	Magnesium	mg/L	0.05	—	2.81	19.9
Mn-T0031	Manganese	mg/L	0.001	0.05	0.035	0.139
Hg-T0310	Mercury	mg/L	0.00005	0.001	< 0.00005	< 0.00005
K_T0031	Potassium	mg/L	0.4	---	3.6	3.1
Se-TMS31	Selenium	mg/L	0.001	0.01	< 0.001	< 0.001
Na-T0031	Sodium	mg/L	0.010	200	193	92.7
U--TLLMS	Uranium	mg/L	0.00001	0.1	0.00019	0.00038
Zn-T0031	Zinc	mg/L	0.002	5.0	0.014	< 0.002

Matrix : Water Water
Sampled on: 00/09/08 08:55 00/09/08 09:30



PHILIP ANALYTICAL

19-Sep-00
Page 4 of 7

SPIKE SUMMARY

Parameter	Client ID	Philip ID	Sample Conc.	Sample & Spike Conc.	Spike Amount	Unit	Percent Recovery
Specific Conductance	Blank Spike. Batch :	04403431	1	1040	1015	uS/cm	102
Residue Filterable 1.0u (TDS)	Blank Spike. Batch :	04403438	< 10	104	100	mg/L	100
pH	Blank Spike. Batch :	04403430	< 0.1	6.0	6	pH units	100
Turbidity	Blank Spike. Batch :	04403428	< 0.10	1.97	2	NTU	96
Alkalinity Total as CaCO3	Blank Spike. Batch :	04403432	< 1	101	100	mg/L	101
Chloride Dissolved	Blank Spike. Batch :	04101852	< 1.0	100	100	mg/L	100
Fluoride Dissolved	Blank Spike. Batch :	04101834	< 0.10	0.40	.4	mg/L	95
Sulfate Dissolved	Blank Spike. Batch :	04101853	< 1.0	106	100	mg/L	105
Nitrate+Nitrite (N)	Blank Spike. Batch :	04101816	< 0.02	0.45	.4	mg/L	112
Nitrite Nitrogen (N)	Blank Spike. Batch :	04101816	< 0.005	0.105	.1	mg/L	105
Arsenic	Blank Spike. Batch :	04202912	< 0.001	0.022	.02	mg/L	109
Cadmium	Blank Spike. Batch :	04202912	< 0.0001	0.0202	.02	mg/L	101
Lead	Blank Spike. Batch :	04202912	< 0.001	0.023	.02	mg/L	113
Selenium	Blank Spike. Batch :	04202912	< 0.001	0.021	.02	mg/L	104
Mercury	Blank Spike. Batch :	04202928	< 0.00005	0.00053	.0005	mg/L	104



PHILIP ANALYTICAL

19-Sep-00
Page 5 of 7

ANALYSIS DATES

Philip ID:	10057652	10057653
Client ID:	JOHN'S HO USE (NEW)	DICK'S WELL 23M

00041220	pH	13-SEP-2000	13-SEP-2000
00021300	Color True	18-SEP-2000	18-SEP-2000
00111160	Specific Conductance	13-SEP-2000	13-SEP-2000
007H1035	Residue Filterable 1.0u (TDS)	15-SEP-2000	15-SEP-2000
00151140	Turbidity	13-SEP-2000	13-SEP-2000
01011211	Alkalinity Phen. 8.3 as CaCO3	13-SEP-2000	13-SEP-2000
01021210	Alkalinity Total as CaCO3	13-SEP-2000	13-SEP-2000
11041334	Chloride Dissolved	15-SEP-2000	15-SEP-2000
11061341	Fluoride Dissolved	14-SEP-2000	14-SEP-2000
11091350	Nitrate+Nitrite (N)	13-SEP-2000	13-SEP-2000
11111354	Nitrite Nitrogen (N)	13-SEP-2000	13-SEP-2000
11211405	Sulfate	15-SEP-2000	15-SEP-2000
As-TMS31	Arsenic	14-SEP-2000	14-SEP-2000
Cd-TMS31	Cadmium	14-SEP-2000	14-SEP-2000
DOH-MET	DOH-MET	13-SEP-2000	13-SEP-2000
Pb-TMS31	Lead	14-SEP-2000	14-SEP-2000
Hg-T0310	Mercury	15-SEP-2000	15-SEP-2000
Se-TMS31	Selenium	14-SEP-2000	14-SEP-2000
U-TLLMS	Uranium	14-SEP-2000	14-SEP-2000

Matrix:	Water	Water
Sampled on:	8-SEP-2000	8-SEP-2000



PHILIP ANALYTICAL

19-Sep-00
Page 6 of 7

BATCH NUMBERS

Philip ID:	10057652	10057653
Client ID:	JOHN'S HO USE (NEW)	DICK'S WELL 23M

00041220	pH	04403430	04403430
00021300	Color True	04101826	04101826
00111160	Specific Conductance	04403431	04403431
007H1035	Residue Filterable 1.0u (TDS)	04403438	04403438
00151140	Turbidity	04403428	04403428
01011211	Alkalinity Phen. 8.3 as CaCO3	04403433	04403433
01021210	Alkalinity Total as CaCO3	04403432	04403432
11041334	Chloride Dissolved	04101852	04101852
11061341	Fluoride Dissolved	04101834	04101834
11091350	Nitrate+Nitrite (N)	04101816	04101816
11111354	Nitrite Nitrogen (N)	04101816	04101816
11211405	Sulfate	04101853	04101853
As-TMS31	Arsenic	04202912	04202912
Cd-TMS31	Cadmium	04202912	04202912
DOH-MET	DOH-MET	04202918	04202918
Pb-TMS31	Lead	04202912	04202912
Hg-T0310	Mercury	04202928	04202928
Se-TMS31	Selenium	04202912	04202912
U-TLLMS	Uranium	04202912	04202912

Matrix:	Water	Water
Sampled on:	8-SEP-2000	8-SEP-2000



PHILIP ANALYTICAL

19-Sep-00
Page 7 of 7

BLANK SUMMARY

All method blanks were less than MDL, except the following:

Parameter	Batch	Sparcode	Blank Conc.	MDL	Unit
Specific Conductance	04403431	00111160	1	1	uS/cm
Potassium	04202918	K_T0031	0.6	0.4	mg/L
Zinc	04202918	Zn-T0031	0.005	0.002	mg/L
Copper	04202918	Cu-T0031	0.002	0.001	mg/L



