

Technical Memorandum

June 7, 2021

To	Mark Tatchell (VoT)	Tel	604-214-0510
Copy to	Rose Marie Rocca (GHD)	Ref. No.	11218464
From	David R. Barton, Natasha Turl (GHD)/ce/02		
Subject	Spring 2021 Monitoring Event Village of Tahsis Tahsis, British Columbia		

Environmental monitoring was completed at the Village of Tahsis (VoT) by GHD staff on April 2, 2021 (Monitoring Event) to assess potential landfill derived alteration to the aquifer, which currently supplies drinking water to the VoT. The monitoring program includes semi-annual sample collection at four wells installed within the capture zone of the VoT's drinking water production well, which is located 100 metres (m) downgradient of the village's landfill that contains waste from a local sawmill and the VoT's drinking water production well. The wells are located within the production well capture zone, upgradient of the production well. The Site plan and monitoring locations are illustrated on Figure 1.

The purpose of this memo is to provide the VoT with a summary of field activities completed, laboratory reports, data validation results, tabulated analytical results compared to the applicable water quality criteria, and an interpretation of results.

This memorandum (memo) has been prepared as part of the scope of work described in the GHD's letter entitled *Proposal for Groundwater Monitoring and Reporting Services, Drinking Water Wellhead Protection* dated September 14, 2020 (Proposal).

1. Monitoring Event Summary

The following tasks were completed during the Monitoring Event:

- Water level monitoring, field parameter measurement, sample collection, and analytical testing of groundwater at four monitoring wells MW1D, MW1S, MW2D and MW2S.
- Sample collection and analysis of a groundwater field duplicate sample as part of the quality assurance/quality control (QA/QC) program.
- Field sample key (FSK) preparation and environmental database updates.
- Validation of the analytical data by a qualified chemist as part of the QA/QC program.

2. Analytical Services and Data Validation

Analytical services were provided by Bureau Veritas (BV) of Burnaby, BC, with results provided directly to GHD. The FSK and laboratory reports generated for the Monitoring Event are included in Attachment A.

A qualified chemist completed a data validation to assess laboratory and field QA/QC measures. The QA/QC memoranda presented in Attachment B reports that the data exhibited acceptable levels of accuracy and precision with the qualifications noted.

3. Water Quality Results

Groundwater analytical results have been assessed to the BC Contaminated Site Regulation, Schedule 3.2 Generic Numerical Water Standards for drinking water (DW) and freshwater aquatic life (FAW). The CSR DW and FAW standards are appropriate for evaluating water quality based on the following rationale:

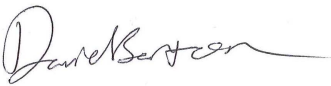
- Protocol 21 for Contaminated Sites: *Water Use Determination* (ENV, October 31, 2017) states that both current and future drinking water use must be considered when determining whether CSR DW standards apply. Currently the VoT obtains drinking water from the production well; therefore, the drinking water exposure pathway is applicable and DW standards apply.
- Protocol 21 also states that CSR freshwater aquatic life (FWAL) standards apply to sites located within 500 m of an aquatic receiving environment (i.e., a surface water body containing aquatic life) unless it can be demonstrated that groundwater does not flow to that receiving environment. The CSR FAW standards are applicable due to the proximity of the Tahsis River west of select monitoring wells (i.e., MW1 and MW2 are located approximately 250 m from the high-water mark of the Tahsis River).

The groundwater analytical results assessed to the applicable CSR FAW and DW standards are presented in Tables 1 and 2.

As shown in Tables 1 and 2, groundwater concentrations of samples collected from the four monitoring wells MW1D, MW1S, MW2D, and MW2S were less than the applicable CSR standards. In addition, no petroleum aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), resin fatty acids, pesticides, or herbicides were detected in groundwater collected during the Monitoring Event. These results indicate that groundwater sampled within the production well capture zone is protective of human and aquatic health.

If you have any questions or require further clarification, please do not hesitate to contact GHD.

Regards,



David R. Barton, MSc., GIT
Junior Scientist



Natasha Turl, B.Sc., EPT
Environmental Scientist

Attachment A

FSK and Laboratory Reports

Sample Name	Location	Date	Time	Type	Matrix	Parent Sample Name	WaterDepth	DepthUnit	DryYesNo	MeasuredDepth	Temperature	Temperature Unit	Field pH (s.u.)	ORP	ORP units	Conductivity	Conductivity Unit	Turbidity (NTU)	TDS	TDS Units
WG-11218464-020421-RP-01	MW1D	04/02/2021	09:00	N	WG		4.44	m BTOR	No	26.72	7.35	deg C	7.71	164	millivolts	127	uS/cm	3.7	82	mg/L
WG-11218464-020421-RP-02	MW1D	04/02/2021	09:05	FD	WG	WG-11218464-020421-RP-01			No		7.35	deg C	7.71	164	millivolts	127	uS/cm	3.7	82	mg/L
WG-11218464-020421-RP-03	MW1S	04/02/2021	08:50	N	WG		4.86	m BTOR	No	9.955	7.80	deg C	7.18	203	millivolts	91	uS/cm	1.9	59	mg/L
WG-11218464-020421-RP-04	MW2S	04/02/2021	10:05	N	WG		5.605	m BTOR	No	8.40	8.05	deg C	5.78	226	millivolts	55	uS/cm	6.9	36	mg/L
WG-11218464-020421-RP-05	MW2D	04/02/2021	10:00	N	WG		5.30	m BTOR	No	23.85	8.25	deg C	7.78	172	millivolts	73	uS/cm	1.2	47	mg/L



Your P.O. #: 73523096
 Your Project #: 11218464
 Site#: 11218464
 Site Location: VILLAGE OF TAHSIS
 Your C.O.C. #: 632223-01-01

Attention: Aïresse MacPhee

GHD Limited
 455 PHILLIP STREET
 WATERLOO, ON
 CANADA N2L 3X2

Report Date: 2021/05/05
 Report #: R3016339
 Version: 3 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C121148

Received: 2021/04/03, 09:00

Sample Matrix: Water
 # Samples Received: 5

Analyses	Quantity	Date		Laboratory Method	Analytical Method
		Extracted	Analyzed		
Alkalinity @25C (pp, total), CO3,HCO3,OH	5	N/A	2021/04/05	BBY6SOP-00026	SM 23 2320 B m
Chloride/Sulphate by Auto Colourimetry	5	N/A	2021/04/05	BBY6SOP-00011 / BBY6SOP-00017	SM23-4500-Cl/SO4-E m
Coliform by membrane filtration	5	N/A	2021/04/03	BBY4SOP-00001	SM 23 9222 m
Conductivity @25C	5	N/A	2021/04/05	BBY6SOP-00026	SM 23 2510 B m
E.coli by membrane filtration in Water	5	N/A	2021/04/03	BBY4SOP-00001	SM 23 9222 m
Fluoride	5	N/A	2021/04/06	BBY6SOP-00048	SM 23 4500-F C m
Hardness Total (calculated as CaCO3) (3)	5	N/A	2021/04/07	BBY WI-00033	Auto Calc
Hardness (calculated as CaCO3)	5	N/A	2021/04/06	BBY WI-00033	Auto Calc
Mercury (Dissolved) by CV (4)	5	2021/04/05	2021/04/05	AB SOP-00084	BCMOE BCLM Oct2013 m
Mercury (Total) by CV	5	2021/04/05	2021/04/05	AB SOP-00084	BCMOE BCLM Oct2013 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	5	N/A	2021/04/06	BBY WI-00033	Auto Calc
Elements by CRC ICPMS (dissolved) (4)	5	N/A	2021/04/06	BBY7SOP-00002	EPA 6020b R2 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	5	2021/04/03	2021/04/07	BBY WI-00033	Auto Calc
Elements by CRC ICPMS (total)	5	2021/04/05	2021/04/07	BBY7SOP-00003 / BBY7SOP-00002	EPA 6020b R2 m
Ammonia-N (Total)	5	N/A	2021/04/07	AB SOP-00007	SM 23 4500 NH3 A G m
Nitrate + Nitrite (N)	5	N/A	2021/04/03	BBY6SOP-00010	SM 23 4500-NO3- I m
Nitrite (N) by CFA	5	N/A	2021/04/03	BBY6SOP-00010	SM 23 4500-NO3- I m
Nitrogen - Nitrate (as N)	5	N/A	2021/04/03	BBY WI-00033	Auto Calc
PAH in Water by GC/MS (SIM)	5	2021/04/06	2021/04/07	BBY8SOP-00021	BCMOE BCLM Jul2017m
Total LMW, HMW, Total PAH Calc (5)	5	N/A	2021/04/07	BBY WI-00033	Auto Calc
Polychlorinated Biphenyls in Water (1)	5	2021/04/07	2021/04/07	CAL SOP-00149	EPA 8082A R1 m
Total PCBs in Water (1)	5	N/A	2021/04/08		Auto Calc
Filter and HNO3 Preserve for Metals	5	N/A	2021/04/03	BBY7 WI-00004	SM 23 3030B m
pH @25°C (6)	5	N/A	2021/04/05	BBY6SOP-00026	SM 23 4500-H+ B m
Resin and Fatty Acids (1)	5	2021/04/07	2021/04/09	CAL SOP-00099	AE129.0
Turbidity	5	N/A	2021/04/03	BBY6SOP-00027	SM 23 2130 B m
OC Pesticides (Selected) & PCB (2, 7)	5	2021/04/10	2021/04/11	CAM SOP-00307	EPA 8081A/ 8082B m
OC Pesticides Summed Parameters (2)	5	N/A	2021/04/12	CAM SOP-00307	EPA 8081A/8082B m
GC/MS Analysis of OP Pesticides (2)	5	2021/04/13	2021/04/13	CAM SOP-00301	EPA 8270 m
Phenoxy Acid Herbicides (2)	5	2021/04/09	2021/04/13	CAM SOP-00330	EPA 8270 m



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CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C121148

Received: 2021/04/03, 09:00

Sample Matrix: Water
 # Samples Received: 5

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Triazine Herbicides (2)	5	2021/04/09	2021/04/14	CAM SOP-00301	EPA 8270 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

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Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

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

- (1) This test was performed by Bureau Veritas Calgary Environmental
- (2) This test was performed by Bureau Veritas Ontario (From Burnaby)
- (3) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
- (4) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
- (5) Total PAHs in Water include: Quinoline, Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Acridine, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b&j)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, and Benzo(g,h,i)perylene.
- (6) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas Laboratories endeavours to analyze samples as soon as possible after receipt.
- (7) Chlordane (Total) = Alpha Chlordane + Gamma Chlordane



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CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C121148

Received: 2021/04/03, 09:00

Encryption Key



**AUTHORIZED REPORT
RAPPORT AUTORISÉ**

Bureau Veritas

05 May 2021 13:28:24

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Nahed Amer, Customer Solutions Representative
Email: Nahed.AMER@bureauveritas.com
Phone# (604) 734 7276

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BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



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BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

RESULTS OF CHEMICAL ANALYSES OF WATER

BV Labs ID		ZO4375	ZO4375	ZO4376			
Sampling Date		2021/04/02 09:00	2021/04/02 09:00	2021/04/02 09:05			
COC Number		632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-01	WG-11218464-020421 -RP-01 Lab-Dup	WG-11218464-020421 -RP-02	RDL	MDL	QC Batch

ANIONS							
Nitrite (N)	mg/L	<0.0050	N/A	<0.0050	0.0050	0.0050	A192927
Calculated Parameters							
Filter and HNO3 Preservation	N/A	FIELD	N/A	FIELD	N/A	N/A	ONSITE
Nitrate (N)	mg/L	0.058	N/A	0.060	0.020	N/A	A192862
Misc. Inorganics							
Conductivity	uS/cm	120	N/A	120	2.0	N/A	A194643
pH	pH	7.96	N/A	7.87	N/A	N/A	A194638
Anions							
Alkalinity (PP as CaCO3)	mg/L	<1.0	N/A	<1.0	1.0	N/A	A194642
Alkalinity (Total as CaCO3)	mg/L	58	N/A	58	1.0	N/A	A194642
Bicarbonate (HCO3)	mg/L	71	N/A	71	1.0	N/A	A194642
Carbonate (CO3)	mg/L	<1.0	N/A	<1.0	1.0	N/A	A194642
Dissolved Fluoride (F)	mg/L	<0.050	N/A	<0.050	0.050	N/A	A194285
Hydroxide (OH)	mg/L	<1.0	N/A	<1.0	1.0	N/A	A194642
Dissolved Chloride (Cl)	mg/L	1.0	N/A	<1.0	1.0	N/A	A193709
Dissolved Sulphate (SO4)	mg/L	3.6	N/A	3.5	1.0	N/A	A193709
Nutrients							
Total Ammonia (N)	mg/L	<0.015	<0.015	<0.015	0.015	0.0040	A195344
Nitrate plus Nitrite (N)	mg/L	0.058	N/A	0.060	0.020	0.020	A192925
Pesticides & Herbicides							
Prometon	ug/L	<0.5	N/A	<0.5	0.5	N/A	A200421
Simazine	ug/L	<3	N/A	<3	3	N/A	A200421
Atrazine	ug/L	<1	N/A	<1	1	N/A	A200421
Propazine	ug/L	<3	N/A	<3	3	N/A	A200421
Metribuzin (Sencor)	ug/L	<3	N/A	<3	3	N/A	A200421
Simetryn	ug/L	<0.5	N/A	<0.5	0.5	N/A	A200421
Ametryn	ug/L	<3	N/A	<3	3	N/A	A200421
Prometryn	ug/L	<3	N/A	<3	3	N/A	A200421
Terbutryne	ug/L	<0.5	N/A	<0.5	0.5	N/A	A200421
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable							



