

Certificate of Analysis MHE0096

Client Details

Client	Three Valleys Mineral Water Pty Ltd
Contact	Olaf Lyche
Address	

Sample Details

Your Reference	Three Valleys Mineral Water
Number of Samples	1 Water
Date Samples Received	06/05/2026
Date Instructions Received	06/05/2026

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for soils and on an as received basis for other matrices.

Report Details

Date Final Results Expected	20/05/2026
Date of Reissue	18/05/2026 - This report supercedes previous report, see amendment history for details

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Accredited for compliance with ISO/IEC 17025. Tests not covered by NATA are denoted with *.

Authorisation Details

Results Approved By	Azrin Akram, Senior Chemist Chaminda Gunasekara, Inorganics Supervisor Chris De Luca, Lab Manager Lucas Yij, Inorganics Team Leader Maggie Hu, Organics Supervisor Nick Salarmis, Assistant Operations Manager Tara White, Metals Supervisor Tianna Milburn, Operations Manager Travis Carey, Organics Supervisor
Laboratory Manager	Chris De Luca

Public copy: client address and market-specific reference removed.

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Report Amendment History

Revision	Reason for Amendment
R-01	This report supercedes MHE0096_R00 due to addition of TDS results

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Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
MHE0096-01	Three Valleys Mineral Water	Water	05/05/2026	06/05/2026

Sample Comments

General Comment No attempt to cool was made. Envirolab strongly recommends cooling to <6° C (or an attempt to cool) when samples are transported to the laboratory.

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Volatile Organic Compounds (Water) - Analysed By MPL Laboratories

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
1,4-Dioxane	µg/L	0.50	<0.50
Surrogate 4-Bromofluorobenzene	%		96.2

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Volatile Organic Compounds - Fumigants (Water)

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
2,2-Dichloropropane	µg/L	1.0	<1.0
1,2-Dichloropropane	µg/L	1.0	<1.0
cis-1,3-Dichloropropene	µg/L	1.0	<1.0
trans-1,3-Dichloropropene	µg/L	1.0	<1.0
1,2-Dibromoethane	µg/L	1.0	<1.0

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Volatile Organic Compounds - MAH (Water)

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
Benzene	µg/L	1.0	<1.0
Toluene	µg/L	1.0	<1.0
Ethylbenzene	µg/L	1.0	<1.0
meta+para Xylene	µg/L	2.0	<2.0
Styrene	µg/L	1.0	<1.0
ortho-Xylene	µg/L	1.0	<1.0
Isopropylbenzene	µg/L	1.0	<1.0
n-Propylbenzene	µg/L	1.0	<1.0
1,3,5-Trimethylbenzene	µg/L	1.0	<1.0
tert-Butylbenzene	µg/L	1.0	<1.0
1,2,4-Trimethylbenzene	µg/L	1.0	<1.0
sec-Butylbenzene	µg/L	1.0	<1.0
4-Isopropyltoluene	µg/L	1.0	<1.0
n-Butyl benzene	µg/L	1.0	<1.0

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Volatile Organic Compounds - Halogenated Aliphatics (Water)

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
Dichlorodifluoromethane (Freon-12)	µg/L	10	<10
Chloromethane	µg/L	10	<10
Vinyl chloride	µg/L	10	<10
Bromomethane	µg/L	10	<10
Chloroethane	µg/L	10	<10
Trichlorofluoromethane (Freon-11)	µg/L	10	<10
1,1-Dichloroethene	µg/L	1.0	<1.0
trans-1,2-Dichloroethene	µg/L	1.0	<1.0
1,1-Dichloroethane	µg/L	1.0	<1.0
cis-1,2-Dichloroethene	µg/L	1.0	<1.0
Bromochloromethane	µg/L	1.0	<1.0
Chloroform	µg/L	1.0	<1.0
1,1,1-Trichloroethane	µg/L	1.0	<1.0
1,1-Dichloropropene	µg/L	1.0	<1.0
Carbon Tetrachloride	µg/L	1.0	<1.0
1,2-Dichloroethane	µg/L	1.0	<1.0
Trichloroethene	µg/L	1.0	<1.0
Dibromomethane	µg/L	1.0	<1.0
Bromodichloromethane	µg/L	1.0	<1.0
1,1,2-Trichloroethane	µg/L	1.0	<1.0
1,3-Dichloropropane	µg/L	1.0	<1.0
Tetrachloroethene	µg/L	1.0	<1.0
Dibromochloromethane	µg/L	1.0	<1.0
1,1,1,2-Tetrachloroethane	µg/L	1.0	<1.0
Bromoform	µg/L	1.0	<1.0
1,1,2,2-Tetrachloroethane	µg/L	1.0	<1.0
1,2,3-Trichloropropane	µg/L	1.0	<1.0
1,2-Dibromo-3-chloropropane	µg/L	1.0	<1.0
Hexachlorobutadiene	µg/L	1.0	<1.0

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Volatile Organic Compounds - Halogenated Aromatics (Water)

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
Chlorobenzene	µg/L	1.0	<1.0
Bromobenzene	µg/L	1.0	<1.0
2-Chlorotoluene	µg/L	1.0	<1.0
4-Chlorotoluene	µg/L	1.0	<1.0
1,3-Dichlorobenzene	µg/L	1.0	<1.0
1,4-Dichlorobenzene	µg/L	1.0	<1.0
1,2-Dichlorobenzene	µg/L	1.0	<1.0
1,2,4-Trichlorobenzene	µg/L	1.0	<1.0
1,2,3-Trichlorobenzene	µg/L	1.0	<1.0