PHILIP ANALYTICAL

04-Aug-00
Page 2 of 8

ANALYTICAL REPORT

Client : HEALTH CANADA
Project : ALEXANDRIA WEST-NJ WELL, T CREEK, R SPRG
Sampling site :
Submitted by : I.BAIRD

Philip ID :	10045758	10045759	10045760
Client ID :	NORMAN JO HNNY WELL	ROY'S SPRING	TOMAHAWK CREEK

Sparcode	Parameter	Unit	MDL			
PHYSICAL						
00041220	pH	pH units	0.1	8.5	8.2	8.6 ←
00021300	Color Truc	Col.Unit	5	< 5	< 5	30
00111160	Specific Conductance	uS/cm	1	722	328	726
SCCASCALC	Computed Conductance	uS/cm		783	374	828
CCPDASCALC	Conductance % Diff.	%		8.1	13.1	13.1
007H1035	Residue Filterable 1.0u (TDS)	mg/L	10	432	226	468
CTDSCALC	Computed TDS	mg/L		427	190	418
TDSRCALC	TDS % Diff.	%		-1.1	-17.5	-11.2
00151140	Turbidity	NTU	0.10	0.83	0.44	1.21 ←
00107CALC	Hardness Total -T	mg/L		158	183	370
GENERAL INORGANICS						
01011211	Alkalinity Phen. 8.3 as CaCO3	mg/L	1	9	< 1	18
01021210	Alkalinity Total as CaCO3	mg/L	1	367	200	432
CO3-CALC	Carbonate as CO3=	mg/L		10.8	< 0.5	21.6
HCO3CALC	Bicarbonate as HCO3-	mg/L		425	244	483
OH--CALC	Hydroxide as OH-	mg/L		< 0.5	< 0.5	< 0.5
ANIONS						
11041334	Chloride Dissolved	mg/L	1.0	3.2	< 1.0	2.2
11061341	Fluoride Dissolved	mg/L	0.10	0.24	0.10	0.23
IonBCALC	Ion Balance	%		-4.9	-2.2	-1.1
AnnsCALC	Total Anions	meq/L		8.52	4.10	8.96
CmncALC	Total Cations	meq/L		7.72	3.92	8.76
LangCALC	Langelier Index	pH units		0.9	0.6	1.5
pHSACALC	Saturation pH	pH units		7.6	7.6	7.1
NITROGEN						
1110CALC	Nitrate Nitrogen Dissolved (N)	mg/L		0.04	0.11	0.05
11091350	Nitrate + Nitrite (N)	mg/L	0.02	0.04	0.11	0.05
11111354	Nitrite Nitrogen (N)	mg/L	0.005	< 0.005	< 0.005	< 0.005
				Matrix :	Water	Water
				Sampled on:	00/07/25 16:00	00/07/25 16:00
					Water	00/07/25 16:00

CONTINUED on page 3



PHILIP ANALYTICAL

04-Aug-00
Page 3 of 8

ANALYTICAL REPORT

Client : HEALTH CANADA
Project : ALEXANDRIA WEST-NJ WELL, T CREEK, R SPRG
Sampling site :
Submitted by : I.BAIRD

Philip ID :	10045758	10045759	10045760
Client ID :	NORMAN JO HNNY WELL	ROY'S SPRING	TOMAHAWK CREEK

Sparcode	Parameter	Unit	MDL			
SULFATE						
11211405	Sulfate	mg/L	1.0	51.5	3.3	11.8
METALS TOTAL						
Al-T0031	Aluminum	mg/L	0.02	< 0.02	< 0.02	< 0.02
As-TMS31	Arsenic	mg/L	0.001	0.002	< 0.001	< 0.001
Ba-T0031	Barium	mg/L	0.001	0.023	< 0.001	0.019
B--T0031	Boron	mg/L	0.008	0.042	< 0.008	0.009
Cd-TMS31	Cadmium	mg/L	0.0001	< 0.0001	< 0.0001	< 0.0001
Ca-T0031	Calcium	mg/L	0.05	20.2	36.7	54.5
Cr-T0031	Chromium	mg/L	0.002	< 0.002	0.003	< 0.002
Cu-T0031	Copper	mg/L	0.001	< 0.001	0.015	< 0.001
Fe-T0031	Iron	mg/L	0.005	0.154	< 0.005	0.051
Pb-TMS31	Lead	mg/L	0.001	< 0.001	< 0.001	< 0.001
Mg-T0031	Magnesium	mg/L	0.05	26.1	22.3	56.8
Mn-T0031	Manganese	mg/L	0.001	0.038	< 0.001	0.059
Hg-T0310	Mercury	mg/L	0.00005	< 0.00005	< 0.00005	< 0.00005
K_T0031	Potassium	mg/L	0.4	2.7	2.3	4.9
Se-TMS31	Selenium	mg/L	0.001	< 0.001	< 0.001	< 0.001
Na-T0031	Sodium	mg/L	0.010	103	4.43	28.5
U--TLLMS	Uranium	mg/L	0.00001	0.00389	0.00060	0.00223
Zn-T0031	Zinc	mg/L	0.002	< 0.002	< 0.002	< 0.002

Matrix :	Water	Water	Water
Sampled on:	00/07/25 16:00	00/07/25 16:00	00/07/25 16:00



PHILIP ANALYTICAL

04-Aug-00
Page 4 of 8

DUPLICATE SUMMARY

Parameter	Client ID	Philip ID	Sample Conc.	Duplicate Conc.	MDL	Unit	Relative % Diff.
Turbidity	TOMAHAWK CREEK	10045760	1.21	1.04	0.10	NTU	15.11
Chloride Dissolved	TOMAHAWK CREEK	10045760	2.2	2.4	1.0	mg/L	-8.70
Sulfate Dissolved	TOMAHAWK CREEK	10045760	11.8	11.7	1.0	mg/L	0.85