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BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

RESULTS OF CHEMICAL ANALYSES OF WATER

BV Labs ID		ZO4375	ZO4375	ZO4376			
Sampling Date		2021/04/02 09:00	2021/04/02 09:00	2021/04/02 09:05			
COC Number		632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-01	WG-11218464-020421 -RP-01 Lab-Dup	WG-11218464-020421 -RP-02	RDL	MDL	QC Batch
Cyanazine (Bladex)	ug/L	<3	N/A	<3	3	N/A	A200421
Physical Properties							
Turbidity	NTU	0.28	0.30	1.0	0.10	N/A	A192922
Surrogate Recovery (%)							
2-Fluorobiphenyl	%	65	N/A	64	N/A	N/A	A200421
D14-Terphenyl (FS)	%	86	N/A	86	N/A	N/A	A200421
D5-NITROBENZENE (sur.)	%	76	N/A	78	N/A	N/A	A200421
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable							



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GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

RESULTS OF CHEMICAL ANALYSES OF WATER

BV Labs ID		ZO4377	ZO4377		ZO4378			
Sampling Date		2021/04/02 08:50	2021/04/02 08:50		2021/04/02 10:05			
COC Number		632223-01-01	632223-01-01		632223-01-01			
	UNITS	WG-11218464-020421 -RP-03	WG-11218464-020421 -RP-03 Lab-Dup	QC Batch	WG-11218464-020421 -RP-04	RDL	MDL	QC Batch

ANIONS								
Nitrite (N)	mg/L	<0.0050	N/A	A192927	<0.0050	0.0050	0.0050	A192927

Calculated Parameters								
Filter and HNO3 Preservation	N/A	FIELD	N/A	ONSITE	FIELD	N/A	N/A	ONSITE
Nitrate (N)	mg/L	0.071	N/A	A192862	0.050	0.020	N/A	A192862

Misc. Inorganics								
Conductivity	uS/cm	92	93	A194654	53	2.0	N/A	A194643
pH	pH	7.53	7.66	A194652	6.68	N/A	N/A	A194638

Anions								
Alkalinity (PP as CaCO3)	mg/L	<1.0	<1.0	A194653	<1.0	1.0	N/A	A194642
Alkalinity (Total as CaCO3)	mg/L	41	43	A194653	23	1.0	N/A	A194642
Bicarbonate (HCO3)	mg/L	51	52	A194653	28	1.0	N/A	A194642
Carbonate (CO3)	mg/L	<1.0	<1.0	A194653	<1.0	1.0	N/A	A194642
Dissolved Fluoride (F)	mg/L	<0.050	N/A	A194285	<0.050	0.050	N/A	A194285
Hydroxide (OH)	mg/L	<1.0	<1.0	A194653	<1.0	1.0	N/A	A194642
Dissolved Chloride (Cl)	mg/L	1.5	N/A	A193709	2.1	1.0	N/A	A193709
Dissolved Sulphate (SO4)	mg/L	2.6	N/A	A193709	1.0	1.0	N/A	A193709

Nutrients								
Total Ammonia (N)	mg/L	<0.015	N/A	A195344	<0.015	0.015	0.0040	A195344
Nitrate plus Nitrite (N)	mg/L	0.071	N/A	A192925	0.050	0.020	0.020	A192925

Pesticides & Herbicides								
Prometon	ug/L	<0.5	N/A	A200421	<0.5	0.5	N/A	A200421
Simazine	ug/L	<3	N/A	A200421	<3	3	N/A	A200421
Atrazine	ug/L	<1	N/A	A200421	<1	1	N/A	A200421
Propazine	ug/L	<3	N/A	A200421	<3	3	N/A	A200421
Metribuzin (Sencor)	ug/L	<3	N/A	A200421	<3	3	N/A	A200421
Simetryn	ug/L	<0.5	N/A	A200421	<0.5	0.5	N/A	A200421
Ametryn	ug/L	<3	N/A	A200421	<3	3	N/A	A200421
Prometryn	ug/L	<3	N/A	A200421	<3	3	N/A	A200421
Terbutryne	ug/L	<0.5	N/A	A200421	<0.5	0.5	N/A	A200421

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



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BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

RESULTS OF CHEMICAL ANALYSES OF WATER

BV Labs ID		ZO4377	ZO4377		ZO4378			
Sampling Date		2021/04/02 08:50	2021/04/02 08:50		2021/04/02 10:05			
COC Number		632223-01-01	632223-01-01		632223-01-01			
	UNITS	WG-11218464-020421 -RP-03	WG-11218464-020421 -RP-03 Lab-Dup	QC Batch	WG-11218464-020421 -RP-04	RDL	MDL	QC Batch
Cyanazine (Bladex)	ug/L	<3	N/A	A200421	<3	3	N/A	A200421
Physical Properties								
Turbidity	NTU	0.76	N/A	A192922	2.4	0.10	N/A	A192922
Surrogate Recovery (%)								
2-Fluorobiphenyl	%	71	N/A	A200421	65	N/A	N/A	A200421
D14-Terphenyl (FS)	%	86	N/A	A200421	88	N/A	N/A	A200421
D5-NITROBENZENE (sur.)	%	84	N/A	A200421	82	N/A	N/A	A200421
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable								



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Sampler Initials: RP

RESULTS OF CHEMICAL ANALYSES OF WATER

BV Labs ID		ZO4379			
Sampling Date		2021/04/02 10:00			
COC Number		632223-01-01			
	UNITS	WG-11218464-020421 -RP-05	RDL	MDL	QC Batch
ANIONS					
Nitrite (N)	mg/L	<0.0050	0.0050	0.0050	A192927
Calculated Parameters					
Filter and HNO3 Preservation	N/A	FIELD	N/A	N/A	ONSITE
Nitrate (N)	mg/L	0.065	0.020	N/A	A192862
Misc. Inorganics					
Conductivity	uS/cm	74	2.0	N/A	A194643
pH	pH	7.45	N/A	N/A	A194638
Anions					
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	N/A	A194642
Alkalinity (Total as CaCO3)	mg/L	34	1.0	N/A	A194642
Bicarbonate (HCO3)	mg/L	41	1.0	N/A	A194642
Carbonate (CO3)	mg/L	<1.0	1.0	N/A	A194642
Dissolved Fluoride (F)	mg/L	<0.050	0.050	N/A	A194285
Hydroxide (OH)	mg/L	<1.0	1.0	N/A	A194642
Dissolved Chloride (Cl)	mg/L	1.6	1.0	N/A	A193709
Dissolved Sulphate (SO4)	mg/L	1.9	1.0	N/A	A193709
Nutrients					
Total Ammonia (N)	mg/L	0.020	0.015	0.0040	A195344
Nitrate plus Nitrite (N)	mg/L	0.065	0.020	0.020	A192925
Pesticides & Herbicides					
Prometon	ug/L	<0.5	0.5	N/A	A200421
Simazine	ug/L	<3	3	N/A	A200421
Atrazine	ug/L	<1	1	N/A	A200421
Propazine	ug/L	<3	3	N/A	A200421
Metribuzin (Sencor)	ug/L	<3	3	N/A	A200421
Simetryn	ug/L	<0.5	0.5	N/A	A200421
Ametryn	ug/L	<3	3	N/A	A200421
Prometryn	ug/L	<3	3	N/A	A200421
Terbutryne	ug/L	<0.5	0.5	N/A	A200421
Cyanazine (Bladex)	ug/L	<3	3	N/A	A200421
RDL = Reportable Detection Limit N/A = Not Applicable					



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VERITAS

BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

RESULTS OF CHEMICAL ANALYSES OF WATER

BV Labs ID		ZO4379			
Sampling Date		2021/04/02 10:00			
COC Number		632223-01-01			
	UNITS	WG-11218464-020421 -RP-05	RDL	MDL	QC Batch
Physical Properties					
Turbidity	NTU	0.23	0.10	N/A	A192922
Surrogate Recovery (%)					
2-Fluorobiphenyl	%	66	N/A	N/A	A200421
D14-Terphenyl (FS)	%	85	N/A	N/A	A200421
D5-NITROBENZENE (sur.)	%	85	N/A	N/A	A200421
RDL = Reportable Detection Limit N/A = Not Applicable					



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Sampler Initials: RP

POLYCHLORINATED BIPHENYLS BY GC-ECD (WATER)

BV Labs ID		ZO4375	ZO4376	ZO4377			
Sampling Date		2021/04/02 09:00	2021/04/02 09:05	2021/04/02 08:50			
COC Number		632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-01	WG-11218464-020421 -RP-02	WG-11218464-020421 -RP-03	RDL	MDL	QC Batch
Polychlorinated Biphenyls							
Aroclor 1016	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Aroclor 1221	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Aroclor 1232	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Aroclor 1242	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Aroclor 1248	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Aroclor 1254	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Aroclor 1260	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Aroclor 1262	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Aroclor 1268	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Total PCB	mg/L	<0.000050	<0.000050	<0.000050	0.000050	N/A	A192845
Surrogate Recovery (%)							
NONACHLOROBIPHENYL (sur.)	%	85	86	118	N/A	N/A	A194746
RDL = Reportable Detection Limit N/A = Not Applicable							



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BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

POLYCHLORINATED BIPHENYLS BY GC-ECD (WATER)

BV Labs ID		ZO4378	ZO4379	ZO4379			
Sampling Date		2021/04/02 10:05	2021/04/02 10:00	2021/04/02 10:00			
COC Number		632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-04	WG-11218464-020421 -RP-05	WG-11218464-020421 -RP-05 Lab-Dup	RDL	MDL	QC Batch

Polychlorinated Biphenyls							
Aroclor 1016	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Aroclor 1221	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Aroclor 1232	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Aroclor 1242	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Aroclor 1248	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Aroclor 1254	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Aroclor 1260	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Aroclor 1262	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Aroclor 1268	ug/L	<0.050	<0.050	<0.050	0.050	N/A	A194746
Total PCB	mg/L	<0.000050	<0.000050	N/A	0.000050	N/A	A192845

Surrogate Recovery (%)							
NONACHLOROBIPHENYL (sur.)	%	88	87	88	N/A	N/A	A194746

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



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VERITAS

BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

PESTICIDES BY GC-MS (WATER)

BV Labs ID		ZO4375	ZO4376	ZO4377	ZO4378			
Sampling Date		2021/04/02 09:00	2021/04/02 09:05	2021/04/02 08:50	2021/04/02 10:05			
COC Number		632223-01-01	632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-01	WG-11218464-020421 -RP-02	WG-11218464-020421 -RP-03	WG-11218464-020421 -RP-04	RDL	MDL	QC Batch

Pesticides & Herbicides								
Aldicarb	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	N/A	A200424
Atrazine	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	N/A	A200424
Bendiocarb	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	N/A	A200424
Carbaryl	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	N/A	A200424
Carbofuran	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	N/A	A200424
Chlorpyrifos (Dursban)	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	N/A	A200424
Cyanazine (Bladex)	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	N/A	A200424
Demeton-S	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	N/A	A200424
Diazinon	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	N/A	A200424
Dichlorvos	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	N/A	A200424
Dimethoate	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	N/A	A200424
Ethion	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	N/A	A200424
Fenchlorphos (Ronnel)	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	N/A	A200424
Fenthion	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	N/A	A200424
Fonofos	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	N/A	A200424
Guthion (Azinphos-methyl)	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	N/A	A200424
Malathion	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	N/A	A200424
Metolachlor	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	N/A	A200424
Mevinphos (Phosdrin)	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	N/A	A200424
Parathion Ethyl	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	N/A	A200424
Parathion methyl	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	N/A	A200424
Phorate (Thimet)	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	N/A	A200424
Phosmet	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	N/A	A200424
Prometryn	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	N/A	A200424
Simazine	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	N/A	A200424
Terbufos	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	N/A	A200424
Triallate	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	N/A	A200424
Trifluralin	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	N/A	A200424

Surrogate Recovery (%)								
2-Fluorobiphenyl	%	60	78	77	77	N/A	N/A	A200424

RDL = Reportable Detection Limit
N/A = Not Applicable



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VERITAS

BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
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Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

PESTICIDES BY GC-MS (WATER)

BV Labs ID		ZO4375	ZO4376	ZO4377	ZO4378			
Sampling Date		2021/04/02 09:00	2021/04/02 09:05	2021/04/02 08:50	2021/04/02 10:05			
COC Number		632223-01-01	632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-01	WG-11218464-020421 -RP-02	WG-11218464-020421 -RP-03	WG-11218464-020421 -RP-04	RDL	MDL	QC Batch
D14-Terphenyl (FS)	%	88	89	89	89	N/A	N/A	A200424
D5-NITROBENZENE (sur.)	%	57	81	80	81	N/A	N/A	A200424
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PESTICIDES BY GC-MS (WATER)