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Volatile Organic Compounds - Other VOCs (Water)

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
Cyclohexane	µg/L	1.0	<1.0

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Volatile Organic Compounds - Surrogates (Water)

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
Surrogate Dibromofluoromethane	%		93.6
Surrogate Toluene-D8	%		99.6
Surrogate 4-Bromofluorobenzene	%		106

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Organophosphorus Pesticides (Water)

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
Dichlorvos	µg/L	0.20	<0.20
Dimethoate	µg/L	0.20	<0.20
Diazinon	µg/L	0.20	<0.20
Chlorpyrifos-methyl	µg/L	0.20	<0.20
Ronnel	µg/L	0.20	<0.20
Fenitrothion	µg/L	0.20	<0.20
Malathion	µg/L	0.20	<0.20
Chlorpyrifos	µg/L	0.20	<0.20
Parathion	µg/L	0.20	<0.20
Bromophos-ethyl	µg/L	0.20	<0.20
Ethion	µg/L	0.20	<0.20
Coumaphos	µg/L	0.20	<0.20
Disulfoton	µg/L	0.20	<0.20
Fenamiphos	µg/L	0.20	<0.20
Fenthion	µg/L	0.20	<0.20
Methidathion	µg/L	0.20	<0.20
Mevinphos	µg/L	0.20	<0.20
Parathion-methyl	µg/L	0.20	<0.20
Phorate	µg/L	0.20	<0.20
Phosalone	µg/L	0.20	<0.20
Azinphos-methyl	µg/L	0.20	<0.20
Surrogate 4-chloro-3-nitrobenzotrifluoride	%		89.6

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Speciated Phenols (Water)

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
Phenol	µg/L	1.0	<1.0
2-Chlorophenol	µg/L	1.0	<1.0
2-Methylphenol	µg/L	1.0	<1.0
3/4-Methylphenol	µg/L	2.0	<2.0
2-Nitrophenol	µg/L	1.0	<1.0
2,4-Dimethylphenol	µg/L	1.0	<1.0
2,4-Dichlorophenol	µg/L	1.0	<1.0
2,6-Dichlorophenol	µg/L	1.0	<1.0
4-Chloro-3-methylphenol	µg/L	5.0	<5.0
2,4,6-Trichlorophenol	µg/L	1.0	<1.0
2,4,5-Trichlorophenol	µg/L	1.0	<1.0
2,4-Dinitrophenol	µg/L	20	<20
4-Nitrophenol	µg/L	20	<20
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	µg/L	2.0	<2.0
4,6-Dinitro-2-methylphenol	µg/L	20	<20
Pentachlorophenol	µg/L	5.0	<5.0
Dinoseb	µg/L	20	<20
2-Cyclohexyl-4,6-Dinitrophenol	µg/L	20	<20
Surrogate 2-Fluorophenol	%		73.8
Surrogate Phenol-D6	%		66.9

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Carbamates (Water)

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
Molinate	µg/L	0.50	<0.50
Carbofuran	µg/L	0.50	<0.50
Carbaryl	µg/L	0.50	<0.50
Surrogate p-Terphenyl-D14	%		112

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LC-MS-MS Oxyhalides (Water)

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
Bromate	µg/L	0.50	<0.50

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Acid Extractable Low Level Metals (Water)

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
Aluminium	µg/L	10	<10
Arsenic	µg/L	1.0	<1.0
Boron	µg/L	20	42
Cadmium	µg/L	0.10	<0.10
Chromium	µg/L	1.0	1.2
Copper	µg/L	1.0	<1.0
Iron	µg/L	10	<10
Mercury	µg/L	0.050	<0.050
Manganese	µg/L	1.0	<1.0
Lead	µg/L	1.0	<1.0
Selenium	µg/L	1.0	<1.0
Zinc	µg/L	1.0	1.2

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Inorganics - Physical Parameters (Water)

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
pH	pH units		6.9
pH (True Colour)	pH units		6.9
Total Dissolved Solids	mg/L	5.0	400
Total Solids	mg/L	5.0	90
Turbidity	NTU	0.10	0.33
Colour (True)*	PCU	5.0	<5.0

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Inorganics - Physical Parameters (Water) - Analysed By Envirolab Services Sydney

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
Threshold Odour Number*	-		No odour observed.

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Inorganics - Ionic Balance and Indexes (Water)

EnviroLab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	290
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	290
Chloride	mg/L	1.0	4.2
Sulfate	mg/L	1.0	<1.0
Calcium	mg/L	0.50	22
Magnesium	mg/L	0.50	5.9
Potassium	mg/L	0.50	0.95
Sodium	mg/L	0.50	56
Hardness (calc) equivalent CaCO3	mg/L	3.0	79
Ionic Balance	%		-19 [1]
Total Anions	mg/L	7.0	290
Anions as meq	meq/L	0.59	4.9
Total Cations	mg/L	2.0	85
Cations as meq	meq/L	0.10	4.1

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Inorganics - Miscellaneous and Common Anions (Water)

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
Fluoride	mg/L	0.10	4.5

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Inorganics - Nutrients (Water)

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
Ammonia as N	mg/L	0.0050	<0.0050
Nitrate as N	mg/L	0.0050	<0.0050
Nitrate as NO3 by calculation	mg/L	0.020	<0.020