FROM : INGRAM WELL & PUMP
 FROM : NORWEST LABS

PHONE NO. : 250 249 5432

UCL. 25 2000

1 604 614 3323

20. 10-00

15:15 4633 P.01/04



**NORWEST
 LABS**

Surrey Ph (804) 614-3322 FAX (804) 814-3323
 Edmonton Ph (780) 438-8522 FAX (780) 438-0396
 Calgary Ph (403) 281-2022 FAX (403) 281-2021
 Lethbridge Ph (403) 329-8266 FAX (403) 327-8827
 Winnipeg Ph (204) 682-8530 FAX (204) 275-8010

Name : INGRAM WELL-AND PUMP SERVICE
 Address : RR#3, BOX 2, BRADFORD SITE
 QUESNEL
 BC
 V2J 3H7
 Att'n : LLOYD INGRAM
 Phone : 248-5282
 Fax : 248-5452

WO (Surrey) : 58098
 WO (Other) : 78828
 PO # :
 Project :
 Date Sampled : 14-Aug-00
 Date Received : 15-Aug-00
 Date Reported : 05-Oct-00

REVISED

088-1 Alexander Band #2 Well

Microbiological Analysis

MSB - Drinking Water - Microbiology

Analysis	Result	Detection Limit	Units
Total Coliforms	4.2	1	MPN/100 mL
Fecal Coliforms	<1	1	MPN/100 mL
Standard Plate Count	623	1	cfu/mL

Drinking Water Guidelines / Recommendations

Maximum Acceptable <1100 mL Conditional pass <10/100
 Maximum Acceptable less than 1 organism per 100 mL
 Maximum Acceptable 500 CFU (Cell Forming Units) per mL

Water Analysis


WBS - Drinking Water - Chemistry

Analysis	Result	Detection Limit	Units
Total Alkalinity	385	6	mg CaCO3/L
Colour	<6	5	TCU
pH	7.98		
Turbidity	<1	1	NTU
Fluoride	1.9	0.5	mg/L
Chloride	8.4	0.1	mg/L
Nitrite-N	<0.5	0.5	mg/L
Nitrate-N	<0.08	0.05	mg/L
Hardness (CaCO3 equiv)	72.8	0.08	mg/L
Total Dissolved Solids	663	1	mg/L
Aluminum	<0.01	0.01	mg/L
Arsenic	<0.02	0.02	mg/L
Barium	0.0425	0.0005	mg/L
Cadmium	<0.0005	0.0005	mg/L
Chromium	<0.001	0.001	mg/L
Copper	0.008	0.002	mg/L
Iron	<0.003	0.003	mg/L
Lead	<0.005	0.005	mg/L
Manganese	0.04	0.0005	mg/L
Sodium	181	0.05	mg/L
Uranium	<0.06	0.06	mg/L
Zinc	0.015	0.001	mg/L

Drinking Water Guidelines / Recommendations

High level indicates moderately alkaline water
 Aesthetic Objective 15 TCU (True Colour Units)
 Aesthetic Objective between 8.5 and 8.5
 Maximum 1 NTU at source & Aesthetic 5 NTU at point of use
 Maximum Acceptable 1.5 mg/L - values up to 1.2 mg/L
 Aesthetic Objective 240 mg/L
 Maximum Acceptable 1 mg/L
 Maximum Acceptable 10 mg/L
 Aesthetic Objective 500 mg/L - higher can cause diarrhea
 Soft waters are < 75 mg/L; hard waters are > 180 mg/L
 Aesthetic Objective 500 mg/L - higher values indicate high
 No guideline concentration set - under review
 Interim Maximum Acceptable 0.025 mg/L
 Maximum Acceptable 1 mg/L
 Maximum Acceptable 0.005 mg/L
 Maximum Acceptable 0.05 mg/L
 Aesthetic Objective 1.0 mg/L at point of consumption
 Aesthetic Objective 0.3 mg/L - may cause staining if higher
 Maximum Acceptable 0.01 mg/L at point of consumption
 Aesthetic Objective 0.05 mg/L - causes staining
 Aesthetic Objective 200 mg/L - 20 mg/L for low sodium diets
 Maximum Acceptable 0.1 mg/L *Lim. f. Pow; 0.02*
 Aesthetic Objective 3.0 mg/L at point of consumption

TE: Fluoride result revised for sample #1

Approved By: 
 John Davidson, Dipl. T., C.P.H.I. (C)
 Supervisor, Inorganics Lab

Accredited By: CANADIAN ASSOCIATION FOR ENVIRONMENTAL ANALYTICAL LABORATORIES (CAEAL)
 For specific tests registered with the Association



ANALYTICAL SERVICES

26-Apr-02
Page 1 of 12

Certificate of Analysis

577 Commerce Court
Burnaby, B.C.
Canada V5A 4N5
Tel 604 444 4808
Fax 604 444 4511

Reported To :

HEALTH CANADA

Client Code FC

220 - 177 VICTORIA STREET
PRINCE GEORGE, BC
V2L 5R8

Phone : (250) 561-5384
FAX : (250) 564-3272

Project Information :

Project ID : WEST ALEXANDRIA
Submitted By: I. BAIRD

Requisition Forms :

Form 08100165 logged on 23-Mar-02 completed on 26-Apr-02

Remarks :

- ☑ All organic data is blank corrected except for PCDD/F, Hi-res MS and CLP volatile analyses
- ☑ 'MDL' = Method Detection Limit, '<' = Less than MDL, '---' = Not analyzed
- ☑ 'CDWG' = Canadian Drinking Water Guidelines
- ☑ Solids results are based on dry weight except Biota Analyses & Special Waste Oil & Grease
- ☑ Organic analyses are not corrected for extraction recovery standards except for isotope Dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBP analyses)
- ☑ All Groundwater samples except BTEX/VOC's or Purgable Hydrocarbons are decanted and/or filtered prior to analysis unless otherwise mandated by regulatory agency
- ☑ This report shall not be reproduced except in full, without the written approval of the laboratory

Methods used by Philip are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', 20th Edition, published by the American Public Health Association, or on US EPA protocols found in the 'Test Methods For Evaluating Solid Waste, Physical/Chemical Method, SW846', 3rd Edition. Other procedures are based on methodologies accepted by the appropriate regulatory agency. Methodology briefs are available by written request.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Liability for any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at Philip for a period of 30 days from receipt of data or as per contract.