BV Labs ID		ZO4379			
Sampling Date		2021/04/02 10:00			
COC Number		632223-01-01			
	UNITS	WG-11218464-020421 -RP-05	RDL	MDL	QC Batch
Pesticides & Herbicides					
Aldicarb	ug/L	<5.0	5.0	N/A	A200424
Atrazine	ug/L	<1.0	1.0	N/A	A200424
Bendiocarb	ug/L	<2.0	2.0	N/A	A200424
Carbaryl	ug/L	<5.0	5.0	N/A	A200424
Carbofuran	ug/L	<5.0	5.0	N/A	A200424
Chlorpyrifos (Dursban)	ug/L	<2.0	2.0	N/A	A200424
Cyanazine (Bladex)	ug/L	<5.0	5.0	N/A	A200424
Demeton-S	ug/L	<2.0	2.0	N/A	A200424
Diazinon	ug/L	<2.0	2.0	N/A	A200424
Dichlorvos	ug/L	<2.0	2.0	N/A	A200424
Dimethoate	ug/L	<2.0	2.0	N/A	A200424
Ethion	ug/L	<1.0	1.0	N/A	A200424
Fenclorphos (Ronnel)	ug/L	<2.0	2.0	N/A	A200424
Fenthion	ug/L	<1.0	1.0	N/A	A200424
Fonofos	ug/L	<2.0	2.0	N/A	A200424
Guthion (Azinphos-methyl)	ug/L	<1.0	1.0	N/A	A200424
Malathion	ug/L	<2.0	2.0	N/A	A200424
Metolachlor	ug/L	<5.0	5.0	N/A	A200424
Mevinphos (Phosdrin)	ug/L	<2.0	2.0	N/A	A200424
Parathion Ethyl	ug/L	<2.0	2.0	N/A	A200424
Parathion methyl	ug/L	<2.0	2.0	N/A	A200424
Phorate (Thimet)	ug/L	<1.0	1.0	N/A	A200424
Phosmet	ug/L	<2.0	2.0	N/A	A200424
Prometryn	ug/L	<1.0	1.0	N/A	A200424
Simazine	ug/L	<2.0	2.0	N/A	A200424
Terbufos	ug/L	<1.0	1.0	N/A	A200424
Triallate	ug/L	<5.0	5.0	N/A	A200424
Trifluralin	ug/L	<5.0	5.0	N/A	A200424
Surrogate Recovery (%)					
2-Fluorobiphenyl	%	78	N/A	N/A	A200424
RDL = Reportable Detection Limit N/A = Not Applicable					



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VERITAS

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GHD Limited
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Your P.O. #: 73523096
Sampler Initials: RP

PESTICIDES BY GC-MS (WATER)

BV Labs ID		ZO4379			
Sampling Date		2021/04/02 10:00			
COC Number		632223-01-01			
	UNITS	WG-11218464-020421 -RP-05	RDL	MDL	QC Batch
D14-Terphenyl (FS)	%	89	N/A	N/A	A200424
D5-NITROBENZENE (sur.)	%	82	N/A	N/A	A200424
RDL = Reportable Detection Limit N/A = Not Applicable					



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VERITAS

BV Labs Job #: C121148
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GHD Limited
Client Project #: 11218464
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Sampler Initials: RP

PHENOXYALKYL ACID PESTICIDES/HERBICIDES (WATER)

BV Labs ID		ZO4375	ZO4376	ZO4377			
Sampling Date		2021/04/02 09:00	2021/04/02 09:05	2021/04/02 08:50			
COC Number		632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-01	WG-11218464-020421 -RP-02	WG-11218464-020421 -RP-03	RDL	MDL	QC Batch
Pesticides & Herbicides							
2,4-D (BEE)	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
Dicamba	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
MCPP	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
MCPA	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
Dichlorprop	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
2,4-D	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
2,4,5-TP	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
2,4,5-T	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
2,4-DB	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
Picloram	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
Surrogate Recovery (%)							
2,4-Dichlorophenyl Acetic Acid	%	108	107	108	N/A	N/A	A200420
2,5-Dibromobenzoic Acid	%	98	97	97	N/A	N/A	A200420
4,4-Dibromobiphenyl	%	100	97	99	N/A	N/A	A200420
RDL = Reportable Detection Limit N/A = Not Applicable							



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BV Labs Job #: C121148
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GHD Limited
Client Project #: 11218464
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Sampler Initials: RP

PHENOXYALKYL ACID PESTICIDES/HERBICIDES (WATER)

BV Labs ID		ZO4377	ZO4378	ZO4379			
Sampling Date		2021/04/02 08:50	2021/04/02 10:05	2021/04/02 10:00			
COC Number		632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-03 Lab-Dup	WG-11218464-020421 -RP-04	WG-11218464-020421 -RP-05	RDL	MDL	QC Batch
Pesticides & Herbicides							
2,4-D (BEE)	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
Dicamba	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
MCPP	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
MCPA	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
Dichlorprop	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
2,4-D	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
2,4,5-TP	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
2,4,5-T	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
2,4-DB	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
Picloram	ug/L	<0.50	<0.50	<0.50	0.50	N/A	A200420
Surrogate Recovery (%)							
2,4-Dichlorophenyl Acetic Acid	%	109	107	106	N/A	N/A	A200420
2,5-Dibromobenzoic Acid	%	98	97	95	N/A	N/A	A200420
4,4-Dibromobiphenyl	%	100	99	97	N/A	N/A	A200420
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable							



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VERITAS

BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

ORGANOCHLORINATED PESTICIDES BY GC-ECD (WATER)

BV Labs ID		ZO4375	ZO4376	ZO4377			
Sampling Date		2021/04/02 09:00	2021/04/02 09:05	2021/04/02 08:50			
COC Number		632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-01	WG-11218464-020421 -RP-02	WG-11218464-020421 -RP-03	RDL	MDL	QC Batch
Calculated Parameters							
Aldrin + Dieldrin	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200423
Chlordane (Total)	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200423
DDT + Metabolites	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200423
Heptachlor + Heptachlor epoxide	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200423
o,p-DDD + p,p-DDD	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200423
o,p-DDE + p,p-DDE	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200423
o,p-DDT + p,p-DDT	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200423
Total Endosulfan	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200423
Total PCB	ug/L	<0.05	<0.05	<0.05	0.05	N/A	A200423
Pesticides & Herbicides							
a-BHC	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
a-Chlordane	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
b-BHC	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
d-BHC	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
Endosulfan I	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
Endosulfan II	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
Endosulfan Sulfate	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
Endrin	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
Endrin Aldehyde	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
Endrin ketone	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
Hexachlorobenzene	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
Mirex	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
o,p'-DDT	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
Octachlorostyrene	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
Toxaphene	ug/L	<0.2	<0.2	<0.2	0.2	N/A	A200422
Lindane	ug/L	<0.003	<0.003	<0.003	0.003	N/A	A200422
Heptachlor	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
Aldrin	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
Heptachlor Epoxide	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
Oxychlordane	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
RDL = Reportable Detection Limit N/A = Not Applicable							



BUREAU
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BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

ORGANOCHLORINATED PESTICIDES BY GC-ECD (WATER)

BV Labs ID		ZO4375	ZO4376	ZO4377			
Sampling Date		2021/04/02 09:00	2021/04/02 09:05	2021/04/02 08:50			
COC Number		632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-01	WG-11218464-020421 -RP-02	WG-11218464-020421 -RP-03	RDL	MDL	QC Batch
g-Chlordane	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
Dieldrin	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
o,p'-DDE	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
p,p'-DDE	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
o,p'-DDD	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
p,p'-DDD	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
p,p'-DDT	ug/L	<0.005	<0.005	<0.005	0.005	N/A	A200422
Methoxychlor	ug/L	<0.01	<0.01	<0.01	0.01	N/A	A200422
Surrogate Recovery (%)							
2,4,5,6-Tetrachloro-m-xylene	%	73	71	71	N/A	N/A	A200422
Decachlorobiphenyl	%	92	79	85	N/A	N/A	A200422
RDL = Reportable Detection Limit N/A = Not Applicable							



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BV Labs Job #: C121148
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GHD Limited
Client Project #: 11218464
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Your P.O. #: 73523096
Sampler Initials: RP

ORGANOCHLORINATED PESTICIDES BY GC-ECD (WATER)

BV Labs ID		ZO4378	ZO4379			
Sampling Date		2021/04/02 10:05	2021/04/02 10:00			
COC Number		632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-04	WG-11218464-020421 -RP-05	RDL	MDL	QC Batch
Calculated Parameters						
Aldrin + Dieldrin	ug/L	<0.005	<0.005	0.005	N/A	A200423
Chlordane (Total)	ug/L	<0.005	<0.005	0.005	N/A	A200423
DDT + Metabolites	ug/L	<0.005	<0.005	0.005	N/A	A200423
Heptachlor + Heptachlor epoxide	ug/L	<0.005	<0.005	0.005	N/A	A200423
o,p-DDD + p,p-DDD	ug/L	<0.005	<0.005	0.005	N/A	A200423
o,p-DDE + p,p-DDE	ug/L	<0.005	<0.005	0.005	N/A	A200423
o,p-DDT + p,p-DDT	ug/L	<0.005	<0.005	0.005	N/A	A200423
Total Endosulfan	ug/L	<0.005	<0.005	0.005	N/A	A200423
Total PCB	ug/L	<0.05	<0.05	0.05	N/A	A200423
Pesticides & Herbicides						
a-BHC	ug/L	<0.005	<0.005	0.005	N/A	A200422
a-Chlordane	ug/L	<0.005	<0.005	0.005	N/A	A200422
b-BHC	ug/L	<0.005	<0.005	0.005	N/A	A200422
d-BHC	ug/L	<0.005	<0.005	0.005	N/A	A200422
Endosulfan I	ug/L	<0.005	<0.005	0.005	N/A	A200422
Endosulfan II	ug/L	<0.005	<0.005	0.005	N/A	A200422
Endosulfan Sulfate	ug/L	<0.005	<0.005	0.005	N/A	A200422
Endrin	ug/L	<0.005	<0.005	0.005	N/A	A200422
Endrin Aldehyde	ug/L	<0.005	<0.005	0.005	N/A	A200422
Endrin ketone	ug/L	<0.005	<0.005	0.005	N/A	A200422
Hexachlorobenzene	ug/L	<0.005	<0.005	0.005	N/A	A200422
Mirex	ug/L	<0.005	<0.005	0.005	N/A	A200422
o,p'-DDT	ug/L	<0.005	<0.005	0.005	N/A	A200422
Octachlorostyrene	ug/L	<0.005	<0.005	0.005	N/A	A200422
Toxaphene	ug/L	<0.2	<0.2	0.2	N/A	A200422
Lindane	ug/L	<0.003	<0.003	0.003	N/A	A200422
Heptachlor	ug/L	<0.005	<0.005	0.005	N/A	A200422
Aldrin	ug/L	<0.005	<0.005	0.005	N/A	A200422
Heptachlor Epoxide	ug/L	<0.005	<0.005	0.005	N/A	A200422
Oxychlordane	ug/L	<0.005	<0.005	0.005	N/A	A200422
RDL = Reportable Detection Limit N/A = Not Applicable						



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BV Labs Job #: C121148
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GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

ORGANOCHLORINATED PESTICIDES BY GC-ECD (WATER)

BV Labs ID		ZO4378	ZO4379			
Sampling Date		2021/04/02 10:05	2021/04/02 10:00			
COC Number		632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-04	WG-11218464-020421 -RP-05	RDL	MDL	QC Batch
g-Chlordane	ug/L	<0.005	<0.005	0.005	N/A	A200422
Dieldrin	ug/L	<0.005	<0.005	0.005	N/A	A200422
o,p'-DDE	ug/L	<0.005	<0.005	0.005	N/A	A200422
p,p'-DDE	ug/L	<0.005	<0.005	0.005	N/A	A200422
o,p'-DDD	ug/L	<0.005	<0.005	0.005	N/A	A200422
p,p'-DDD	ug/L	<0.005	<0.005	0.005	N/A	A200422
p,p'-DDT	ug/L	<0.005	<0.005	0.005	N/A	A200422
Methoxychlor	ug/L	<0.01	<0.01	0.01	N/A	A200422
Surrogate Recovery (%)						
2,4,5,6-Tetrachloro-m-xylene	%	70	73	N/A	N/A	A200422
Decachlorobiphenyl	%	75	83	N/A	N/A	A200422
RDL = Reportable Detection Limit N/A = Not Applicable						



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BV Labs Job #: C121148
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GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

MICROBIOLOGY (WATER)

BV Labs ID		ZO4375	ZO4376	ZO4377			
Sampling Date		2021/04/02 09:00	2021/04/02 09:05	2021/04/02 08:50			
COC Number		632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-01	WG-11218464-020421 -RP-02	WG-11218464-020421 -RP-03	RDL	MDL	QC Batch

Microbiological Param.							
E. coli	CFU/100mL	<1	<1	<1	1	N/A	A192904
Total Coliforms	CFU/100mL	<1	2	<1	1	N/A	A192903
RDL = Reportable Detection Limit N/A = Not Applicable							

BV Labs ID		ZO4378	ZO4379			
Sampling Date		2021/04/02 10:05	2021/04/02 10:00			
COC Number		632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-04	WG-11218464-020421 -RP-05	RDL	MDL	QC Batch

Microbiological Param.						
E. coli	CFU/100mL	3	<1	1	N/A	A192904
Total Coliforms	CFU/100mL	100	<1	1	N/A	A192903
RDL = Reportable Detection Limit N/A = Not Applicable						



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BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

RESIN AND FATTY ACIDS BY GC-MS (WATER)

BV Labs ID		ZO4375	ZO4376	ZO4376			
Sampling Date		2021/04/02 09:00	2021/04/02 09:05	2021/04/02 09:05			
COC Number		632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-01	WG-11218464-020421 -RP-02	WG-11218464-020421 -RP-02 Lab-Dup	RDL	MDL	QC Batch

Misc. Organics							
Decanoic acid (C10)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Undecanoic acid (C11)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Dodecanoic acid (C12)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Tetradecanoic acid (C14)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Hexadecanoic acid (C16)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Octadecanoic acid (C18)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Oleic acid (C18:1)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Linoleic acid (C18:2)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Linolenic acid (C18:3)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Eicosanoic acid (C20)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Docosanoic acid (C22)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
9,10-dichlorostearic acid (C18)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Pimaric acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Sandaracopimaric acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Isopimaric acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Palustric acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Dehydroabietic acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Abietic acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Neobiatic acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
14-chlorodehydroabietic acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
12-chlorodehydroabietic acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
12,14-dichlorodehydroabietic acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
* Total of Resin Acids Detected	mg/L	<0.060	<0.060	<0.060	0.060	N/A	A196563
* Total of Fatty Acids Detected	mg/L	<0.072	<0.072	<0.072	0.072	N/A	A196563

