

Appendix G
**Laboratory Chain of
Custody Docs**



167 3668



ANALY
 Received by: Cristina Prats Bellmun:000
 R J Hill Laboratories Ltd
 1 Clyde Street,
 Private Bag 3205,
 Hamilton 3240, NEW Z
 3116736689

Client
 Name Opus International Consultants Limited 205990

Address PO Box 273, Alexandra 9340

Phone 03 440 2418 Fax 03 440 2401

Client Reference G-VG092.00 02SHE

Quote No Order No

Primary Contact Lisa Bond 175913

Submitted By Lisa Bond 175913

Charge To Opus International Consultants Limited 205990

Results To Mail Primary Contact Mail Submitter

Fax Results

Email Results lisa.bond@opus.co.nz

Office use Job No:

CHAIN OF CUSTODY RECORD

Sent to Hill Laboratories
 Date & Time: 1/11/16
 Name: L. BOND
 Signature: LAB.
 Please tick if you require COC to be emailed back

Received at Hill Laboratories
 Date & Time: 02/11/16 8:28
 Name: CRISTINA
 Signature: [Signature]

Condition
 Room Temp Chilled Frozen
 Temp: 11.3
 Sample & Analysis details checked
 Signature:

Priority Low Normal High
 Urgent (ASAP, extra charge applies, please contact lab first)

NOTE: The estimated turnaround time for the types and number of samples and analyses specified on this quote is by 4:30 pm, 5 working days following the day of receipt of the samples at the laboratory.

Requested Reporting Date:

ADDITIONAL INFORMATION

GORE WWTP

Quoted Sample Types

Soil (Soil)

No.	Sample Name	Sample Date/Time	Sample Type	Tests Required
1	BH1 @ 1.4m	26/10/16	ES	NES Metals Total PAH
2	BH2 @ 1.3m	26/10/16	ES	NES Metals Total PAH
3				
4				
5				
6				
7				
8				
9				
10				



Job Information Summary

Page 1 of 2

Client:	Opus International Consultants Limited	Lab No:	1673668
Contact:	Lisa Bond	Date Registered:	03-Nov-2016 9:17 am
	C/- Opus International Consultants Limited	Priority:	High
	PO Box 273	Quote No:	72291
	Alexandra 9340	Order No:	
		Client Reference:	6-VG092.00 02SHE
		Add. Client Ref:	
		Submitted By:	Lisa Bond
		Charge To:	Opus International Consultants Limited
		Target Date:	09-Nov-2016 4:30 pm

Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	BH1@1.4m26-Oct-2016	Soil	GSoil300	National Environmental Standards Metals; Total Petroleum Hydrocarbons in Soil
2	BH2@1.3m26-Oct-2016	Soil	GSoil300	National Environmental Standards Metals; Total Petroleum Hydrocarbons in Soil

SUMMARY OF METHODS

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively clean matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis.

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Preparation	Air dried at 35°C and sieved, <2mm fraction. Used for sample preparation. May contain a residual moisture content of 2-5%.	-	1-2
National Environmental Standards Metals		0 - 20 mg/kg dry wt	1-2
Total Petroleum Hydrocarbons in Soil	Sonication extraction in DCM, Silica cleanup, GC-FID analysis US EPA 8015B/MfE Petroleum Industry Guidelines. Tested on as received sample [KBIs:5786,2805,10734]	8 - 60 mg/kg dry wt	1-2
Dry Matter (Env)	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. US EPA 3550. (Free water removed before analysis).	0.10 g/100g as rcvd	1-2
Extraction of Hexavalent Chromium in Environmental Solids	0.01M KH ₂ PO ₄ Extraction.	-	1-2
Total Recoverable digestion	Nitric / hydrochloric acid digestion. US EPA 200.2.	-	1-2
Total Recoverable Arsenic	Dried sample, sieved as specified (if required). Nitric/Hydrochloric acid digestion, ICP-MS, screen level. US EPA 200.2.	2 mg/kg dry wt	1-2
Total Recoverable Boron	Dried sample, sieved as specified (if required). Nitric/Hydrochloric acid digestion, ICP-MS, screen level. US EPA 200.2.	20 mg/kg dry wt	1-2
Total Recoverable Cadmium	Dried sample, sieved as specified (if required). Nitric/Hydrochloric acid digestion, ICP-MS, screen level. US EPA 200.2.	0.10 mg/kg dry wt	1-2
Trivalent Chromium	Calculation Total Chromium - Hexavalent Chromium.	0 mg/kg dry wt	1-2
Hexavalent Chromium in Environmental Solids	Phosphate buffer extraction, colorimetry.	0.4 mg/kg dry wt	1-2
Total Recoverable Chromium	Dried sample, sieved as specified (if required). Nitric/Hydrochloric acid digestion, ICP-MS, screen level. US EPA 200.2.	2 mg/kg dry wt	1-2
Total Recoverable Copper	Dried sample, sieved as specified (if required). Nitric/Hydrochloric acid digestion, ICP-MS, screen level. US EPA 200.2.	2 mg/kg dry wt	1-2

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
Total Recoverable Lead	Dried sample, sieved as specified (if required). Nitric/Hydrochloric acid digestion, ICP-MS, screen level. US EPA 200.2.	0.4 mg/kg dry wt	1-2
Total Recoverable Mercury	Dried sample, sieved as specified (if required). Nitric/Hydrochloric acid digestion, ICP-MS, screen level. US EPA 200.2.	0.10 mg/kg dry wt	1-2