PHILIP Project Manager: James Teshima

Foillets de transmission par télécopieur		Date	# de pages
Post-It Fax Note		76710	(voir de pages)
To / À	From / De		
Co/Dest / Co/Service		Co / Co	
Phone # / N° de tel.		Phone # / N° de tel.	
Fax # / N° de télécopieur		Fax # / N° de télécopieur	
250-341-9210			



ANALYTICAL SERVICES

26-Apr-02
Page 2 of 12

ANALYTICAL REPORT

Client : HEALTH CANADA
Project : WEST ALEXANDRIA
Sampling site :
Submitted by : I. BAIRD

Philip ID : 12016556 12016557
Client ID : W. ALEXANDRIA TRAVEL
BLANK

Sparcode	Parameter	Unit	MDL	CDWG		
PHYSICAL						
00041220	pH	pH units	0.1	6.5-8.5	8.4	---
00021300	Color True	Col. Unit	5	15	< 5	---
00111160	Specific Conductance	uS/cm	1	---	850	---
SCC-CALC	Computed Conductance	uS/cm	---	---	890	---
CCP-CALC	Conductance % Diff.	%	---	---	5.0	---
00081071	Residue Nonfilterable (TSS)	mg/L	4	---	< 4	---
007H1035	Residue Filterable 1.0u (TDS)	mg/L	10	500	530	---
CTD-CALC	Computed TDS	mg/L	---	---	500	---
TDS-CALC	TDS % Diff.	%	---	---	-4.8	---
00151140	Turbidity	NTU	0.10	1.0	0.27	---
0107CALC	Hardness Total -T	mg/L	---	500	374	---
GENERAL INORGANICS						
01011211	Alkalinity Phen. 8.3 as CaCO3	mg/L	1	---	8	---
01021210	Alkalinity Total as CaCO3	mg/L	1	---	43	---
CO3-CALC	Carbonate as CO3 =	mg/L	---	---	9.6	---
HCO3-CALC	Bicarbonate as HCO3-	mg/L	---	---	500	---
OH--CALC	Hydroxide as OH-	mg/L	---	---	< 0.5	---
2105AA04	Cyanide(SAD) + Thiocyanate	mg/L	0.0005	0.2	< 0.0005	---
0125LLHS	Sulfide Total	mg/L	0.005	0.05	0.007	---
ANIONS						
11041334	Chloride Dissolved	mg/L	0.5	< 250	12.0	---
11061341	Fluoride Dissolved	mg/L	0.01	1.5	2.37	---
IonB-CALC	Ion Balance	%	---	---	-0.8	---
Ann-CALC	Total Anions	meq/L	---	---	9.31	---
Cns-CALC	Total Cations	meq/L	---	---	9.25	---
Lan-CALC	Langelier Index	pH units	---	---	0.6	---
pHS-CALC	Saturation pH	pH units	---	---	7.3	---
CARBON						
01030912	Organic Carbon - Total	mg/L	0.5	---	2.8	---

Matrix : Water Water
Sampled on: 02/03/20 16:00 02/03/20 16:00

CONTINUED on page 3



ANALYTICAL SERVICES

26-Apr-02
Page 3 of 12

ANALYTICAL REPORT

Client : HEALTH CANADA
Project : WEST ALEXANDRIA
Sampling site :
Submitted by : I. BAIRD

Philip ID : 12016556 12016557
Client ID : W TRAVEL
ALEXANDRIA BLANK

Sparcode	Parameter	Unit	MDL	CDWG		
NITROGEN						
11081351	Ammonia Nitrogen (N)	mg/L	0.005	---	0.488	---
1110CALC	Nitrate Nitrogen Dissolved (N)	mg/L		10.0	0.02	---
11091350	Nitrite + Nitrate (N)	mg/L	0.02	10.0	0.03	---
11111354	Nitrite Nitrogen (N)	mg/L	0.005	1.0	0.10	---
SULFATE						
11211405	Sulfate	mg/L	0.5	< 500	20.6	---
METALS TOTAL						
AJ-T0031	Aluminum	mg/L	0.02	---	< 0.02	---
Sn-TMS31	Antimony	mg/L	0.001	---	< 0.001	---
As-TMS31	Arsenic	mg/L	0.001	0.025	0.010	---
Ba-T0031	Barium	mg/L	0.001	1.0	0.38	---
B-T0031	Boron	mg/L	0.008	5.0	0.88	---
Cd-TMS31	Cadmium	mg/L	0.0001	0.005	< 0.0001	---
Ca-T0031	Calcium	mg/L	0.05	---	11.4	---
Cr-T0031	Chromium	mg/L	0.005	0.05	< 0.005	---
Co-T0031	Cobalt	mg/L	0.005	---	< 0.005	---
Cu-T0031	Copper	mg/L	0.005	1.0	0.008	---
Fe-T0031	Iron	mg/L	0.005	0.3	0.091	---
Pb-TMS31	Lead	mg/L	0.0005	0.01	0.0001	---
Mg-T0031	Magnesium	mg/L	0.05	---	2.7	---
Mn-T0031	Manganese	mg/L	0.001	0.05	0.027	---
Hg-T0310	Mercury	mg/L	0.00005	0.001	< 0.00005	---
Mo-T0031	Molybdenum	mg/L	0.005	---	0.012	---
Ni-T0031	Nickel	mg/L	0.008	---	< 0.008	---
K_T0031	Potassium	mg/L	1	---	3	---
Se-TMS31	Selenium	mg/L	0.001	0.01	< 0.001	---
Ag-T0031	Silver	mg/L	0.01	---	< 0.01	---
Na_T0031	Sodium	mg/L	0.05	200	185	---
U-TLLMS	Uranium	mg/L	0.00001	0.1	0.00017	---
V--T0031	Vanadium	mg/L	0.005	---	< 0.005	---
Zn-T0031	Zinc	mg/L	0.005	5.0	0.022	---

Matrix : Water Water
Sampled on: 02/03/20 16:00 02/03/20 16:00

CONTINUED on page 4



ANALYTICAL SERVICES

26-Apr-02
Page 4 of 12

ANALYTICAL REPORT

Client : HEALTH CANADA
Project : WEST ALEXANDRIA
Sampling site :
Submitted by : I. BAJRD