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Inorganics - Common Wastewater Parameters (Water) - Analysed By MPL Laboratories

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
MBAS	mg/L	0.10	<0.10

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Inorganics - Cyanide Species and Similar (Water)

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
Total Cyanide	mg/L	0.0040	<0.0040

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Subcontracted Micro - Certificate: 6761176 & 6769659 - Analysed By MNAQ (Australia) Pty Ltd (Melbourne) (Water)

Envirolab ID	Units	PQL	MHE0096-01
Your Reference			
Date Sampled			05/05/2026
Pseudomonas aeruginosa	cfu/100mL	1.0	<1 [5]
Salmonella	-		Not Detect [5]
Shigella	/25mL		Not Detect [5]
SR anaerobic spores	cfu/100mL	1.00	<1 [5]
Total Coliforms	cfu/100mL	1.0	<1 [5]
Enterococci	cfu/mL	1.0	<1 [5]
Heterotrophic Plate Count 22C	cfu/mL	1.0	110 [5]
Heterotrophic Plate Count 36C	cfu/mL	1.0	<1 [5]

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Result Comments

Identifier	Description
[1]	Ion balance is outside of acceptance criteria, however, the major cations/anions are near or below the PQL and hence the analytical error may be more significant resulting in a poor cation-anion balance.
[5]	The sub-contracting laboratory did not provide analysis and/or preparation and/or sample receipt dates. The date(s) the sample(s) was/were received at the sub-contracting laboratory has/have been used to assess holding time(s).

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Method Summary

Method ID	Methodology Summary
Calc - ION	Calculation
INORG-001	pH - Measured using pH meter and electrode. Please note that the results for water analyses are indicative only, as analysis can be completed outside of the recommended holding times. Solids are reported from a 1:5 water extract unless otherwise specified. Alternatively, pH is determined in a 1:5 extract using 0.01M calcium chloride or a solid is extracted at a ratio of 1:2.5 (AS1289.4.3.1), pH is measured in the extract.
INORG-006	Alkalinity - determined titrimetrically based on APHA latest edition 2320-B. Solids reported from a 1:5 water extract unless otherwise specified. Total Carbon Dioxide - determined by calculation in accordance with APHA latest edition, 4500-CO2 D.
INORG-014	Cyanide - free, total, weak acid dissociable by segmented flow analyser (in line dialysis with colourimetric finish). Solids/Filters and sorbents are extracted in a caustic media prior to analysis. Impingers are pH adjusted as required prior to analysis. Cyanides amenable to Chlorination - samples are analysed untreated and treated with hypochlorite to assess the potential for chlorination of cyanide forms.
INORG-018	Total Dissolved Solids - determined gravimetrically. The solids are dried at 180±10°C. NOTE: Where the EC of the sample is <100µS/cm, the TDS will typically be below 70mg/L (as the sample is very likely to be at least drinking water quality). Therefore to ensure data quality for TDS, the TDS is typically calculated as per the equation: TDS = EC*0.6
INORG-021	Methylene Blue Active Substances - determined colorimetrically, based on APHA latest edition, Method 5540-C. Solid samples extracted with water.
INORG-022	Turbidity - measured nephelometrically using a turbidimeter, in accordance with APHA latest edition, 2130-B.
INORG-026	Fluoride determined by ion selective electrode (ISE) based on APHA latest edition, 4500-F-C. Solids are reported from a 1:5 water extract unless otherwise specified.
INORG-028	Measured by visual comparison and/or spectrophotometrically.
INORG-040	The concentrations of the major ions (mg/L) are converted to milliequivalents and summed. The ionic balance should be within +/- 15% i.e. total anions = total cations +/-15%.
INORG-041	Total Solids - determined gravimetrically. The samples are dried at 104±5°C.
INORG-055	Nitrate/Nitrite/NOx/TKN - determined colourimetrically. Waters samples are filtered on receipt prior to analysis. Soils/solids are analysed following a water extraction.
INORG-057	Ammonia - determined colourimetrically. Water samples are filtered on receipt prior to analysis. Soils and OHS media are analysed following a water extraction. Alternatively, Ammonia can be extracted from soil using 1M KCl.
INORG-081	Anions determined by Ion Chromatography. Waters samples are filtered on receipt prior to analysis. Solids are analysed from a water extract. Alternatively determined by colourimetry/turbidity using Discrete Analyser.
INORG-133	Threshold odour number (TON) in water determined by a panel of 5 individuals and the consensus threshold.
METALS-020	Determination of various metals by ICP-AES. Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically, there is no guarantee that the salt form is completely soluble in the acids used in the preparation. Where molecular anion forms are calculated from an element (e.g. SO4 from S or PO4 from P stoichiometrically), the assumption is that the element is only present in that molecular anion form. Submission of low masses of sample e.g. for dust samples, may result in raised PQLs.
METALS-021	Determination of Mercury by Cold Vapour AAS.
METALS-022	Determination of various metals by ICP-MS. Please note for Bromine and Iodine, any forms of these elements that are present are included together in the one result reported for each of these two elements. Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.
ORG-022	Determination of semi-volatile organic compounds (SVOCs) by GC-MS. Water samples are extracted by LLE and soils using DCM/Acetone/Methanol.
ORG-023	Determination of volatile organic compounds (VOCs) by P&T-GC-MS. Water samples are analysed directly by purge and trap GC-MS. Soils are extracted with Methanol, diluted and analysed by purge and trap GC-MS.
ORG-023_F1_TOT	Determination of volatile organic compounds (VOCs) by P&T-GC-MS. Water samples are analysed directly by purge and trap GC-MS. Solids are extracted with Methanol, diluted and analysed by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.
ORG-026_SVOC_VO C_GCMSMS	Determination of organic analytes by HS-GC-MS-MS. Water samples are sub-sampled and generally analysed directly by headspace GC-MS-MS. Soils are extracted with solvent, diluted where necessary and analysed by headspace GC-MS-MS.
ORG-029_OXYHALID ES	Water Samples for Oxyhalides are filtered through 0.2µm filter prior to analysis on LC-MS-MS.