Surrogate Recovery (%)							
HEPTADECANOIC ACID (sur.)	%	114	116	104	N/A	N/A	A196563
O-METHYLPODOCARPIC ACID (sur.)	%	125	125	115	N/A	N/A	A196563

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



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VERITAS

BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

RESIN AND FATTY ACIDS BY GC-MS (WATER)

BV Labs ID		ZO4377	ZO4378	ZO4379			
Sampling Date		2021/04/02 08:50	2021/04/02 10:05	2021/04/02 10:00			
COC Number		632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-03	WG-11218464-020421 -RP-04	WG-11218464-020421 -RP-05	RDL	MDL	QC Batch
Misc. Organics							
Decanoic acid (C10)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Undecanoic acid (C11)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Dodecanoic acid (C12)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Tetradecanoic acid (C14)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Hexadecanoic acid (C16)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Octadecanoic acid (C18)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Oleic acid (C18:1)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Linoleic acid (C18:2)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Linolenic acid (C18:3)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Eicosanoic acid (C20)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Docosanoic acid (C22)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
9,10-dichlorostearic acid (C18)	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Pimaric acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Sandaracopimaric acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Isopimaric acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Palustric acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Dehydroabietic acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Abietic acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
Neoabietic acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
14-chlorodehydroabietic acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
12-chlorodehydroabietic acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
12,14-dichlorodehydroabietic acid	mg/L	<0.0060	<0.0060	<0.0060	0.0060	N/A	A196563
* Total of Resin Acids Detected	mg/L	<0.060	<0.060	<0.060	0.060	N/A	A196563
* Total of Fatty Acids Detected	mg/L	<0.072	<0.072	<0.072	0.072	N/A	A196563
Surrogate Recovery (%)							
HEPTADECANOIC ACID (sur.)	%	113	118	114	N/A	N/A	A196563
O-METHYLPODOCARPIC ACID (sur.)	%	124	126	125	N/A	N/A	A196563
RDL = Reportable Detection Limit N/A = Not Applicable							



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BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

CSR DISSOLVED METALS IN WATER WITH CV HG (WATER)

BV Labs ID		ZO4375	ZO4376	ZO4377			
Sampling Date		2021/04/02 09:00	2021/04/02 09:05	2021/04/02 08:50			
COC Number		632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-01	WG-11218464-020421 -RP-02	WG-11218464-020421 -RP-03	RDL	MDL	QC Batch
Calculated Parameters							
Dissolved Hardness (CaCO3)	mg/L	57.9	56.7	42.7	0.50	0.50	A192774
Elements							
Dissolved Mercury (Hg)	ug/L	<0.0019	<0.0019	<0.0019	0.0019	0.0019	A193502
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	8.4	8.2	4.1	3.0	0.030	A193553
Dissolved Antimony (Sb)	ug/L	<0.50	<0.50	<0.50	0.50	0.0020	A193553
Dissolved Arsenic (As)	ug/L	0.31	0.29	0.24	0.10	0.010	A193553
Dissolved Barium (Ba)	ug/L	<1.0	1.1	<1.0	1.0	0.0020	A193553
Dissolved Beryllium (Be)	ug/L	<0.10	<0.10	<0.10	0.10	0.0030	A193553
Dissolved Bismuth (Bi)	ug/L	<1.0	<1.0	<1.0	1.0	0.0010	A193553
Dissolved Boron (B)	ug/L	<50	<50	<50	50	50	A193553
Dissolved Cadmium (Cd)	ug/L	<0.010	<0.010	<0.010	0.010	0.0020	A193553
Dissolved Chromium (Cr)	ug/L	<1.0	<1.0	<1.0	1.0	0.020	A193553
Dissolved Cobalt (Co)	ug/L	<0.20	<0.20	<0.20	0.20	0.20	A193553
Dissolved Copper (Cu)	ug/L	<0.20	<0.20	<0.20	0.20	0.010	A193553
Dissolved Iron (Fe)	ug/L	<5.0	<5.0	<5.0	5.0	0.040	A193553
Dissolved Lead (Pb)	ug/L	<0.20	<0.20	<0.20	0.20	0.0010	A193553
Dissolved Lithium (Li)	ug/L	<2.0	<2.0	<2.0	2.0	2.0	A193553
Dissolved Manganese (Mn)	ug/L	<1.0	<1.0	<1.0	1.0	0.030	A193553
Dissolved Molybdenum (Mo)	ug/L	<1.0	<1.0	<1.0	1.0	0.0020	A193553
Dissolved Nickel (Ni)	ug/L	<1.0	<1.0	<1.0	1.0	0.010	A193553
Dissolved Phosphorus (P)	ug/L	<10	11	<10	10	1.0	A193553
Dissolved Selenium (Se)	ug/L	<0.10	<0.10	<0.10	0.10	0.0060	A193553
Dissolved Silicon (Si)	ug/L	2790	2750	3290	100	0.30	A193553
Dissolved Silver (Ag)	ug/L	<0.020	<0.020	<0.020	0.020	0.0020	A193553
Dissolved Strontium (Sr)	ug/L	33.7	33.3	25.5	1.0	0.0020	A193553
Dissolved Thallium (Tl)	ug/L	<0.010	<0.010	<0.010	0.010	0.010	A193553
Dissolved Tin (Sn)	ug/L	<5.0	<5.0	<5.0	5.0	0.0050	A193553
Dissolved Titanium (Ti)	ug/L	<5.0	<5.0	<5.0	5.0	0.30	A193553
Dissolved Uranium (U)	ug/L	0.14	0.14	<0.10	0.10	0.0010	A193553
Dissolved Vanadium (V)	ug/L	<5.0	<5.0	<5.0	5.0	0.020	A193553
RDL = Reportable Detection Limit							



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BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

CSR DISSOLVED METALS IN WATER WITH CV HG (WATER)

BV Labs ID		ZO4375	ZO4376	ZO4377			
Sampling Date		2021/04/02 09:00	2021/04/02 09:05	2021/04/02 08:50			
COC Number		632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-01	WG-11218464-020421 -RP-02	WG-11218464-020421 -RP-03	RDL	MDL	QC Batch
Dissolved Zinc (Zn)	ug/L	<5.0	<5.0	<5.0	5.0	0.050	A193553
Dissolved Zirconium (Zr)	ug/L	<0.10	<0.10	<0.10	0.10	0.0080	A193553
Dissolved Calcium (Ca)	mg/L	19.4	19.1	14.1	0.050	0.0010	A192778
Dissolved Magnesium (Mg)	mg/L	2.29	2.20	1.82	0.050	0.00050	A192778
Dissolved Potassium (K)	mg/L	0.142	0.133	0.107	0.050	0.0020	A192778
Dissolved Sodium (Na)	mg/L	1.51	1.47	1.37	0.050	0.0010	A192778
Dissolved Sulphur (S)	mg/L	<3.0	<3.0	<3.0	3.0	1.0	A192778
RDL = Reportable Detection Limit							



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BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

CSR DISSOLVED METALS IN WATER WITH CV HG (WATER)

BV Labs ID		ZO4378	ZO4379			
Sampling Date		2021/04/02 10:05	2021/04/02 10:00			
COC Number		632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-04	WG-11218464-020421 -RP-05	RDL	MDL	QC Batch
Calculated Parameters						
Dissolved Hardness (CaCO3)	mg/L	21.2	33.6	0.50	0.50	A192774
Elements						
Dissolved Mercury (Hg)	ug/L	<0.0019	<0.0019	0.0019	0.0019	A193502
Dissolved Metals by ICPMS						
Dissolved Aluminum (Al)	ug/L	46.7	4.9	3.0	0.030	A193553
Dissolved Antimony (Sb)	ug/L	<0.50	<0.50	0.50	0.0020	A193553
Dissolved Arsenic (As)	ug/L	<0.10	0.50	0.10	0.010	A193553
Dissolved Barium (Ba)	ug/L	1.4	<1.0	1.0	0.0020	A193553
Dissolved Beryllium (Be)	ug/L	<0.10	<0.10	0.10	0.0030	A193553
Dissolved Bismuth (Bi)	ug/L	<1.0	<1.0	1.0	0.0010	A193553
Dissolved Boron (B)	ug/L	<50	<50	50	50	A193553
Dissolved Cadmium (Cd)	ug/L	<0.010	<0.010	0.010	0.0020	A193553
Dissolved Chromium (Cr)	ug/L	<1.0	<1.0	1.0	0.020	A193553
Dissolved Cobalt (Co)	ug/L	0.83	<0.20	0.20	0.20	A193553
Dissolved Copper (Cu)	ug/L	1.22	<0.20	0.20	0.010	A193553
Dissolved Iron (Fe)	ug/L	69.5	<5.0	5.0	0.040	A193553
Dissolved Lead (Pb)	ug/L	<0.20	<0.20	0.20	0.0010	A193553
Dissolved Lithium (Li)	ug/L	<2.0	<2.0	2.0	2.0	A193553
Dissolved Manganese (Mn)	ug/L	70.6	<1.0	1.0	0.030	A193553
Dissolved Molybdenum (Mo)	ug/L	<1.0	<1.0	1.0	0.0020	A193553
Dissolved Nickel (Ni)	ug/L	<1.0	<1.0	1.0	0.010	A193553
Dissolved Phosphorus (P)	ug/L	<10	<10	10	1.0	A193553
Dissolved Selenium (Se)	ug/L	<0.10	<0.10	0.10	0.0060	A193553
Dissolved Silicon (Si)	ug/L	3660	3430	100	0.30	A193553
Dissolved Silver (Ag)	ug/L	<0.020	<0.020	0.020	0.0020	A193553
Dissolved Strontium (Sr)	ug/L	11.6	18.3	1.0	0.0020	A193553
Dissolved Thallium (Tl)	ug/L	<0.010	<0.010	0.010	0.010	A193553
Dissolved Tin (Sn)	ug/L	<5.0	<5.0	5.0	0.0050	A193553
Dissolved Titanium (Ti)	ug/L	<5.0	<5.0	5.0	0.30	A193553
Dissolved Uranium (U)	ug/L	<0.10	<0.10	0.10	0.0010	A193553
Dissolved Vanadium (V)	ug/L	<5.0	<5.0	5.0	0.020	A193553
RDL = Reportable Detection Limit						



BUREAU
VERITAS

BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

CSR DISSOLVED METALS IN WATER WITH CV HG (WATER)

BV Labs ID		ZO4378	ZO4379			
Sampling Date		2021/04/02 10:05	2021/04/02 10:00			
COC Number		632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-04	WG-11218464-020421 -RP-05	RDL	MDL	QC Batch
Dissolved Zinc (Zn)	ug/L	<5.0	<5.0	5.0	0.050	A193553
Dissolved Zirconium (Zr)	ug/L	<0.10	<0.10	0.10	0.0080	A193553
Dissolved Calcium (Ca)	mg/L	6.39	10.9	0.050	0.0010	A192778
Dissolved Magnesium (Mg)	mg/L	1.28	1.53	0.050	0.00050	A192778
Dissolved Potassium (K)	mg/L	0.086	0.088	0.050	0.0020	A192778
Dissolved Sodium (Na)	mg/L	1.32	1.12	0.050	0.0010	A192778
Dissolved Sulphur (S)	mg/L	<3.0	<3.0	3.0	1.0	A192778
RDL = Reportable Detection Limit						



BUREAU
VERITAS

BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

CSR TOTAL METALS IN WATER WITH CV HG (WATER)

BV Labs ID		ZO4375	ZO4375		ZO4376			
Sampling Date		2021/04/02 09:00	2021/04/02 09:00		2021/04/02 09:05			
COC Number		632223-01-01	632223-01-01		632223-01-01			
	UNITS	WG-11218464-020421 -RP-01	WG-11218464-020421 -RP-01 Lab-Dup	QC Batch	WG-11218464-020421 -RP-02	RDL	MDL	QC Batch