Philip ID : 12016558 12016557
Client ID : W. TRAVEL
ALEXANDRIA BLANK

Sparcode	Parameter	Unit	MDL	CDWG		
CHLORINATED PHENOLS						
EX9946Z7	Water Prep for CPs	date			02/03/25	---
MCP2CPWA	2-chlorophenol	mg/L	0.001	---	< 0.001	---
MCP3CPWA	3-chlorophenol	mg/L	0.001	---	< 0.001	---
MCP4CPWA	4-chlorophenol	mg/L	0.001	---	< 0.001	---
CPE1CPWA	2,3-Dichlorophenol	mg/L	0.0001	---	< 0.0001	---
CPH1CPWA	2,4+3,4-DiClPhenol	mg/L	0.0001	---	< 0.0001	---
CPH2CPWA	2,5-Dichlorophenol	mg/L	0.0001	---	< 0.0001	---
CP09CPWA	2,6-Dichlorophenol	mg/L	0.0001	---	< 0.0001	---
CPE3CPWA	3,5-Dichlorophenol	mg/L	0.0001	---	< 0.0001	---
CP03CPWA	2,3,4-Trichlorophenol	mg/L	0.0001	---	< 0.0001	---
CP04CPWA	2,3,5-Trichlorophenol	mg/L	0.0001	---	< 0.0001	---
CP05CPWA	2,3,6-Trichlorophenol	mg/L	0.0001	---	< 0.0001	---
CP06CPWA	2,4,5-Trichlorophenol	mg/L	0.0001	---	< 0.0001	---
CP07CPWA	2,4,6-Trichlorophenol	mg/L	0.0001	---	< 0.0001	---
CP44CPWA	3,4,5-Trichlorophenol	mg/L	0.0001	---	< 0.0001	---
CP02CPWA	2,3,4,5-Tetrachlorophenol	mg/L	0.0001	---	< 0.0001	---
CP01CPWA	2346+2356-TeClPhenol	mg/L	0.0001	---	< 0.0001	---
PO22CPWA	Pentachlorophenol	mg/L	0.0001	---	< 0.0001	---
SURROGATE RECOVERY						
DC01SURR	CL2 Phenylaceticacid	%		---	74	---
BR3-CPWA	Tribromophenol	%	40	---	111	---
HYDROCARBONS						
H099PT11	VH C6-C10	mg/L	0.1	---	< 0.1	< 0.1
EX99S172	Volat. Wat. Pro-Ser.	date			02/03/25	02/03/25
H097CALC	VPHw	mg/L		---	< 0.1	< 0.1
POLYCYCLIC AROMATIC HYDROCARBONS						
EX9946Z4	PAH Extraction-Water	date			02/03/25	---
PA05MWO2	Benzo(a)pyrene	mg/L	0.00002	0.00001	< 0.00002	---

Matrix : Water Water
Sampled on: 02/03/20 16:00 02/03/20 16:00

CONTINUED on page 5



ANALYTICAL SERVICES

26-Apr-02
Page 5 of 12

ANALYTICAL REPORT

Client : HEALTH CANADA
Project : WEST ALEXANDRIA
Sampling site :
Submitted by : I. BAIRD

Philip ID : 12016556 12016557
Client ID : W. TRAVEL
ALEXANDRIA BLANK

Spacode	Parameter	Unit	MDL	CDWG		
VOLATILE ORGANICS-MAH						
B020MS11	Benzene	ug/L	0.5	5.0	< 0.5	---
B020PT11	Benzene	ug/L	0.5	5.0	---	< 0.5
V919MS11	Chlorobenzene	ug/L	0.5	80.0	< 0.5	---
V924MS11	1,2-Dichlorobenzene	ug/L	0.5	200.0	< 0.5	---
V925MS11	1,3-Dichlorobenzene	ug/L	0.3	---	< 0.3	---
V926MS11	1,4-Dichlorobenzene	ug/L	0.4	5.0	< 0.4	---
B021MS11	Ethylbenzene	ug/L	0.5	---	< 0.5	---
B021PT11	Ethylbenzene	ug/L	0.5	---	---	< 0.5
V921MS11	Styrene	ug/L	0.4	---	< 0.4	---
V921PT11	Styrene	ug/L	0.4	---	---	< 0.4
T001MS11	Toluene	ug/L	0.5	24.0	< 0.5	---
T001PT11	Toluene	ug/L	0.5	24.0	---	< 0.5
X_8842_5	Xylenes	ug/L	0.5	300.0	< 0.5	< 0.5
X003MS11	m,p - Xylene	ug/L	0.5	---	< 0.5	---
X003PT11	m,p - Xylene	ug/L	0.5	---	---	< 0.5
X002MS11	o - Xylene	ug/L	0.5	---	< 0.5	---
X002PT11	o - Xylene	ug/L	0.5	---	---	< 0.5
MTBEMS11	Methyl t-butyl ether	ug/L	5	---	< 5	---
MTBEPT11	Methyl t-butyl ether	ug/L	5	---	---	< 5
VOLATILE ORGANICS-CHLORINATED ALIPHATIC						
V903MS11	Bromomethane	ug/L	3	---	< 3	---
C034MS11	Carbon tetrachloride	ug/L	1	---	< 1	---
V904MS11	Chloroethane	ug/L	4	---	< 4	---
V914MS11	2-chloroethylvinylether	ug/L	2	---	< 2	---
V901MS11	Chloromethane	ug/L	1	---	< 1	---
V909MS11	1,1-Dichloroethane	ug/L	0.7	---	< 0.7	---
V912MS11	1,2-Dichloroethane	ug/L	0.5	---	< 0.5	---
V906MS11	1,1-Dichloroethene	ug/L	0.4	---	< 0.4	---
V910MS11	cis-1,2-Dichloroethene	ug/L	0.4	---	< 0.4	---
V908MS11	trans-1,2-Dichloroethene	ug/L	0.7	---	< 0.7	---
V907MS11	Dichloromethane	ug/L	0.9	---	< 0.9	---
V913MS11	1,2-Dichloropropane	ug/L	0.5	---	< 0.5	---

Matrix : Water Water
Sampled on: 02/03/20 16:00 02/03/20 16:00

CONTINUED on page 6



ANALYTICAL SERVICES

26-Apr-02
Page 6 of 12

ANALYTICAL REPORT

Client : HEALTH CANADA
Project : WEST ALEXANDRIA
Sampling site :
Submitted by : I. BAIRD