Your Reference:

Three Valleys Mineral Water

Revision: R-01

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Method Summary

Method ID	Methodology Summary
SUB-028	Subcontracted to MNAQ (Australia) Pty Ltd - Accreditation number 345
SUB-028_HP	Subcontracted to MNAQ (Australia) Pty Ltd - Accreditation number 345
SUB-028_HU	Subcontracted to MNAQ (Australia) Pty Ltd - Accreditation number 345
SUB-028_T	Subcontracted to MNAQ (Australia) Pty Ltd - Accreditation number 345

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Result Definitions

Identifier	Description
NR	Not reported
NEPM	National Environment Protection Measure
NS	Not specified
LCS	Laboratory Control Sample
RPD	Relative Percent Difference
>	Greater than
<	Less than
PQL	Practical Quantitation Limit
INS	Insufficient sample for this test
NA	Test not required
NT	Not tested
DOL	Samples rejected due to particulate overload (air filters only)
RFD	Samples rejected due to filter damage (air filters only)
RUD	Samples rejected due to uneven deposition (air filters only)
##	Indicates a laboratory acceptance criteria outlier, for further details, see Result Comments and/or QC Comments

Quality Control Definitions

Blank

This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, and is determined by processing solvents and reagents in exactly the same manner as for samples.

Surrogate Spike

Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

LCS (Laboratory Control Sample)

This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Matrix Spike

A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

Duplicate

This is the complete duplicate analysis of a sample from the process batch. The sample selected should be one where the analyte concentration is easily measurable.

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Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria. Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction. Spikes for Physical and Aggregate Tests are not applicable. For VOCs in water samples, three vials are required for duplicate or spike analysis.

General Acceptance Criteria (GAC) - Analyte specific criteria applies for some analytes and is reflected in QC recovery tables.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% - see ELN-P05 QAQC tables for details (available on request); <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase. Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was typically insufficient in order to satisfy laboratory QA/QC protocols.

Miscellaneous Information

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached. We have taken the sampling date as being the date received at the laboratory.

Two significant figures are reported for the majority of tests and with a high degree of confidence, for results <10*PQL, the second significant figure may be in doubt i.e. has a relatively high degree of uncertainty and is provided for information only.

Measurement Uncertainty estimates can be downloaded from the [Envirolab Resources website](#) or obtained directly by contacting the laboratory.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS where sediment/solids are included by default.

Urine Analysis - The BEI values listed are taken from the 2022 edition of *TLVs and BEIs Threshold Limits by ACGIH*.

Air volumes are typically provided by customers (often as flow rate(s) and sampling time(s) and/or simply volume(s) sampled or exposure times (determines 'volume' passive badges are exposed to)). Hence in such circumstances the volume measurement is inevitably not covered by Envirolab's NATA accreditation. An exception may occur where Envirolab Newcastle does the sampling where accreditation exists for certain types of sampling and hence volume determination(s). Note air volumes are often used to determine concentrations for dust and/or analyses on filters, sorbents and in impingers. For canister sampling, the air volume is covered by Envirolab's NATA accreditation.

Where air volumes and/or sampled areas and/or time based sampling data is supplied by customers and the customer is NATA accredited for the sampling activity then calculated concentrations can be reported on the endorsed Certificate of Analysis (CoA). Confirmation of the accreditation must be supplied by the customer and such information is used in good faith. Where the sampling is not covered by NATA accreditation then only the raw data can be reported on the CoA (e.g. mass, fibres per field)

Data Quality Assessment Summary MHE0096

Client Details

Client	Three Valleys Mineral Water Pty Ltd
Your Reference	Three Valleys Mineral Water
Date Issued	18/05/2026

Recommended Holding Time Compliance

Recommended holding time exceedances exist - See detailed list below

Quality Control and QC Frequency

QC Type	Compliant	Details
Blank	Yes	No Outliers
LCS	Yes	No Outliers
Duplicates	Yes	No Outliers
Matrix Spike	No	Matrix Spike Outliers Exist - See detailed list below
Surrogates / Extracted Internal Standards	Yes	No Outliers
QC Frequency	Yes	No Outliers

Surrogates/Extracted Internal Standards, Duplicates and/or Matrix Spikes are not always relevant/applicable to certain analyses and matrices. Therefore, said QC measures are deemed compliant in these situations by default. See Laboratory Acceptance Criteria for more information