Calculated Parameters								
Total Hardness (CaCO3)	mg/L	53.5	N/A	A192773	54.3	0.50	0.50	A192773
Elements								
Total Mercury (Hg)	ug/L	<0.0019	<0.0019	A193646	<0.0019	0.0019	0.0019	A193480
Total Metals by ICPMS								
Total Aluminum (Al)	ug/L	25.3	N/A	A193195	55.3	3.0	0.030	A193195
Total Antimony (Sb)	ug/L	<0.50	N/A	A193195	<0.50	0.50	0.0020	A193195
Total Arsenic (As)	ug/L	0.25	N/A	A193195	0.32	0.10	0.010	A193195
Total Barium (Ba)	ug/L	<1.0	N/A	A193195	1.1	1.0	0.0020	A193195
Total Beryllium (Be)	ug/L	<0.10	N/A	A193195	<0.10	0.10	0.0030	A193195
Total Bismuth (Bi)	ug/L	<1.0	N/A	A193195	<1.0	1.0	0.0010	A193195
Total Boron (B)	ug/L	<50	N/A	A193195	<50	50	50	A193195
Total Cadmium (Cd)	ug/L	<0.010	N/A	A193195	<0.010	0.010	0.0020	A193195
Total Chromium (Cr)	ug/L	<1.0	N/A	A193195	<1.0	1.0	0.020	A193195
Total Cobalt (Co)	ug/L	<0.20	N/A	A193195	<0.20	0.20	0.20	A193195
Total Copper (Cu)	ug/L	<0.50	N/A	A193195	0.79	0.50	0.030	A193195
Total Iron (Fe)	ug/L	21	N/A	A193195	75	10	0.70	A193195
Total Lead (Pb)	ug/L	<0.20	N/A	A193195	<0.20	0.20	0.0010	A193195
Total Lithium (Li)	ug/L	<2.0	N/A	A193195	<2.0	2.0	2.0	A193195
Total Manganese (Mn)	ug/L	<1.0	N/A	A193195	3.2	1.0	0.030	A193195
Total Molybdenum (Mo)	ug/L	<1.0	N/A	A193195	<1.0	1.0	0.0020	A193195
Total Nickel (Ni)	ug/L	<1.0	N/A	A193195	<1.0	1.0	0.010	A193195
Total Phosphorus (P)	ug/L	<10	N/A	A193195	<10	10	1.0	A193195
Total Selenium (Se)	ug/L	<0.10	N/A	A193195	<0.10	0.10	0.0060	A193195
Total Silicon (Si)	ug/L	2660	N/A	A193195	2810	100	0.30	A193195
Total Silver (Ag)	ug/L	<0.020	N/A	A193195	<0.020	0.020	0.0020	A193195
Total Strontium (Sr)	ug/L	31.5	N/A	A193195	31.3	1.0	0.0020	A193195
Total Thallium (Tl)	ug/L	<0.010	N/A	A193195	<0.010	0.010	0.010	A193195
Total Tin (Sn)	ug/L	<5.0	N/A	A193195	<5.0	5.0	0.0050	A193195
Total Titanium (Ti)	ug/L	<5.0	N/A	A193195	<5.0	5.0	0.30	A193195

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



BUREAU
VERITAS

BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

CSR TOTAL METALS IN WATER WITH CV HG (WATER)

BV Labs ID		ZO4375	ZO4375		ZO4376			
Sampling Date		2021/04/02 09:00	2021/04/02 09:00		2021/04/02 09:05			
COC Number		632223-01-01	632223-01-01		632223-01-01			
	UNITS	WG-11218464-020421 -RP-01	WG-11218464-020421 -RP-01 Lab-Dup	QC Batch	WG-11218464-020421 -RP-02	RDL	MDL	QC Batch
Total Uranium (U)	ug/L	0.15	N/A	A193195	0.16	0.10	0.0010	A193195
Total Vanadium (V)	ug/L	<5.0	N/A	A193195	<5.0	5.0	0.020	A193195
Total Zinc (Zn)	ug/L	<5.0	N/A	A193195	<5.0	5.0	0.050	A193195
Total Zirconium (Zr)	ug/L	<0.10	N/A	A193195	<0.10	0.10	0.0080	A193195
Total Calcium (Ca)	mg/L	18.2	N/A	A192779	18.7	0.050	0.0010	A192779
Total Magnesium (Mg)	mg/L	1.93	N/A	A192779	1.87	0.050	0.00050	A192779
Total Potassium (K)	mg/L	0.117	N/A	A192779	0.115	0.050	0.0020	A192779
Total Sodium (Na)	mg/L	1.26	N/A	A192779	1.24	0.050	0.0010	A192779
Total Sulphur (S)	mg/L	<3.0	N/A	A192779	<3.0	3.0	1.0	A192779

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



BUREAU
VERITAS

BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

CSR TOTAL METALS IN WATER WITH CV HG (WATER)

BV Labs ID		ZO4377	ZO4378	ZO4379			
Sampling Date		2021/04/02 08:50	2021/04/02 10:05	2021/04/02 10:00			
COC Number		632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-03	WG-11218464-020421 -RP-04	WG-11218464-020421 -RP-05	RDL	MDL	QC Batch
Calculated Parameters							
Total Hardness (CaCO3)	mg/L	40.6	20.8	32.7	0.50	0.50	A192773
Elements							
Total Mercury (Hg)	ug/L	<0.0019	<0.0019	<0.0019	0.0019	0.0019	A193480
Total Metals by ICPMS							
Total Aluminum (Al)	ug/L	48.5	149	25.8	3.0	0.030	A193195
Total Antimony (Sb)	ug/L	<0.50	<0.50	<0.50	0.50	0.0020	A193195
Total Arsenic (As)	ug/L	0.17	<0.10	0.40	0.10	0.010	A193195
Total Barium (Ba)	ug/L	<1.0	1.1	<1.0	1.0	0.0020	A193195
Total Beryllium (Be)	ug/L	<0.10	<0.10	<0.10	0.10	0.0030	A193195
Total Bismuth (Bi)	ug/L	<1.0	<1.0	<1.0	1.0	0.0010	A193195
Total Boron (B)	ug/L	<50	<50	<50	50	50	A193195
Total Cadmium (Cd)	ug/L	<0.010	<0.010	<0.010	0.010	0.0020	A193195
Total Chromium (Cr)	ug/L	<1.0	<1.0	<1.0	1.0	0.020	A193195
Total Cobalt (Co)	ug/L	<0.20	0.97	<0.20	0.20	0.20	A193195
Total Copper (Cu)	ug/L	<0.50	1.43	2.09	0.50	0.030	A193195
Total Iron (Fe)	ug/L	95	307	40	10	0.70	A193195
Total Lead (Pb)	ug/L	<0.20	<0.20	<0.20	0.20	0.0010	A193195
Total Lithium (Li)	ug/L	<2.0	<2.0	<2.0	2.0	2.0	A193195
Total Manganese (Mn)	ug/L	2.4	75.5	33.2	1.0	0.030	A193195
Total Molybdenum (Mo)	ug/L	<1.0	<1.0	<1.0	1.0	0.0020	A193195
Total Nickel (Ni)	ug/L	<1.0	<1.0	<1.0	1.0	0.010	A193195
Total Phosphorus (P)	ug/L	<10	<10	<10	10	1.0	A193195
Total Selenium (Se)	ug/L	<0.10	<0.10	<0.10	0.10	0.0060	A193195
Total Silicon (Si)	ug/L	3310	3850	3500	100	0.30	A193195
Total Silver (Ag)	ug/L	<0.020	<0.020	<0.020	0.020	0.0020	A193195
Total Strontium (Sr)	ug/L	24.9	11.1	17.3	1.0	0.0020	A193195
Total Thallium (Tl)	ug/L	<0.010	<0.010	<0.010	0.010	0.010	A193195
Total Tin (Sn)	ug/L	<5.0	<5.0	<5.0	5.0	0.0050	A193195
Total Titanium (Ti)	ug/L	5.6	13.3	<5.0	5.0	0.30	A193195
Total Uranium (U)	ug/L	<0.10	<0.10	<0.10	0.10	0.0010	A193195
Total Vanadium (V)	ug/L	<5.0	<5.0	<5.0	5.0	0.020	A193195
RDL = Reportable Detection Limit							



BUREAU
VERITAS

BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

CSR TOTAL METALS IN WATER WITH CV HG (WATER)

BV Labs ID		ZO4377	ZO4378	ZO4379			
Sampling Date		2021/04/02 08:50	2021/04/02 10:05	2021/04/02 10:00			
COC Number		632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-03	WG-11218464-020421 -RP-04	WG-11218464-020421 -RP-05	RDL	MDL	QC Batch
Total Zinc (Zn)	ug/L	<5.0	<5.0	<5.0	5.0	0.050	A193195
Total Zirconium (Zr)	ug/L	<0.10	<0.10	<0.10	0.10	0.0080	A193195
Total Calcium (Ca)	mg/L	13.7	6.52	10.9	0.050	0.0010	A192779
Total Magnesium (Mg)	mg/L	1.54	1.09	1.31	0.050	0.00050	A192779
Total Potassium (K)	mg/L	0.098	0.081	0.085	0.050	0.0020	A192779
Total Sodium (Na)	mg/L	1.16	1.13	0.962	0.050	0.0010	A192779
Total Sulphur (S)	mg/L	<3.0	<3.0	<3.0	3.0	1.0	A192779
RDL = Reportable Detection Limit							



BUREAU
VERITAS

BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

CSR PAH IN WATER BY GC-MS (WATER)

BV Labs ID		ZO4375	ZO4376	ZO4377			
Sampling Date		2021/04/02 09:00	2021/04/02 09:05	2021/04/02 08:50			
COC Number		632223-01-01	632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-01	WG-11218464-020421 -RP-02	WG-11218464-020421 -RP-03	RDL	MDL	QC Batch
Calculated Parameters							
Low Molecular Weight PAH's	ug/L	<0.10	<0.10	<0.10	0.10	0.010	A192865
High Molecular Weight PAH's	ug/L	<0.050	<0.050	<0.050	0.050	0.020	A192865
Total PAH	ug/L	<0.10	<0.10	<0.10	0.10	0.010	A192865
Polycyclic Aromatics							
Quinoline	ug/L	<0.020	<0.020	<0.020	0.020	0.020	A194016
Naphthalene	ug/L	<0.10	<0.10	<0.10	0.10	0.050	A194016
1-Methylnaphthalene	ug/L	<0.050	<0.050	<0.050	0.050	0.050	A194016
2-Methylnaphthalene	ug/L	<0.10	<0.10	<0.10	0.10	0.050	A194016
Acenaphthylene	ug/L	<0.050	<0.050	<0.050	0.050	0.050	A194016
Acenaphthene	ug/L	<0.050	<0.050	<0.050	0.050	0.050	A194016
Fluorene	ug/L	<0.050	<0.050	<0.050	0.050	0.050	A194016
Phenanthrene	ug/L	<0.050	<0.050	<0.050	0.050	0.050	A194016
Anthracene	ug/L	<0.010	<0.010	<0.010	0.010	0.010	A194016
Acridine	ug/L	<0.050	<0.050	<0.050	0.050	0.050	A194016
Fluoranthene	ug/L	<0.020	<0.020	<0.020	0.020	0.020	A194016
Pyrene	ug/L	<0.020	<0.020	<0.020	0.020	0.020	A194016
Benzo(a)anthracene	ug/L	<0.010	<0.010	<0.010	0.010	0.010	A194016
Chrysene	ug/L	<0.020	<0.020	<0.020	0.020	0.020	A194016
Benzo(b&j)fluoranthene	ug/L	<0.030	<0.030	<0.030	0.030	0.030	A194016
Benzo(k)fluoranthene	ug/L	<0.050	<0.050	<0.050	0.050	0.050	A194016
Benzo(a)pyrene	ug/L	<0.0050	<0.0050	<0.0050	0.0050	0.0050	A194016
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	<0.050	<0.050	0.050	0.050	A194016
Dibenz(a,h)anthracene	ug/L	<0.0030	<0.0030	<0.0030	0.0030	0.0030	A194016
Benzo(g,h,i)perylene	ug/L	<0.050	<0.050	<0.050	0.050	0.050	A194016
Surrogate Recovery (%)							
D10-ANTHRACENE (sur.)	%	98	97	97	N/A	N/A	A194016
D8-ACENAPHTHYLENE (sur.)	%	85	86	85	N/A	N/A	A194016
D8-NAPHTHALENE (sur.)	%	94	95	95	N/A	N/A	A194016
TERPHENYL-D14 (sur.)	%	97	97	96	N/A	N/A	A194016
RDL = Reportable Detection Limit N/A = Not Applicable							



BUREAU
VERITAS

BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

CSR PAH IN WATER BY GC-MS (WATER)

BV Labs ID		ZO4378	ZO4379			
Sampling Date		2021/04/02 10:05	2021/04/02 10:00			
COC Number		632223-01-01	632223-01-01			
	UNITS	WG-11218464-020421 -RP-04	WG-11218464-020421 -RP-05	RDL	MDL	QC Batch
Calculated Parameters						
Low Molecular Weight PAH's	ug/L	<0.10	<0.10	0.10	0.010	A192865
High Molecular Weight PAH's	ug/L	<0.050	<0.050	0.050	0.020	A192865
Total PAH	ug/L	<0.10	<0.10	0.10	0.010	A192865
Polycyclic Aromatics						
Quinoline	ug/L	<0.020	<0.020	0.020	0.020	A194016
Naphthalene	ug/L	<0.10	<0.10	0.10	0.050	A194016
1-Methylnaphthalene	ug/L	<0.050	<0.050	0.050	0.050	A194016
2-Methylnaphthalene	ug/L	<0.10	<0.10	0.10	0.050	A194016
Acenaphthylene	ug/L	<0.050	<0.050	0.050	0.050	A194016
Acenaphthene	ug/L	<0.050	<0.050	0.050	0.050	A194016
Fluorene	ug/L	<0.050	<0.050	0.050	0.050	A194016
Phenanthrene	ug/L	<0.050	<0.050	0.050	0.050	A194016
Anthracene	ug/L	<0.010	<0.010	0.010	0.010	A194016
Acridine	ug/L	<0.050	<0.050	0.050	0.050	A194016
Fluoranthene	ug/L	<0.020	<0.020	0.020	0.020	A194016
Pyrene	ug/L	<0.020	<0.020	0.020	0.020	A194016
Benzo(a)anthracene	ug/L	<0.010	<0.010	0.010	0.010	A194016
Chrysene	ug/L	<0.020	<0.020	0.020	0.020	A194016
Benzo(b&j)fluoranthene	ug/L	<0.030	<0.030	0.030	0.030	A194016
Benzo(k)fluoranthene	ug/L	<0.050	<0.050	0.050	0.050	A194016
Benzo(a)pyrene	ug/L	<0.0050	<0.0050	0.0050	0.0050	A194016
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	<0.050	0.050	0.050	A194016
Dibenz(a,h)anthracene	ug/L	<0.0030	<0.0030	0.0030	0.0030	A194016
Benzo(g,h,i)perylene	ug/L	<0.050	<0.050	0.050	0.050	A194016
Surrogate Recovery (%)						
D10-ANTHRACENE (sur.)	%	100	95	N/A	N/A	A194016
D8-ACENAPHTHYLENE (sur.)	%	89	84	N/A	N/A	A194016
D8-NAPHTHALENE (sur.)	%	98	93	N/A	N/A	A194016
TERPHENYL-D14 (sur.)	%	100	95	N/A	N/A	A194016
RDL = Reportable Detection Limit N/A = Not Applicable						



**BUREAU
VERITAS**

BV Labs Job #: C121148

Report Date: 2021/05/05

GHD Limited

Client Project #: 11218464

Site Location: VILLAGE OF TAHSIS

Your P.O. #: 73523096

Sampler Initials: RP

GENERAL COMMENTS

Version 3: Additional parameter Phosphorus have been included in the Dissolved Metals scan as per request from client 2021/05/05.