Philp ID : 12016556 12016557
Client ID : W. TRAVEL
ALEXANDRIA BLANK

Sparcode	Parameter	Unit	MDL	CDWG			
V915MS11	cis-1,3-Dichloropropene	ug/L	0.4	---	< 0.4	---	
V916MS11	trans-1,3-Dichloropropene	ug/L	0.3	---	< 0.3	---	
V918MS11	1,2-Dibromoethane	ug/L	1	---	< 1	---	
V923MS11	1,1,2,2-Tetrachloroethane	ug/L	0.5	---	< 0.5	---	
T030MS11	Tetrachloroethene	ug/L	0.5	30.0	< 0.5	---	
V911MS11	1,1,1-Trichloroethane	ug/L	0.7	---	< 0.7	---	
V917MS11	1,1,2-Trichloroethane	ug/L	0.5	---	< 0.5	---	
T029MS11	Trichloroethene	ug/L	0.6	50.0	< 0.6	---	
V905MS11	Trichlorofluoromethane	ug/L	4	---	< 4	---	
V902MS11	Vinyl Chloride	ug/L	1	2.0	< 1	---	
VOLATILE ORGANICS-TRIHALOMETHANES							
B012MS11	Bromodichloromethane	ug/L	0.5	100.0	< 0.5	---	
B013MS11	Bromoform	ug/L	0.4	100.0	< 0.4	---	
C032MS11	Chloroform	ug/L	0.6	100.0	< 0.6	---	
C033MS11	Dibromochloromethane	ug/L	0.4	100.0	< 0.4	---	
VOC SURROGATE RECOVERY							
VS01VSUR	Bromofluorobenzene	%	0	---	91	---	
VS01PT11	Bromofluorobenzene	%	0	---	---	84	
VS02VSUR	d4-1,2-dichloroethane	%	0	---	96	---	
VS03VSUR	d8-Toluene	%	0	---	91	---	
VS03PT11	d8-Toluene	%	0	---	---	96	
					Matrix :	Water	Water
					Sampled on:	02/03/20 16:00	02/03/20 16:00



ANALYTICAL SERVICES

26-Apr-02
Page 7 of 12

SPIKE SUMMARY

Parameter	Client ID	Philip ID	Sample Conc.	Sample & Spike Conc.	Spike Amount	Unit	Percent Recovery
Residue Nonfilterable (TSS)	Blank Spike. Batch :	24401200	< 4	210	200	mg/L	105
Residue Filterable 1.0u (TDS)	Blank Spike. Batch :	24401192	< 10	94	100	mg/L	94
Turbidity	Blank Spike. Batch :	24401211	< 0.10	2.08	2	NTU	101
Cyanide(SAD) + Thiocyanate	Blank Spike. Batch :	24100657	< 0.0005	0.0201	.04	mg/L	101
Sulfide Total	Blank Spike. Batch :	24100684	< 0.005	0.092	.1	mg/L	92
Chloride Dissolved	Blank Spike. Batch :	24100665	< 0.5	103	100	mg/L	103
Fluoride Dissolved	Blank Spike. Batch :	24100645	< 0.01	0.50	.5	mg/L	99
Organic Carbon - Total	Blank Spike. Batch :	24100658	< 0.5	10.6	10	mg/L	106
Ammonia Nitrogen (N)	Blank Spike. Batch :	24100671	< 0.005	0.187	.2	mg/L	94
Nitrate + Nitrite (N)	Blank Spike. Batch :	24100671	< 0.02	0.62	.6	mg/L	102
Nitrite Nitrogen (N)	Blank Spike. Batch :	24100671	< 0.005	0.201	.2	mg/L	101
Sulfate Dissolved	Blank Spike. Batch :	24100666	< 0.5	103	100	mg/L	103
Mercury	Blank Spike. Batch :	24201068	< 0.00005	0.00049	.0005	mg/L	94
Arsenic	Blank Spike. Batch :	24201040	< 0.001	0.022	.02	mg/L	108
Cadmium	Blank Spike. Batch :	24201040	< 0.0001	0.0203	.01	mg/L	102
Lead	Blank Spike. Batch :	24201040	< 0.0005	0.0212	.02	mg/L	106
Selenium	Blank Spike. Batch :	24201040	< 0.001	0.022	.02	mg/L	108
Pentachlorophenol	Blank Spike. Batch :	24500736	< 0.0001	0.0018	.002	mg/L	91
2,3,4,5-Tetrachlorophenol	Blank Spike. Batch :	24500736	< 0.0001	0.0034	.004	mg/L	86
4-chlorophenol	Blank Spike. Batch :	24500736	< 0.001	0.019	.01	mg/L	96
2,3,4,5-Tetrachlorophenol	Blank Spike. Batch :	24500736	< 0.0001	0.0018	.002	mg/L	90
2,3,4-Trichlorophenol	Blank Spike. Batch :	24500736	< 0.0001	0.0016	.002	mg/L	78
2,3,5-Trichlorophenol	Blank Spike. Batch :	24500736	< 0.0001	0.0016	.002	mg/L	78
2,3,6-Trichlorophenol	Blank Spike. Batch :	24500736	< 0.0001	0.0016	.002	mg/L	80
2,4,5-Trichlorophenol	Blank Spike. Batch :	24500736	< 0.0001	0.0017	.002	mg/L	84
2,4,6-Trichlorophenol	Blank Spike. Batch :	24500736	< 0.0001	0.0017	.002	mg/L	83
3,4,5-Trichlorophenol	Blank Spike. Batch :	24500736	< 0.0001	0.0014	.002	mg/L	69
2,4+3,4-DiClPhenol	Blank Spike. Batch :	24500736	< 0.0001	0.0028	.004	mg/L	69
2,3-Dichlorophenol	Blank Spike. Batch :	24500736	< 0.0001	0.0014	.002	mg/L	69
2,5-Dichlorophenol	Blank Spike. Batch :	24500736	< 0.0001	0.0015	.002	mg/L	75
3,5-Dichlorophenol	Blank Spike. Batch :	24500736	< 0.0001	0.0012	.002	mg/L	62
2,6-Dichlorophenol	Blank Spike. Batch :	24500736	< 0.0001	0.0016	.002	mg/L	82
2-chlorophenol	Blank Spike. Batch :	24500736	< 0.001	0.015	.01	mg/L	77
3-chlorophenol	Blank Spike. Batch :	24500736	< 0.001	0.015	.01	mg/L	77
Benzo(a)pyrene	Blank Spike. Batch :	24500526	< 0.00002	0.0020	.0025	mg/L	80
Chloromethane	Blank Spike. Batch :	25201611	< 1	42	50	ug/L	84
Vinyl Chloride	Blank Spike. Batch :	25201611	< 1	48	50	ug/L	96
Bromomethane	Blank Spike. Batch :	25201611	< 3	50	50	ug/L	100