Data Quality Assessment Summary MHE0096

Recommended Holding Time Compliance

Analysis	Sample Number(s)	Date Sampled	Date Extracted	Date Analysed	Compliant
1,4-Dioxane Water	1	05/05/2026	11/05/2026	12/05/2026	Yes
Fumigants Water	1	05/05/2026	11/05/2026	11/05/2026	Yes
VOC - MAH Water	1	05/05/2026	11/05/2026	11/05/2026	Yes
Halogenated Aliphatics Water	1	05/05/2026	11/05/2026	11/05/2026	Yes
Halogenated Aromatics Water	1	05/05/2026	11/05/2026	11/05/2026	Yes
Other VOC Water	1	05/05/2026	11/05/2026	11/05/2026	Yes
VOC - Surrogates Water	1	05/05/2026	11/05/2026	11/05/2026	Yes
OPP (21 list) Water	1	05/05/2026	11/05/2026	11/05/2026	Yes
Speciated Phenols Water	1	05/05/2026	11/05/2026	11/05/2026	Yes
Carbamates Water	1	05/05/2026	11/05/2026	12/05/2026	Yes
Oxyhalides Water	1	05/05/2026	08/05/2026	08/05/2026	Yes
Total Metals (LL) Water	1	05/05/2026	08/05/2026	13/05/2026	Yes
Total Metals (LL)-Hg Water	1	05/05/2026	07/05/2026	11/05/2026	Yes
Colour-True Water	1	05/05/2026	06/05/2026	13/05/2026	Yes
Odour Water	1	05/05/2026	13/05/2026	13/05/2026	No
pH Water	1	05/05/2026	08/05/2026	08/05/2026	No
pH (True Colour) Water	1	05/05/2026	08/05/2026	08/05/2026	Yes
TDS Water	1	05/05/2026	11/05/2026	18/05/2026	Yes
Total Solids Water	1	05/05/2026	08/05/2026	13/05/2026	Yes
Turbidity Water	1	05/05/2026	07/05/2026	13/05/2026	Yes
Alkalinity Suite Water	1	05/05/2026	08/05/2026	08/05/2026	Yes
Chloride Water	1	05/05/2026	08/05/2026	12/05/2026	Yes
Dissolved Cations Water	1	05/05/2026	08/05/2026	12/05/2026	Yes
Ion Balance Water	1	05/05/2026	08/05/2026	12/05/2026	Yes
	1	05/05/2026	08/05/2026	15/05/2026	Yes
Sulfate Water	1	05/05/2026	08/05/2026	08/05/2026	Yes
Fluoride Water	1	05/05/2026	13/05/2026	13/05/2026	Yes
Nitrogen - Ammonia Water	1	05/05/2026	11/05/2026	12/05/2026	Yes
Nitrogen - Nitrate Water	1	05/05/2026	06/05/2026	11/05/2026	Yes
MBAS Water	1	05/05/2026	11/05/2026	11/05/2026	No
Cyanide - Total Water	1	05/05/2026	08/05/2026	08/05/2026	Yes
Faecal Enterococci Water	1	05/05/2026	06/05/2026	11/05/2026	Yes
HPC - 22C Water	1	05/05/2026	06/05/2026	11/05/2026	Yes
HPC - 36C Water	1	05/05/2026	06/05/2026	11/05/2026	Yes
Pseudomonas aeruginosa Water	1	05/05/2026	06/05/2026	11/05/2026	Yes
Salmonella Water	1	05/05/2026	06/05/2026	11/05/2026	Yes
Shigella Water	1	05/05/2026	11/05/2026	15/05/2026	Yes
Sulfur Reducing Anarobes Water	1	05/05/2026	06/05/2026	15/05/2026	Yes

Your Reference:

Three Valleys Mineral Water

Revision: R-01

Certificate of Analysis Generated: 18/05/2026 16:27

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Data Quality Assessment Summary MHE0096

Recommended Holding Time Compliance

Analysis	Sample Number(s)	Date Sampled	Date Extracted	Date Analysed	Compliant
Total Coliforms Water	1	05/05/2026	06/05/2026	11/05/2026	Yes

Outliers: Matrix Spike

INORG-055 | Inorganics - Nutrients (Water) | Batch BHE1633

Sample ID	Analyte	% Limits	% Recovery
BHE1633-MS1#	Nitrate as N	70 - 130	##[2]

Quality Control MHE0096

ORG-026_SVOC_VOC_GCMSMS | Volatile Organic Compounds (Water) | Batch BHE1728

Analyte	Units	PQL	Blank	DUP1 MHE0096-01 Samp QC RPD %	LCS %	Spike % MHE0096-01
1,4-Dioxane	µg/L	0.50	<0.50	<0.50 <0.50 [NA]	114	110
Surrogate 4-Bromofluorobenzene	%		99.2	96.2 / 100	98.8	100

ORG-023 | Volatile Organic Compounds - Fumigants (Water) | Batch BHE1792

Analyte	Units	PQL	Blank	DUP1 BHE1792-DUP1# Samp QC RPD %	DUP2 BHE1792-DUP2# Samp QC RPD %	LCS %	Spike % BHE1792-MS1#
2,2-Dichloropropane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]
1,2-Dichloropropane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	66.2	64.7
cis-1,3-Dichloropropene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	81.0	77.6
trans-1,3-Dichloropropene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	89.0	84.7
1,2-Dibromoethane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	78.4	76.0