Results relate only to the items tested.



BUREAU
VERITAS

BV Labs Job #: C121148

Report Date: 2021/05/05

QUALITY ASSURANCE REPORT

GHD Limited

Client Project #: 11218464

Site Location: VILLAGE OF TAHSIS

Your P.O. #: 73523096

Sampler Initials: RP

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A194016	D10-ANTHRACENE (sur.)	2021/04/06	89	50 - 140	94	50 - 140	96	%		
A194016	D8-ACENAPHTHYLENE (sur.)	2021/04/06	90	50 - 140	91	50 - 140	88	%		
A194016	D8-NAPHTHALENE (sur.)	2021/04/06	91	50 - 140	90	50 - 140	92	%		
A194016	TERPHENYL-D14 (sur.)	2021/04/06	75	50 - 140	97	50 - 140	97	%		
A194746	NONACHLOROBIPHENYL (sur.)	2021/04/07	91 (7)	50 - 130	109	50 - 130	104	%		
A196563	HEPTADECANOIC ACID (sur.)	2021/04/09	104 (11)	50 - 130	99	50 - 130	114	%		
A196563	O-METHYLPODOCARPIC ACID (sur.)	2021/04/09	112 (11)	50 - 130	106	50 - 130	123	%		
A200420	2,4-Dichlorophenyl Acetic Acid	2021/04/13	107 (13)	50 - 130	110	50 - 130	112	%		
A200420	2,5-Dibromobenzoic Acid	2021/04/13	99 (13)	10 - 130	100	10 - 130	98	%		
A200420	4,4-Dibromobiphenyl	2021/04/13	97 (13)	10 - 130	100	10 - 130	98	%		
A200421	2-Fluorobiphenyl	2021/04/14	55 (15)	30 - 130	66	30 - 130	49	%		
A200421	D14-Terphenyl (FS)	2021/04/14	90 (15)	30 - 130	90	30 - 130	87	%		
A200421	D5-NITROBENZENE (sur.)	2021/04/14	52 (15)	30 - 130	76	30 - 130	58	%		
A200422	2,4,5,6-Tetrachloro-m-xylene	2021/04/11	74	50 - 130	47 (4)	50 - 130	50	%		
A200422	Decachlorobiphenyl	2021/04/11	83	50 - 130	76	50 - 130	85	%		
A200424	2-Fluorobiphenyl	2021/04/13			73	30 - 130	76	%		
A200424	D14-Terphenyl (FS)	2021/04/13			86	30 - 130	89	%		
A200424	D5-NITROBENZENE (sur.)	2021/04/13			81	30 - 130	83	%		
A192922	Turbidity	2021/04/03			100	80 - 120	<0.10	NTU	6.6 (1)	20
A192925	Nitrate plus Nitrite (N)	2021/04/03	103	80 - 120	107	80 - 120	<0.020	mg/L	0.32 (2)	25
A192927	Nitrite (N)	2021/04/03	100	80 - 120	103	80 - 120	<0.0050	mg/L	NC (2)	20
A193195	Total Aluminum (Al)	2021/04/07	84	80 - 120	90	80 - 120	<3.0	ug/L	10 (2)	20
A193195	Total Antimony (Sb)	2021/04/07	99	80 - 120	100	80 - 120	<0.50	ug/L	NC (2)	20
A193195	Total Arsenic (As)	2021/04/07	101	80 - 120	95	80 - 120	<0.10	ug/L	NC (2)	20
A193195	Total Barium (Ba)	2021/04/07	NC	80 - 120	89	80 - 120	<1.0	ug/L	4.3 (2)	20
A193195	Total Beryllium (Be)	2021/04/07	97	80 - 120	95	80 - 120	<0.10	ug/L	NC (2)	20
A193195	Total Bismuth (Bi)	2021/04/07	98	80 - 120	106	80 - 120	<1.0	ug/L	NC (2)	20
A193195	Total Boron (B)	2021/04/07	88	80 - 120	94	80 - 120	<50	ug/L	NC (2)	20
A193195	Total Cadmium (Cd)	2021/04/07	101	80 - 120	104	80 - 120	<0.010	ug/L	NC (2)	20
A193195	Total Chromium (Cr)	2021/04/07	93	80 - 120	99	80 - 120	<1.0	ug/L	NC (2)	20
A193195	Total Cobalt (Co)	2021/04/07	91	80 - 120	100	80 - 120	<0.20	ug/L	NC (2)	20



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Your P.O. #: 73523096

Sampler Initials: RP

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A193195	Total Copper (Cu)	2021/04/07	84	80 - 120	100	80 - 120	<0.50	ug/L	1.1 (2)	20
A193195	Total Iron (Fe)	2021/04/07	103	80 - 120	106	80 - 120	<10	ug/L	NC (2)	20
A193195	Total Lead (Pb)	2021/04/07	97	80 - 120	102	80 - 120	<0.20	ug/L	NC (2)	20
A193195	Total Lithium (Li)	2021/04/07	82	80 - 120	86	80 - 120	<2.0	ug/L	0.070 (2)	20
A193195	Total Manganese (Mn)	2021/04/07	91	80 - 120	100	80 - 120	<1.0	ug/L	3.7 (2)	20
A193195	Total Molybdenum (Mo)	2021/04/07	NC	80 - 120	97	80 - 120	<1.0	ug/L	0.93 (2)	20
A193195	Total Nickel (Ni)	2021/04/07	87	80 - 120	100	80 - 120	<1.0	ug/L	NC (2)	20
A193195	Total Phosphorus (P)	2021/04/07	92	80 - 120	91	80 - 120	<10	ug/L		
A193195	Total Selenium (Se)	2021/04/07	97	80 - 120	98	80 - 120	<0.10	ug/L	4.3 (2)	20
A193195	Total Silicon (Si)	2021/04/07	103	80 - 120	99	80 - 120	<100	ug/L	0.93 (2)	20
A193195	Total Silver (Ag)	2021/04/07	93	80 - 120	100	80 - 120	<0.020	ug/L	NC (2)	20
A193195	Total Strontium (Sr)	2021/04/07	NC	80 - 120	95	80 - 120	<1.0	ug/L	1.3 (2)	20
A193195	Total Thallium (Tl)	2021/04/07	101	80 - 120	103	80 - 120	<0.010	ug/L	5.4 (2)	20
A193195	Total Tin (Sn)	2021/04/07	101	80 - 120	103	80 - 120	<5.0	ug/L	NC (2)	20
A193195	Total Titanium (Ti)	2021/04/07	103	80 - 120	102	80 - 120	<5.0	ug/L	NC (2)	20
A193195	Total Uranium (U)	2021/04/07	109	80 - 120	107	80 - 120	<0.10	ug/L	NC (2)	20
A193195	Total Vanadium (V)	2021/04/07	99	80 - 120	98	80 - 120	<5.0	ug/L	NC (2)	20
A193195	Total Zinc (Zn)	2021/04/07	91	80 - 120	105	80 - 120	<5.0	ug/L	NC (2)	20
A193195	Total Zirconium (Zr)	2021/04/07	109	80 - 120	110	80 - 120	<0.10	ug/L	NC (2)	20
A193480	Total Mercury (Hg)	2021/04/05	94	80 - 120	108	80 - 120	<0.0019	ug/L	NC (2)	20
A193502	Dissolved Mercury (Hg)	2021/04/05	105	80 - 120	105	80 - 120	<0.0019	ug/L	NC (2)	20
A193553	Dissolved Aluminum (Al)	2021/04/06	99	80 - 120	100	80 - 120	<3.0	ug/L	3.8 (2)	20
A193553	Dissolved Antimony (Sb)	2021/04/06	105	80 - 120	107	80 - 120	<0.50	ug/L	NC (2)	20
A193553	Dissolved Arsenic (As)	2021/04/06	107	80 - 120	102	80 - 120	<0.10	ug/L	1.3 (2)	20
A193553	Dissolved Barium (Ba)	2021/04/06	NC	80 - 120	100	80 - 120	<1.0	ug/L	0.43 (2)	20
A193553	Dissolved Beryllium (Be)	2021/04/06	103	80 - 120	104	80 - 120	<0.10	ug/L	NC (2)	20
A193553	Dissolved Bismuth (Bi)	2021/04/06	96	80 - 120	102	80 - 120	<1.0	ug/L	NC (2)	20
A193553	Dissolved Boron (B)	2021/04/06	105	80 - 120	109	80 - 120	<50	ug/L	NC (2)	20
A193553	Dissolved Cadmium (Cd)	2021/04/06	101	80 - 120	104	80 - 120	<0.010	ug/L	5.1 (2)	20
A193553	Dissolved Chromium (Cr)	2021/04/06	99	80 - 120	100	80 - 120	<1.0	ug/L	NC (2)	20
A193553	Dissolved Cobalt (Co)	2021/04/06	96	80 - 120	100	80 - 120	<0.20	ug/L	NC (2)	20



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Your P.O. #: 73523096

Sampler Initials: RP

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A193553	Dissolved Copper (Cu)	2021/04/06	90	80 - 120	99	80 - 120	<0.20	ug/L	8.1 (2)	20
A193553	Dissolved Iron (Fe)	2021/04/06	101	80 - 120	102	80 - 120	<5.0	ug/L	NC (2)	20
A193553	Dissolved Lead (Pb)	2021/04/06	95	80 - 120	99	80 - 120	<0.20	ug/L	NC (2)	20
A193553	Dissolved Lithium (Li)	2021/04/06	94	80 - 120	104	80 - 120	<2.0	ug/L	0.082 (2)	20
A193553	Dissolved Manganese (Mn)	2021/04/06	97	80 - 120	100	80 - 120	<1.0	ug/L	5.8 (2)	20
A193553	Dissolved Molybdenum (Mo)	2021/04/06	NC	80 - 120	103	80 - 120	<1.0	ug/L	0.63 (2)	20
A193553	Dissolved Nickel (Ni)	2021/04/06	94	80 - 120	100	80 - 120	<1.0	ug/L	NC (2)	20
A193553	Dissolved Phosphorus (P)	2021/04/06	104	80 - 120	99	80 - 120	<10	ug/L		
A193553	Dissolved Selenium (Se)	2021/04/06	106	80 - 120	104	80 - 120	<0.10	ug/L	2.8 (2)	20
A193553	Dissolved Silicon (Si)	2021/04/06	96	80 - 120	100	80 - 120	<100	ug/L	3.2 (2)	20
A193553	Dissolved Silver (Ag)	2021/04/06	96	80 - 120	103	80 - 120	<0.020	ug/L	NC (2)	20
A193553	Dissolved Strontium (Sr)	2021/04/06	NC	80 - 120	101	80 - 120	<1.0	ug/L	2.8 (2)	20
A193553	Dissolved Thallium (Tl)	2021/04/06	99	80 - 120	101	80 - 120	<0.010	ug/L	1.1 (2)	20
A193553	Dissolved Tin (Sn)	2021/04/06	112	80 - 120	108	80 - 120	<5.0	ug/L	NC (2)	20
A193553	Dissolved Titanium (Ti)	2021/04/06	108	80 - 120	103	80 - 120	<5.0	ug/L	NC (2)	20
A193553	Dissolved Uranium (U)	2021/04/06	103	80 - 120	104	80 - 120	<0.10	ug/L	NC (2)	20
A193553	Dissolved Vanadium (V)	2021/04/06	104	80 - 120	101	80 - 120	<5.0	ug/L	NC (2)	20
A193553	Dissolved Zinc (Zn)	2021/04/06	93	80 - 120	99	80 - 120	<5.0	ug/L	NC (2)	20
A193553	Dissolved Zirconium (Zr)	2021/04/06	107	80 - 120	107	80 - 120	<0.10	ug/L	NC (2)	20
A193646	Total Mercury (Hg)	2021/04/05	92	80 - 120	101	80 - 120	<0.0019	ug/L	NC (3)	20
A193709	Dissolved Chloride (Cl)	2021/04/05	NC	80 - 120	103	80 - 120	<1.0	mg/L		
A193709	Dissolved Sulphate (SO4)	2021/04/05	90	80 - 120	101	80 - 120	<1.0	mg/L	3.6 (2)	20
A194016	1-Methylnaphthalene	2021/04/06	91	50 - 140	90	50 - 140	<0.050	ug/L	NC (2)	40
A194016	2-Methylnaphthalene	2021/04/06	89	50 - 140	87	50 - 140	<0.10	ug/L	NC (2)	40
A194016	Acenaphthene	2021/04/06	92	50 - 140	92	50 - 140	<0.050	ug/L	NC (2)	40
A194016	Acenaphthylene	2021/04/06	88	50 - 140	88	50 - 140	<0.050	ug/L	NC (2)	40
A194016	Acridine	2021/04/06	103	50 - 140	101	50 - 140	<0.050	ug/L	NC (2)	40
A194016	Anthracene	2021/04/06	88	50 - 140	89	50 - 140	<0.010	ug/L	NC (2)	40
A194016	Benzo(a)anthracene	2021/04/06	94	50 - 140	98	50 - 140	<0.010	ug/L	NC (2)	40
A194016	Benzo(a)pyrene	2021/04/06	83	50 - 140	95	50 - 140	<0.0050	ug/L	NC (2)	40
A194016	Benzo(b&j)fluoranthene	2021/04/06	87	50 - 140	100	50 - 140	<0.030	ug/L	NC (2)	40