ANALYTICAL SERVICES

26-Apr-02
Page 8 of 12

SPIKE SUMMARY

Parameter	Client ID	Philip ID	Sample Conc.	Sample & Spike Conc.	Spike Amount	Unit	Percent Recovery
Chloroethane	Blank Spike. Batch :	25201611	< 4	56	50	ug/L	111
Trichlorofluoromethane	Blank Spike. Batch :	25201611	< 4	55	50	ug/L	111
1,1-Dichloroethane	Blank Spike. Batch :	25201611	< 0.4	11	10	ug/L	106
Dichloromethane	Blank Spike. Batch :	25201611	< 0.9	9.8	10	ug/L	98
trans-1,2-Dichloroethane	Blank Spike. Batch :	25201611	< 0.7	10	10	ug/L	102
1,1-Dichloroethane	Blank Spike. Batch :	25201611	< 0.7	10	10	ug/L	103
cis-1,2-Dichloroethane	Blank Spike. Batch :	25201611	< 0.4	9.8	10	ug/L	98
Chloroform	Blank Spike. Batch :	25201611	< 0.6	11	10	ug/L	108
1,1,1-Trichloroethane	Blank Spike. Batch :	25201611	< 0.7	11	10	ug/L	107
1,2-Dichloroethane	Blank Spike. Batch :	25201611	< 0.5	9.9	10	ug/L	99
Carbon tetrachloride	Blank Spike. Batch :	25201611	< 1	10	10	ug/L	102
Benzene	Blank Spike. Batch :	25201611	< 0.5	10	10	ug/L	102
1,2-Dichloropropane	Blank Spike. Batch :	25201611	< 0.5	9.9	10	ug/L	99
Trichloroethane	Blank Spike. Batch :	25201611	< 0.6	11	10	ug/L	109
Bromodichloromethane	Blank Spike. Batch :	25201611	< 0.5	11	10	ug/L	114
cis-1,3-Dichloropropene	Blank Spike. Batch :	25201611	< 0.4	9.8	10	ug/L	98
trans-1,3-Dichloropropene	Blank Spike. Batch :	25201611	< 0.3	10	10	ug/L	102
Toluene	Blank Spike. Batch :	25201611	< 0.5	10	10	ug/L	100
1,1,2-Trichloroethane	Blank Spike. Batch :	25201611	< 0.5	9.9	10	ug/L	99
Dibromochloromethane	Blank Spike. Batch :	25201611	< 0.4	10	10	ug/L	102
1,2-Dibromoethane	Blank Spike. Batch :	25201611	< 1	10	10	ug/L	103
Tetrachloroethane	Blank Spike. Batch :	25201611	< 0.5	10	10	ug/L	102
Chlorobenzene	Blank Spike. Batch :	25201611	< 0.5	9.8	10	ug/L	98
Ethylbenzene	Blank Spike. Batch :	25201611	< 0.5	9.8	10	ug/L	98
m,p - Xylene	Blank Spike. Batch :	25201611	< 0.5	20	20	ug/L	100
Bromoform	Blank Spike. Batch :	25201611	< 0.4	10	10	ug/L	102
Styrene	Blank Spike. Batch :	25201611	< 0.4	10	10	ug/L	100
o - Xylene	Blank Spike. Batch :	25201611	< 0.5	9.9	10	ug/L	99
1,1,2,2-Tetrachloroethane	Blank Spike. Batch :	25201611	< 0.5	10	10	ug/L	102
1,2-Dichlorobenzene	Blank Spike. Batch :	25201611	< 0.5	10	10	ug/L	102
1,3-Dichlorobenzene	Blank Spike. Batch :	25201611	< 0.3	10	10	ug/L	103
1,4-Dichlorobenzene	Blank Spike. Batch :	25201611	< 0.4	11	10	ug/L	106
Methyl t-butyl ether	Blank Spike. Batch :	25201611	< 5	11	10	ug/L	105
Benzene	Blank Spike. Batch :	25201592	< 0.5	10	10	ug/L	103
Toluene	Blank Spike. Batch :	25201592	< 0.5	10	10	ug/L	100
Ethylbenzene	Blank Spike. Batch :	25201592	< 0.5	9.3	10	ug/L	93
m,p - Xylene	Blank Spike. Batch :	25201592	< 0.5	19	20	ug/L	96
o - Xylene	Blank Spike. Batch :	25201592	< 0.5	9.9	10	ug/L	99



ANALYTICAL SERVICES

26-Apr-02
Page 9 of 12

SPIKE SUMMARY

Parameter	Client ID	Philip ID	Sample Conc.	Sample & Spike Conc.	Spike Amount	Unit	Percent Recovery
Styrene	Blank Spike. Batch :	25201592	< 0.4	11	10	ug/L	109
Methyl t-butyl ether	Blank Spike. Batch :	25201592	< 5	10	10	ug/L	97