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

ORG-023_F1_TOT | Volatile Organic Compounds - MAH (Water) | Batch BHE1792

Analyte	Units	PQL	Blank	DUP1 BHE1792-DUP1# Samp QC RPD %	DUP2 BHE1792-DUP2# Samp QC RPD %	LCS %	Spike % BHE1792-MS1#
Benzene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	90.5	70.9
Toluene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	89.5	77.9
Ethylbenzene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	94.7	89.8
meta+para Xylene	µg/L	2.0	<2.0	<2.0 <2.0 [NA]	<2.0 <2.0 [NA]	99.5	94.4
Styrene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]
ortho-Xylene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	95.2	90.6
Isopropylbenzene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]
n-Propylbenzene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]
1,3,5-Trimethylbenzene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]
tert-Butylbenzene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]
1,2,4-Trimethylbenzene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]
sec-Butylbenzene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]
4-Isopropyltoluene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]
n-Butyl benzene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

Quality Control MHE0096

ORG-023 | Volatile Organic Compounds - Halogenated Aliphatics (Water) | Batch BHE1792

Analyte	Units	PQL	Blank	DUP1		DUP2		LCS %	Spike %
				BHE1792-DUP1#		BHE1792-DUP2#			
				Samp	QC RPD %	Samp	QC RPD %		
Dichlorodifluoromethane (Freon-12)	µg/L	10	<10	<10 <10 [NA]	<10 <10 [NA]	[NA]	[NA]		
Chloromethane	µg/L	10	<10	<10 <10 [NA]	<10 <10 [NA]	[NA]	[NA]		
Vinyl chloride	µg/L	10	<10	<10 <10 [NA]	<10 <10 [NA]	[NA]	[NA]		
Bromomethane	µg/L	10	<10	<10 <10 [NA]	<10 <10 [NA]	[NA]	[NA]		
Chloroethane	µg/L	10	<10	<10 <10 [NA]	<10 <10 [NA]	[NA]	[NA]		
Trichlorofluoromethane (Freon-11)	µg/L	10	<10	<10 <10 [NA]	<10 <10 [NA]	[NA]	[NA]		
1,1-Dichloroethene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]		
trans-1,2-Dichloroethene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]		
1,1-Dichloroethane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	82.6	80.7		
cis-1,2-Dichloroethene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]		
Bromochloromethane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]		
Chloroform	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	94.1	92.8		
1,1,1-Trichloroethane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	108	106		
1,1-Dichloropropene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]		
Carbon Tetrachloride	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]		
1,2-Dichloroethane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	104	102		
Trichloroethene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	81.8	76.2		
Dibromomethane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]		
Bromodichloromethane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	92.9	90.9		
1,1,2-Trichloroethane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]		
1,3-Dichloropropane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]		
Tetrachloroethene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	81.8	75.1		
Dibromochloromethane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	92.6	89.5		
1,1,1,2-Tetrachloroethane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]		
Bromoform	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	102	95.4		
1,1,2,2-Tetrachloroethane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]		
1,2,3-Trichloropropane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]		
1,2-Dibromo-3-chloropropane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]		
Hexachlorobutadiene	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	[NA]	[NA]		

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

ORG-023 | Volatile Organic Compounds - Halogenated Aromatics (Water) | Batch BHE1792

Analyte	Units	PQL	Blank	DUP1			DUP2			LCS %	Spike %	
				BHE1792-DUP1#			BHE1792-DUP2#				BHE1792-MS1#	
				Samp	QC	RPD %	Samp	QC	RPD %			
Chlorobenzene	µg/L	1.0	<1.0	<1.0	<1.0	[NA]	<1.0	<1.0	[NA]	[NA]	[NA]	
Bromobenzene	µg/L	1.0	<1.0	<1.0	<1.0	[NA]	<1.0	<1.0	[NA]	[NA]	[NA]	
2-Chlorotoluene	µg/L	1.0	<1.0	<1.0	<1.0	[NA]	<1.0	<1.0	[NA]	[NA]	[NA]	
4-Chlorotoluene	µg/L	1.0	<1.0	<1.0	<1.0	[NA]	<1.0	<1.0	[NA]	[NA]	[NA]	
1,3-Dichlorobenzene	µg/L	1.0	<1.0	<1.0	<1.0	[NA]	<1.0	<1.0	[NA]	[NA]	[NA]	
1,4-Dichlorobenzene	µg/L	1.0	<1.0	<1.0	<1.0	[NA]	<1.0	<1.0	[NA]	91.0	82.9	
1,2-Dichlorobenzene	µg/L	1.0	<1.0	<1.0	<1.0	[NA]	<1.0	<1.0	[NA]	[NA]	[NA]	
1,2,4-Trichlorobenzene	µg/L	1.0	<1.0	<1.0	<1.0	[NA]	<1.0	<1.0	[NA]	98.4	90.1	
1,2,3-Trichlorobenzene	µg/L	1.0	<1.0	<1.0	<1.0	[NA]	<1.0	<1.0	[NA]	[NA]	[NA]	

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

Quality Control MHE0096

ORG-023 | Volatile Organic Compounds - Other VOCs (Water) | Batch BHE1792

Analyte	Units	PQL	Blank	DUP1 BHE1792-DUP1# Samp QC RPD %	DUP2 BHE1792-DUP2# Samp QC RPD %	LCS %	Spike % BHE1792-MS1#
Cyclohexane	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	<1.0 <1.0 [NA]	69.5	68.8