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Sampler Initials: RP

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A194016	Benzo(g,h,i)perylene	2021/04/06	40 (4)	50 - 140	95	50 - 140	<0.050	ug/L	NC (2)	40
A194016	Benzo(k)fluoranthene	2021/04/06	86	50 - 140	95	50 - 140	<0.050	ug/L	NC (2)	40
A194016	Chrysene	2021/04/06	96	50 - 140	100	50 - 140	<0.020	ug/L	NC (2)	40
A194016	Dibenz(a,h)anthracene	2021/04/06	39 (4)	50 - 140	95	50 - 140	<0.0030	ug/L	NC (2)	40
A194016	Fluoranthene	2021/04/06	95	50 - 140	98	50 - 140	<0.020	ug/L	NC (2)	40
A194016	Fluorene	2021/04/06	92	50 - 140	93	50 - 140	<0.050	ug/L	NC (2)	40
A194016	Indeno(1,2,3-cd)pyrene	2021/04/06	43 (4)	50 - 140	100	50 - 140	<0.050	ug/L	NC (2)	40
A194016	Naphthalene	2021/04/06	90	50 - 140	87	50 - 140	<0.10	ug/L	NC (2)	40
A194016	Phenanthrene	2021/04/06	91	50 - 140	91	50 - 140	<0.050	ug/L	NC (2)	40
A194016	Pyrene	2021/04/06	91	50 - 140	93	50 - 140	<0.020	ug/L	NC (2)	40
A194016	Quinoline	2021/04/06	109	50 - 140	108	50 - 140	<0.020	ug/L	NC (2)	40
A194285	Dissolved Fluoride (F)	2021/04/06	102	80 - 120	102	80 - 120	<0.050	mg/L	0 (2)	20
A194638	pH	2021/04/05			102	97 - 103			2.2 (2)	N/A
A194642	Alkalinity (PP as CaCO3)	2021/04/05					<1.0	mg/L		
A194642	Alkalinity (Total as CaCO3)	2021/04/05			97	80 - 120	<1.0	mg/L		
A194642	Bicarbonate (HCO3)	2021/04/05					<1.0	mg/L		
A194642	Carbonate (CO3)	2021/04/05					<1.0	mg/L		
A194642	Hydroxide (OH)	2021/04/05					<1.0	mg/L		
A194643	Conductivity	2021/04/05			102	80 - 120	<2.0	uS/cm	0.74 (2)	10
A194652	pH	2021/04/05			101	97 - 103			0.26 (2)	N/A
A194653	Alkalinity (PP as CaCO3)	2021/04/05					<1.0	mg/L	NC (2)	20
A194653	Alkalinity (Total as CaCO3)	2021/04/05	110 (6)	80 - 120	98	80 - 120	<1.0	mg/L	0.15 (2)	20
A194653	Bicarbonate (HCO3)	2021/04/05					<1.0	mg/L	0.15 (2)	20
A194653	Carbonate (CO3)	2021/04/05					<1.0	mg/L	NC (2)	20
A194653	Hydroxide (OH)	2021/04/05					<1.0	mg/L	NC (2)	20
A194654	Conductivity	2021/04/05			102	80 - 120	<2.0	uS/cm	0.65 (5)	10
A194746	Aroclor 1016	2021/04/07					<0.050	ug/L	NC (8)	30
A194746	Aroclor 1221	2021/04/07					<0.050	ug/L	NC (8)	30
A194746	Aroclor 1232	2021/04/07					<0.050	ug/L	NC (8)	30
A194746	Aroclor 1242	2021/04/07					<0.050	ug/L	NC (8)	30
A194746	Aroclor 1248	2021/04/07					<0.050	ug/L	NC (8)	30



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			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A194746	Aroclor 1254	2021/04/07					<0.050	ug/L	NC (8)	30
A194746	Aroclor 1260	2021/04/07	99 (7)	50 - 130	88	50 - 130	<0.050	ug/L	NC (8)	30
A194746	Aroclor 1262	2021/04/07					<0.050	ug/L	NC (8)	30
A194746	Aroclor 1268	2021/04/07					<0.050	ug/L	NC (8)	30
A195344	Total Ammonia (N)	2021/04/07	100 (9)	80 - 120	98	80 - 120	<0.015	mg/L	NC (10)	20
A196563	* Total of Fatty Acids Detected	2021/04/09					<0.072	mg/L	NC (12)	30
A196563	* Total of Resin Acids Detected	2021/04/09					<0.060	mg/L	NC (12)	30
A196563	12,14-dichlorodehydroabiatic acid	2021/04/09	115 (11)	50 - 130	98	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	12-chlorodehydroabiatic acid	2021/04/09	121 (11)	50 - 130	100	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	14-chlorodehydroabiatic acid	2021/04/09	122 (11)	50 - 130	100	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	9,10-dichlorostearic acid (C18)	2021/04/09	73 (11)	50 - 130	89	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Abiatic acid	2021/04/09	114 (11)	50 - 130	81	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Decanoic acid (C10)	2021/04/09	91 (11)	50 - 130	92	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Dehydroabiatic acid	2021/04/09	115 (11)	50 - 130	107	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Docosanoic acid (C22)	2021/04/09	94 (11)	50 - 130	91	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Dodecanoic acid (C12)	2021/04/09	104 (11)	50 - 130	92	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Eicosanoic acid (C20)	2021/04/09	103 (11)	50 - 130	94	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Hexadecanoic acid (C16)	2021/04/09	93 (11)	50 - 130	98	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Isopimaric acid	2021/04/09	109 (11)	50 - 130	99	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Linoleic acid (C18:2)	2021/04/09	106 (11)	50 - 130	104	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Linolenic acid (C18:3)	2021/04/09	95 (11)	50 - 130	84	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Neoabiatic acid	2021/04/09	93 (11)	50 - 130	80	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Octadecanoic acid (C18)	2021/04/09	104 (11)	50 - 130	98	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Oleic acid (C18:1)	2021/04/09	97 (11)	50 - 130	96	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Palustric acid	2021/04/09	73 (11)	50 - 130	65	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Pimaric acid	2021/04/09	97 (11)	50 - 130	95	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Sandaracopimaric acid	2021/04/09	90 (11)	50 - 130	94	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Tetradecanoic acid (C14)	2021/04/09	110 (11)	50 - 130	94	50 - 130	<0.0060	mg/L	NC (12)	30
A196563	Undecanoic acid (C11)	2021/04/09	105 (11)	50 - 130	96	50 - 130	<0.0060	mg/L	NC (12)	30
A200420	2,4,5-T	2021/04/13	73 (13)	10 - 130	98	10 - 130	<0.50	ug/L	NC (14)	40
A200420	2,4,5-TP	2021/04/13	94 (13)	10 - 130	100	10 - 130	<0.50	ug/L	NC (14)	40



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Your P.O. #: 73523096
Sampler Initials: RP

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A200420	2,4-D (BEE)	2021/04/13	77 (13)	10 - 130	104	10 - 130	<0.50	ug/L	NC (14)	40
A200420	2,4-D	2021/04/13	75 (13)	10 - 130	90	10 - 130	<0.50	ug/L	NC (14)	40
A200420	2,4-DB	2021/04/13	96 (13)	10 - 130	98	10 - 130	<0.50	ug/L	NC (14)	40
A200420	Dicamba	2021/04/13	94 (13)	10 - 130	98	10 - 130	<0.50	ug/L	NC (14)	40
A200420	Dichlorprop	2021/04/13	92 (13)	10 - 130	97	10 - 130	<0.50	ug/L	NC (14)	40
A200420	MCPA	2021/04/13	88 (13)	10 - 130	97	10 - 130	<0.50	ug/L	NC (14)	40
A200420	MCPA	2021/04/13	101 (13)	10 - 130	103	10 - 130	<0.50	ug/L	NC (14)	40
A200420	Picloram	2021/04/13	82 (13)	10 - 130	90	10 - 130	<0.50	ug/L	NC (14)	40
A200421	Ametryn	2021/04/14	85 (15)	40 - 130	94	40 - 130	<3	ug/L		
A200421	Atrazine	2021/04/14	89 (15)	40 - 130	90	40 - 130	<1	ug/L		
A200421	Cyanazine (Bladex)	2021/04/14	89 (15)	40 - 130	87	40 - 130	<3	ug/L		
A200421	Metribuzin (Sencor)	2021/04/14	81 (15)	40 - 130	80	40 - 130	<3	ug/L		
A200421	Prometon	2021/04/14	86 (15)	40 - 130	89	40 - 130	<0.5	ug/L		
A200421	Prometryn	2021/04/14	87 (15)	40 - 130	86	40 - 130	<3	ug/L		
A200421	Propazine	2021/04/14	91 (15)	40 - 130	92	40 - 130	<3	ug/L		
A200421	Simazine	2021/04/14	89 (15)	40 - 130	91	40 - 130	<3	ug/L		
A200421	Simetryn	2021/04/14	90 (15)	40 - 130	85	40 - 130	<0.5	ug/L		
A200421	Terbutryne	2021/04/14	88 (15)	40 - 130	85	40 - 130	<0.5	ug/L		
A200422	a-BHC	2021/04/11	71	30 - 130	70	30 - 130	<0.005	ug/L	4.7 (2)	40
A200422	a-Chlordane	2021/04/11	76	50 - 130	70	50 - 130	<0.005	ug/L	2.2 (2)	30
A200422	Aldrin	2021/04/11	70	50 - 130	56	50 - 130	<0.005	ug/L	5.6 (2)	30
A200422	b-BHC	2021/04/11	70	30 - 130	65	30 - 130	<0.005	ug/L	3.2 (2)	40
A200422	d-BHC	2021/04/11	70	30 - 130	68	30 - 130	<0.005	ug/L	3.3 (2)	40
A200422	Dieldrin	2021/04/11	87	50 - 130	82	50 - 130	<0.005	ug/L	3.2 (2)	30
A200422	Endosulfan I	2021/04/11	77	50 - 130	77	50 - 130	<0.005	ug/L	2.8 (2)	30
A200422	Endosulfan II	2021/04/11	72	50 - 130	66	50 - 130	<0.005	ug/L	2.9 (2)	30
A200422	Endosulfan Sulfate	2021/04/11	86	30 - 130	76	30 - 130	<0.005	ug/L	2.1 (2)	40
A200422	Endrin Aldehyde	2021/04/11	69	30 - 130	69	30 - 130	<0.005	ug/L	2.3 (2)	40
A200422	Endrin ketone	2021/04/11	77	30 - 130	70	30 - 130	<0.005	ug/L	3.2 (2)	40
A200422	Endrin	2021/04/11	83	50 - 130	73	50 - 130	<0.005	ug/L	1.7 (2)	30
A200422	g-Chlordane	2021/04/11	77	50 - 130	70	50 - 130	<0.005	ug/L	1.3 (2)	30



BUREAU
VERITAS

BV Labs Job #: C121148

Report Date: 2021/05/05

QUALITY ASSURANCE REPORT(CONT'D)

GHD Limited

Client Project #: 11218464

Site Location: VILLAGE OF TAHSIS

Your P.O. #: 73523096

Sampler Initials: RP

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A200422	Heptachlor Epoxide	2021/04/11	75	50 - 130	71	50 - 130	<0.005	ug/L	3.4 (2)	30
A200422	Heptachlor	2021/04/11	71	50 - 130	59	50 - 130	<0.005	ug/L	4.4 (2)	30
A200422	Hexachlorobenzene	2021/04/11	72	50 - 130	64	50 - 130	<0.005	ug/L	3.4 (2)	30
A200422	Lindane	2021/04/11	87	50 - 130	85	50 - 130	<0.003	ug/L	4.0 (2)	30
A200422	Methoxychlor	2021/04/11	79	50 - 130	65	50 - 130	<0.01	ug/L	2.8 (2)	30
A200422	Mirex	2021/04/11	79	30 - 130	70	30 - 130	<0.005	ug/L	1.5 (2)	40
A200422	o,p'-DDD	2021/04/11	81	50 - 130	75	50 - 130	<0.005	ug/L	3.1 (2)	30
A200422	o,p'-DDE	2021/04/11	75	50 - 130	68	50 - 130	<0.005	ug/L	1.3 (2)	30
A200422	o,p'-DDT	2021/04/11	75	50 - 130	67	50 - 130	<0.005	ug/L	0.075 (2)	30
A200422	Octachlorostyrene	2021/04/11	80	30 - 130	67	30 - 130	<0.005	ug/L	3.4 (2)	40
A200422	Oxychlorane	2021/04/11	74	30 - 130	68	30 - 130	<0.005	ug/L	0.32 (2)	30
A200422	p,p'-DDD	2021/04/11	83	50 - 130	76	50 - 130	<0.005	ug/L	2.2 (2)	30
A200422	p,p'-DDE	2021/04/11	81	50 - 130	78	50 - 130	<0.005	ug/L	4.0 (2)	30
A200422	p,p'-DDT	2021/04/11	76	50 - 130	64	50 - 130	<0.005	ug/L	1.9 (2)	30
A200422	Toxaphene	2021/04/11					<0.2	ug/L		
A200424	Aldicarb	2021/04/13			91	30 - 130	<5.0	ug/L	3.7 (2)	40
A200424	Atrazine	2021/04/13			96	30 - 130	<1.0	ug/L	0.53 (2)	40
A200424	Bendiocarb	2021/04/13			96	30 - 130	<2.0	ug/L	0.62 (2)	40
A200424	Carbaryl	2021/04/13			85	30 - 130	<5.0	ug/L	0.63 (2)	40
A200424	Carbofuran	2021/04/13			98	30 - 130	<5.0	ug/L	0.53 (2)	40
A200424	Chlorpyrifos (Dursban)	2021/04/13			91	30 - 130	<2.0	ug/L	1.1 (2)	40
A200424	Cyanazine (Bladex)	2021/04/13			91	30 - 130	<5.0	ug/L	0.26 (2)	40
A200424	Demeton-S	2021/04/13			129	30 - 130	<2.0	ug/L	2.0 (2)	40
A200424	Diazinon	2021/04/13			95	30 - 130	<2.0	ug/L	1.1 (2)	40
A200424	Dichlorvos	2021/04/13			85	30 - 130	<2.0	ug/L	0.12 (2)	40
A200424	Dimethoate	2021/04/13			99	30 - 130	<2.0	ug/L	5.5 (2)	40
A200424	Ethion	2021/04/13			92	30 - 130	<1.0	ug/L	0.087 (2)	40
A200424	Fenclorpos (Ronnel)	2021/04/13			81	30 - 130	<2.0	ug/L	1.6 (2)	40
A200424	Fenthion	2021/04/13			86	30 - 130	<1.0	ug/L	0.93 (2)	40
A200424	Fonofos	2021/04/13			93	30 - 130	<2.0	ug/L	1.4 (2)	40
A200424	Guthion (Azinphos-methyl)	2021/04/13			97	30 - 130	<1.0	ug/L	0.48 (2)	40