ANALYTICAL SERVICES

26-Apr-02
Page 10 of 12

ANALYSIS DATES

Philip ID:		12016556	12016557
Client ID:		W.	TRAVEL
		ALEXANDRIA	BLANK
00041220	pH	27-MAR-2002	---
00021300	Color True	27-MAR-2002	---
00111160	Specific Conductance	27-MAR-2002	---
00081071	Residue Nonfilterable (TSS)	27-MAR-2002	---
007H1035	Residue Filterable 1.0u (TDS)	28-MAR-2002	---
00151140	Turbidity	28-MAR-2002	---
01011211	Alkalinity Phen. 8.3 as CaCO3	27-MAR-2002	---
01021210	Alkalinity Total as CaCO3	27-MAR-2002	---
2105AA04	Cyanide(SAD) + Thiocyanate	26-MAR-2002	---
0125LLHS	Sulfide Total	28-MAR-2002	---
11041334	Chloride Dissolved	26-MAR-2002	---
11061341	Fluoride Dissolved	23-MAR-2002	---
TDC-W	15004 Sparg/Ox-Mem Color	26-MAR-2002	---
11081351	Ammonia Nitrogen (N)	27-MAR-2002	---
11091350	Nitrate + Nitrite (N)	27-MAR-2002	---
11111354	Nitrite Nitrogen (N)	27-MAR-2002	---
11211405	Sulfate	26-MAR-2002	---
Hg-T0310	Mercury	28-MAR-2002	---
MET-DWS	Public Metals ICP/HGA	25-MAR-2002	---
CPWAGCMS	GOLDPCPS	24-APR-2002	---
DC01SURR	CL2 Phenylaceticacid	24-APR-2002	---
H099PT11	VH C6-C10	26-MAR-2002	---
PA05MW02	Benzo(a)pyrene	28-MAR-2002	---
PKG-BT13	BTEX/C6-C10 Waters	--	25-MAR-2002
VOC-W1	VOC's P&T GC/MS	26-MAR-2002	---
VOC-SR	Surrogate Recovery	26-MAR-2002	---
Matrix:		Water	Water
Sampled on:		20-MAR-2002	20-MAR-2002



ANALYTICAL SERVICES

26-Apr-02
Page 11 of 12

BATCH NUMBERS

Philip ID:	12016556	12016557
Chest ID:	W.	TRAVEL
	ALEXANDRIA	BLANK
00041220	pH	24401181
00021300	Color True	24100670
00111160	Specific Conductance	24401183
00081071	Residue Nonfilterable (TSS)	24401200
007H1035	Residue Filterable 1.0u (TDS)	24401192
00151140	Turbidity	24401211
01011211	Alkalinity Phen. 8.3 as CaCO3	24401184
01021210	Alkalinity Total as CaCO3	24401182
2105AA04	Cyanide(SAD) + Thiocyanate	24100657
0125LLHS	Sulfide Total	24100684
11041334	Chloride Dissolved	24100665
11061341	Fluoride Dissolved	24100645
TOC-W	15004 Sparg/Ox-Mem Color	24100658
11081351	Ammonia Nitrogen (N)	24100671
11091350	Nitrate + Nitrite (N)	24100671
11111354	Nitrite Nitrogen (N)	24100671
11211405	Sulfate	24100666
Hg-T0310	Mercury	24201068
MET-DWS	Public Metals ICP/HGA	24201040
CPWAGCMS	GOLDPCS	24500736
DC01SURR	CL2 Phenylecceticacid	24500737
H099PT11	VH C6-C10	25201619
PA05M W02	Benzo(a)pyrene	24500526
PKG-BT13	BTEX/C6-C10 Waters	---
VOC-W1	VOC's P&T GC/MS	25201592
VOC-SR	Surrogate Recovery	25201611
Matrix:	Water	Water
Sampled on:	20-MAR-2002	20-MAR-2002



PSC ANALYTICAL SERVICES

8577 Commerce Court
Burnaby, B.C. V5A 4N5

Phone: (604) 444-4808

Fax: (604) 444-4511

Toll Free: 1-800-440-4808

ANALYTICAL SERVICES

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST 1 of 1

ANALYSIS REQUEST

8100165

COMPANY NAME: *Health Canada*
PH. # *250 561 5384*
FAX # *250 564 3237*

COMPANY ADDRESS: *220-177 Victoria St
Prince George BC
V2L 5R8*
CLIENT PROJECT ID: (S)
*WEST ALEXANDRIA
(W. ALEXANDRIA)*

SAMPLER NAME (PRINT): *I. Baird*
PROJECT MANAGER: *Susan Kish*

FIELD SAMPLE ID	PSC LAB # (Lab Use Only)	MATRIX					# CONTAINERS	SAMPLING			PHYSICALS, NUTRIENTS, IONS	SULPHIDE	CALCINATED PHENOLS	SULPHIDES	CYANIDE	METALS	TOC	VOC	TRAVEL BLANK
		GROUND WATER	SURFACE WATER	SOIL	OTHER	DATE		TIME	HEADSPACE VAPOUR										
1. W. ALEXANDRIA	16554	✓					3	20/03/02	1030		✓								
2. W. ALEXANDRIA		✓					1	20/03/02	1045		✓								
3. W. ALEXANDRIA		✓					1	20/03/02	1050			✓							
4. W. ALEXANDRIA		✓					1	20/03/02	1100				✓						
5. W. ALEXANDRIA		✓					1	20/03/02	1110					✓					
6. W. ALEXANDRIA		✓					1	20/03/02	1115						✓				
7. W. ALEXANDRIA		✓					1	20/03/02	1120							✓			
8. W. ALEXANDRIA	16557	✓					3	20/03/02	1130								✓		
9.																		✓	
10.																			
11.																			
12.																			

TAT (Turnaround Time)

P.O. NUMBER / QUOTE NUMBER: *BC 02-028-JW*

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE: *N/A*

- CCME
- CMA
- ALBERTA TIER 1
- OTHER

LAB USE ONLY

PRE-APPROVAL

*some exceptions apply
please contact lab*

STANDARD 10 BUSINESS DAYS
 STANDARD 5 BUSINESS DAYS
 RUSH 2 BUSINESS DAYS
 URGENT 1 BUSINESS DAY

OTHER BUSINESS DAYS

ACCOUNTING CONTACT

SPECIAL REPORTING OR BILLING INSTRUCTIONS: *N/A*

JARS USED

3C *APR. 1/02* *M*

RELINQUISHED BY SAMPLER: *J. Baird*

DATE: *20/03/02*

TIME: *0710*

RECEIVED BY:

RELINQUISHED BY:

DATE:

TIME:

RECEIVED BY:

RELINQUISHED BY:

DATE: *Mar 22/02*

TIME: *11:30*

RECEIVED BY LABORATORY: *JK*

CUSTODY RECORD

ORIGINAL - PSC YELLOW - PSC PINK - CLIENT