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

ORG-023 | Volatile Organic Compounds - Surrogates (Water) | Batch BHE1792

Analyte	Units	PQL	Blank	DUP1 BHE1792-DUP1# Samp QC RPD %	DUP2 BHE1792-DUP2# Samp QC RPD %	LCS %	Spike % BHE1792-MS1#
Surrogate Dibromofluoromethane	%		90.6	93.7 96.1	96.6 89.8	86.9	87.6
Surrogate Toluene-D8	%		94.2	99.1 100	101 99.0	99.1	98.9
Surrogate 4-Bromofluorobenzene	%		108	108 110	109 106	102	104

Analyte	Units	PQL	Blank	LCS %	Spike % BHE1792-MS2#
Surrogate Dibromofluoromethane	%			86.2	84.3
Surrogate Toluene-D8	%			97.5	98.0
Surrogate 4-Bromofluorobenzene	%			102	103

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

ORG-022 | Organophosphorus Pesticides (Water) | Batch BHE1631

Analyte	Units	PQL	Blank	DUP1 MHE0096-01 Samp QC RPD %	LCS %	Spike % MHE0096-01
Dichlorvos	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	82.9	80.0
Dimethoate	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	[NA]	[NA]
Diazinon	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	[NA]	[NA]
Chlorpyrifos-methyl	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	85.5	80.9
Ronnel	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	91.3	87.8
Fenitrothion	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	113	110
Malathion	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	104	104
Chlorpyrifos	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	97.3	95.4
Parathion	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	113	109
Bromophos-ethyl	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	[NA]	[NA]
Ethion	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	92.7	94.9
Coumaphos	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	[NA]	[NA]
Disulfoton	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	[NA]	[NA]
Fenamiphos	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	[NA]	[NA]
Fenthion	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	[NA]	[NA]
Methidathion	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	[NA]	[NA]
Mevinphos	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	[NA]	[NA]
Parathion-methyl	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	[NA]	[NA]
Phorate	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	[NA]	[NA]
Phosalone	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	[NA]	[NA]
Azinphos-methyl	µg/L	0.20	<0.20	<0.20 <0.20 [NA]	[NA]	[NA]
Surrogate 4-chloro-3-nitrobenzotrifluorid	%		79.5	89.6 104	102	97.9

Quality Control MHE0096

ORG-022 | Speciated Phenols (Water) | Batch BHE1631

Analyte	Units	PQL	Blank	DUP1 MHE0096-01 Samp QC RPD %	LCS %	Spike % MHE0096-01
Phenol	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	84.4	79.3
2-Chlorophenol	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	93.5	87.6
2-Methylphenol	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	[NA]	[NA]
3/4-Methylphenol	µg/L	2.0	<2.0	<2.0 <2.0 [NA]	[NA]	[NA]
2-Nitrophenol	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	[NA]	[NA]
2,4-Dimethylphenol	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	[NA]	[NA]
2,4-Dichlorophenol	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	[NA]	[NA]
2,6-Dichlorophenol	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	89.5	90.3
4-Chloro-3-methylphenol	µg/L	5.0	<5.0	<5.0 <5.0 [NA]	[NA]	[NA]
2,4,6-Trichlorophenol	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	[NA]	[NA]
2,4,5-Trichlorophenol	µg/L	1.0	<1.0	<1.0 <1.0 [NA]	[NA]	[NA]
2,4-Dinitrophenol	µg/L	20	<20	<20 <20 [NA]	[NA]	[NA]
4-Nitrophenol	µg/L	20	<20	<20 <20 [NA]	[NA]	[NA]
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	µg/L	2.0	<2.0	<2.0 <2.0 [NA]	[NA]	[NA]
4,6-Dinitro-2-methylphenol	µg/L	20	<20	<20 <20 [NA]	[NA]	[NA]
Pentachlorophenol	µg/L	5.0	<5.0	<5.0 <5.0 [NA]	[NA]	[NA]
Dinoseb	µg/L	20	<20	<20 <20 [NA]	[NA]	[NA]
2-Cyclohexyl-4,6-Dinitrophenol	µg/L	20	<20	<20 <20 [NA]	[NA]	[NA]
Surrogate 2-Fluorophenol	%		63.6	73.8 87.9	81.9	80.4
Surrogate Phenol-D6	%		60.9	66.9 79.8	78.3	74.4

ORG-022 | Carbamates (Water) | Batch BHE1631

Analyte	Units	PQL	Blank	DUP1 MHE0096-01 Samp QC RPD %	LCS %	Spike % MHE0096-01
Molinate	µg/L	0.50	<0.50	<0.50 <0.50 [NA]	[NA]	[NA]
Carbofuran	µg/L	0.50	<0.50	<0.50 <0.50 [NA]	90.3	89.6
Carbaryl	µg/L	0.50	<0.50	<0.50 <0.50 [NA]	[NA]	[NA]
Surrogate p-Terphenyl-D14	%		94.7	112 115	92.5	86.2

ORG-029_OXYHALIDES | LC-MS-MS Oxyhalides (Water) | Batch BHE1359

Analyte	Units	PQL	Blank	DUP1 MHE0096-01 Samp QC RPD %	LCS %	Spike % MHE0096-01
Bromate	µg/L	0.50	<0.50	<0.50 <0.50 [NA]	97.2	85.9