BUREAU
VERITAS

BV Labs Job #: C121148

Report Date: 2021/05/05

QUALITY ASSURANCE REPORT(CONT'D)

GHD Limited

Client Project #: 11218464

Site Location: VILLAGE OF TAHSIS

Your P.O. #: 73523096

Sampler Initials: RP

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A200424	Malathion	2021/04/13			92	30 - 130	<2.0	ug/L	1.6 (2)	40
A200424	Metolachlor	2021/04/13			90	30 - 130	<5.0	ug/L	1.1 (2)	40
A200424	Mevinphos (Phosdrin)	2021/04/13			93	30 - 130	<2.0	ug/L	0.74 (2)	40
A200424	Parathion Ethyl	2021/04/13			100	30 - 130	<2.0	ug/L	1.2 (2)	40
A200424	Parathion methyl	2021/04/13			87	30 - 130	<2.0	ug/L	1.2 (2)	40
A200424	Phorate (Thimet)	2021/04/13			95	30 - 130	<1.0	ug/L	0.39 (2)	40
A200424	Phosmet	2021/04/13			87	30 - 130	<2.0	ug/L	1.5 (2)	40
A200424	Prometryn	2021/04/13			88	30 - 130	<1.0	ug/L	0.57 (2)	40
A200424	Simazine	2021/04/13			82	30 - 130	<2.0	ug/L	0.66 (2)	40
A200424	Terbufos	2021/04/13			93	30 - 130	<1.0	ug/L	0.48 (2)	40
A200424	Triallate	2021/04/13			93	30 - 130	<5.0	ug/L	1.9 (2)	40



BUREAU
VERITAS

BV Labs Job #: C121148

Report Date: 2021/05/05

QUALITY ASSURANCE REPORT(CONT'D)

GHD Limited

Client Project #: 11218464

Site Location: VILLAGE OF TAHSIS

Your P.O. #: 73523096

Sampler Initials: RP

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A200424	Trifluralin	2021/04/13			84	30 - 130	<5.0	ug/L	0.80 (2)	40

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID [ZO4375-02]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [ZO4375-05]

(4) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(5) Duplicate Parent ID [ZO4377-01]

(6) Matrix Spike Parent ID [ZO4377-01]

(7) Matrix Spike Parent ID [ZO4375-11]

(8) Duplicate Parent ID [ZO4379-11]

(9) Matrix Spike Parent ID [ZO4375-07]

(10) Duplicate Parent ID [ZO4375-07]

(11) Matrix Spike Parent ID [ZO4375-10]

(12) Duplicate Parent ID [ZO4376-10]

(13) Matrix Spike Parent ID [ZO4378-12]

(14) Duplicate Parent ID [ZO4377-12]

(15) Matrix Spike Parent ID [ZO4376-13]



BUREAU
VERITAS

BV Labs Job #: C121148
Report Date: 2021/05/05

GHD Limited
Client Project #: 11218464
Site Location: VILLAGE OF TAHSIS
Your P.O. #: 73523096
Sampler Initials: RP

VALIDATION SIGNATURE PAGE

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

David Huang, M.Sc., P.Chem., QP, Scientific Services Manager

Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

Veronica Falk, B.Sc., P.Chem., QP, Scientific Specialist, Organics

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

- UPDATED -

Surrey Veritas Laboratories
4055 Canada Way, Burnaby, British Columbia Canada V5G 3K5 Tel: (604) 734 7276 Toll-free: 800-363-4206 Fax: (604) 731 2386 www.bvlab.ca

INVOICE TO:


Company Name: #163 GHD Limited
 Contact Name: AP Invoices - 735
 Address: 455 PHILLIP STREET
 WATERLOO ON N2L 3X2
 Phone: (519) 854-0510 Fax: (519) 725-1304
 Email: APInvoices-735@ghd.com

Report Information

Company Name: Alesse MacPhee
 Contact Name: Alesse MacPhee
 Address: _____
 Phone: _____ Fax: _____
 Email: alesse.macphee@ghd.com; NationalEDDSupport@bma

Project Information

Quotation #: 110019
 P.O. #: 73523096
 Project #: 11218464
 Project Name: Village of Iqaluit
 Site #: _____
 Sampled By: R. P. P. / D. Baker


 C121148_COC

Regulatory Criteria

COR
 CCME
 BC Water Quality
 Other _____

Special Instructions

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

Metallic Pesticides (Y/N)	Speciated Ammonia, Cl, F, SO4, NO2, NO3, NH4, EC, Turb	COR Dissolved Metals in Water with CV Hg + Hardness	COR Total Metals in Water with CV Hg + Hardness	Ammonia-N (Total)	Total Coliform & E. Coli by MF-Chromocult	PM10	Polychlorinated Biphenyls	Resin and Fatty Acids	Triazine Herbicides + Phenoxy Acid Herbicides	OC + OP Pesticides
X	X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X	X

Turnaround Time (TAT) Required:

Regular (Standard) TAT: (will be applied if Rush TAT is not specified)
 Standard TAT = 5-7 working days for most tests.
 Please note: Standard TAT for certain tests such as BOD and Dissolved Furan are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission):
 1 Day 2 Day 3 Day Date Required: _____

Rush Confirmation Number: _____ (Call us for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BV LABS

Sample Bottle Label	Sample Location Identification	Date Sampled	Time Sampled	Matrix	Comments
WG-11218464-020421-RP-01	1	Apr 23, 2011	900	WG	20 - Samples are altered & preserved as indicated on bottles - short hold times
WG-11218464-020421-RP-02	2		905	WG	
WG-11218464-020421-RP-03	3		850	WG	
WG-11218464-020421-RP-04	2		1005	WG	
WG-11218464-020421-RP-05	3		1000	WG	

RECEIVED BY: (Signature/Print) *Audrey A. [Signature]* **DATE (YY/MM/DD)** 21/04/11 **TIME** 09:00

LAB USE ONLY

Temperature (°C) on Receipt: 6.6/6.3/3.3
 4.4, 4 10-118



INVOICE TO:		Report Information		Project Information	
Company Name #163 GHD Limited	Company Name Airesse MacPhee	Quotation # C10010	Barcode: C121148_COC		
Contact Name AP Invoices - 735	Contact Name Airesse MacPhee	P.O. #	Order #: 02223		
Address 455 PHILLIP STREET WATERLOO ON N2L 3X2	Address	Project # 11218464	Project Manager Nahed Amer		
Phone (519) 884-0510 Fax: (519) 725-1394	Phone	Project Name Village of Tahsis	Chain Of Custody Record CBS2223-01-01		
Email APinvoics-735@ghd.com	Email airesse.macphee@ghd.com; NationalIEDDSupport@ma	Site #	Sampled By KPlaha / DBokro		

Regulatory Criteria <input type="checkbox"/> CSR <input type="checkbox"/> CCME <input type="checkbox"/> BC Water Quality <input type="checkbox"/> Other	Special Instructions	ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required Please provide advance notice for rush projects		
		Metals Field Filtered? (Y/N)	Speciated Alkalinity: Cl, F, SO4, NO2, NO3, N+H, EC, Turb	CSR Dissolved Metals in Water with CV Hg + Hardness	CSR Total Metals in Water with CV Hg + Hardness	Ammonia-N (Total)	Total Coliform & E. Coli by MF-Chromocult	PAH	Polychlorinated Biphenyls	Resin and Fatty Acids	Triazine Herbicides + Phenoxy Acid Herbicides	OC + OP Pesticides	Regular (Standard) TAT: (will be applied if Rush TAT is not specified) Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests such as BOD and Clostridia/Furans are > 5 days - contact your Project Manager for details. <input checked="" type="checkbox"/>	
													Job Specific Rush TAT (if applies to entire submission) 1 DAY <input type="checkbox"/> 2 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> Date Required: <input type="checkbox"/> Rush Confirmation Number: _____ (call lab for #)	

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BY LABS

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered? (Y/N)	Speciated Alkalinity: Cl, F, SO4, NO2, NO3, N+H, EC, Turb	CSR Dissolved Metals in Water with CV Hg + Hardness	CSR Total Metals in Water with CV Hg + Hardness	Ammonia-N (Total)	Total Coliform & E. Coli by MF-Chromocult	PAH	Polychlorinated Biphenyls	Resin and Fatty Acids	Triazine Herbicides + Phenoxy Acid Herbicides	OC + OP Pesticides	# of bottles	Comments
WG-11218464-04201-PP-19		Apr 21 2021	900	WG	X	X	X	X	X	X	X	X	X	X	X	20	- Samples are filtered & preserved as indicated on bottles - short hold times
	20		905	WG	X	X	X	X	X	X	X	X	X	X			
	21		850	WG	X	X	X	X	X	X	X	X	X	X			
	22		1005	WG	X	X	X	X	X	X	X	X	X	X			
	23		1000	WG	X	X	X	X	X	X	X	X	X	X			
					X	X	X	X	X	X	X	X	X	X	X		

RELINQUISHED BY: (Signature/Print) <i>R. Plaha / K. Plaha</i>	Date: (YY/MM/DD) 21/04/21	Time 09:00	RECEIVED BY: (Signature/Print) <i>Airesse MacPhee</i>	Date: (YY/MM/DD) 21/04/21	Time 09:00	# Jars used and not submitted NA	Time Sensitive <input type="checkbox"/>	Temperature (°C) on Receipt 6.6/6.6/6.6	Custody Seal Intact on Cooler? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BY LABS' STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVLABS.COM/TERMS-AND-CONDITIONS.							* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.		

6.6/6.6/6.6
4.4.4 100-100

Attachment B

QA/QC Memoranda

Technical Memorandum

06 May 2021

To	Rose Marie Rocca, Natasha Turl, David R. Barton	Tel	604-248-3661
Copy to		Email	airessemacphee@ghd.com
From	Airesse MacPhee/an/01	Ref. No.	11218464
Subject	Data Quality Assessment and Verification		

Laboratory:	Bureau Veritas Laboratories				
Lab Job No.:	C121148				
Date(s) Sampled:	April 2, 2021				
Media Sampled:	Groundwater				
QA/QC	Criteria	Pass	Qualifiers	Fail	N/A
Holding Times	Analyte specific	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Temperature	<10°C at receipt	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample Preservation	Required container/preservatives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Field Duplicate (blind)	Matrix Specific	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Field Blank (blind)	Non detect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Trip Blank	Non detect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lab QA/QC	Within standard recoveries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data OK for Use	Yes <input type="checkbox"/> With Qualifiers <input checked="" type="checkbox"/> No <input type="checkbox"/>				

The following results are qualified due to field duplicate variability:

Lab Report #	Sample Date (mm/dd/yyyy)	Sample ID	Analyte	Result	Qualifier	Units
C121148	04/02/2021	WG-11218464-020421-RP-01	Aluminum	25.3	J	µg/L
C121148	04/02/2021	WG-11218464-020421-RP-02	Aluminum	55.3	J	µg/L
C121148	04/02/2021	WG-11218464-020421-RP-01	Iron	21	J	µg/L
C121148	04/02/2021	WG-11218464-020421-RP-02	Iron	75	J	µg/L
C121148	04/02/2021	WG-11218464-020421-RP-01	Manganese	1.0	UJ	µg/L
C121148	04/02/2021	WG-11218464-020421-RP-02	Manganese	3.2	J	µg/L
C121148	04/02/2021	WG-11218464-020421-RP-01	Turbidity	0.28	J	NTU
C121148	04/02/2021	WG-11218464-020421-RP-02	Turbidity	1.0	J	NTU

Based on the assessment detailed in the foregoing, the data summarized are acceptable with the specific qualifications noted above.

Notes:

- UJ - The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
- J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

Regards



Airesse MacPhee
Data Management - Data Validator