METALS-021 | Acid Extractable Low Level Metals (Water) | Batch BHE1267

Analyte	Units	PQL	Blank	DUP1 BHE1267-DUP1# Samp QC RPD %	DUP2 BHE1267-DUP2# Samp QC RPD %	LCS %	Spike % BHE1267-MS1#
Mercury	µg/L	0.050	<0.050	<0.050 <0.050 [NA]	<0.050 <0.050 [NA]	104	120

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

Quality Control MHE0096

METALS-022 | Acid Extractable Low Level Metals (Water) | Batch BHE1492

Analyte	Units	PQL	Blank	DUP1	LCS %	Spike % MHE0096-01
				BHE1492-DUP1#		
				Samp QC RPD %		
Aluminium	µg/L	10	<10	8190 8570 4.55	97.2	94.4
Arsenic	µg/L	1.0	<1.0	9.02 9.90 [NA]	101	105
Boron	µg/L	20	<20	<40 <40 [NA] [3]	104	103
Cadmium	µg/L	0.10	<0.10	0.620 0.680 [NA]	103	106
Chromium	µg/L	1.0	<1.0	16.8 17.9 6.33	102	102
Copper	µg/L	1.0	<1.0	21.1 20.9 0.761	102	96.3
Iron	µg/L	10	<10	15600 21100 29.6	100	112
Lead	µg/L	1.0	<1.0	2.32 2.20 [NA]	101	92.9
Manganese	µg/L	1.0	<1.0	517 571 9.87	100	98.7
Selenium	µg/L	1.0	<1.0	<2.0 <2.0 [NA] [3]	100	102
Zinc	µg/L	1.0	<1.0	159 186 15.6	103	102

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-022 | Inorganics - Physical Parameters (Water) | Batch BHE1356

Analyte	Units	PQL	Blank	DUP1	LCS %
				MHE0096-01	
				Samp QC RPD %	
Turbidity	NTU	0.10	<0.10	0.330 0.330 [NA]	101

INORG-001 | Inorganics - Physical Parameters (Water) | Batch BHE1552

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %
				MHE0096-01	BHE1552-DUP2#	
				Samp QC RPD %	Samp QC RPD %	
pH	pH units		4.2	6.9 6.9 0.289	7.7 7.7 0.130	97.8
pH (True Colour)	pH units		4.2	6.9 6.9 0.289	7.7 7.7 0.130	[NA]

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-028 | Inorganics - Physical Parameters (Water) | Batch BHE1897

Analyte	Units	PQL	Blank	DUP1	LCS %
				BHE1897-DUP1#	
				Samp QC RPD %	
Colour (True)*	PCU	5.0	<5.0	<5.0 <5.0 [NA]	109

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-041 | Inorganics - Physical Parameters (Water) | Batch BHE2178

Analyte	Units	PQL	Blank	DUP1	LCS %
				MHE0096-01	
				Samp QC RPD %	
Total Solids	mg/L	5.0	<5.0	90.0 105 15.4	99.0

INORG-133 | Inorganics - Physical Parameters (Water) | Batch BHE2300

Analyte	Units	PQL	Blank	LCS %
Threshold Odour Number*	-		0.00	[NA]

INORG-018 | Inorganics - Physical Parameters (Water) | Batch BHE2905

Analyte	Units	PQL	Blank	DUP1	LCS %
				MHE0096-01	
				Samp QC RPD %	
Total Dissolved Solids	mg/L	5.0	<5.0	405 375 7.69	97.3

Quality Control MHE0096

INORG-081 | Inorganics - Ionic Balance and Indexes (Water) | Batch BHE1441

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %	Spike %
				BHE1441-DUP1# Samp QC RPD %	BHE1441-DUP2# Samp QC RPD %		
Chloride	mg/L	1.0	<1.0	160 162 1.00	2880 2850 0.990	100	79.1
Sulfate	mg/L	1.0	<1.0	<1.0 <1.0 [NA]	214 243 [NA]	105	90.1

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

METALS-020 | Inorganics - Ionic Balance and Indexes (Water) | Batch BHE1493

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %	Spike %
				MHE0096-01 Samp QC RPD %	BHE1493-DUP2# Samp QC RPD %		
Calcium	mg/L	0.50	<0.50	21.9 22.4 2.13	51.1 51.6 0.971	96.6	95.4
Magnesium	mg/L	0.50	<0.50	5.92 6.00 1.33	79.9 78.1 2.26	96.2	93.1
Potassium	mg/L	0.50	<0.50	0.954 0.987 [NA]	2.48 2.48 [NA]	98.4	97.5
Sodium	mg/L	0.50	<0.50	56.3 57.4 1.94	166 164 1.03	98.3	88.5
Hardness (calc) equivalent CaCO3	mg/L	3.0	<3.0	79.0 80.5 1.88	457 451 1.35	[NA]	[NA]

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-006 | Inorganics - Ionic Balance and Indexes (Water) | Batch BHE1552

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %	
				MHE0096-01 Samp QC RPD %	BHE1552-DUP2# Samp QC RPD %		
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	290 275 5.13	319 330 3.42	[NA]	
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0 <5.0 [NA]	<5.0 <5.0 [NA]	[NA]	
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0 <5.0 [NA]	<5.0 <5.0 [NA]	[NA]	
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	290 275 5.13	319 330 3.42	108	

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-026 | Inorganics - Miscellaneous and Common Anions (Water) | Batch BHE2176

Analyte	Units	PQL	Blank	DUP1	LCS %	Spike %
				MHE0096-01 Samp QC RPD %		
Fluoride	mg/L	0.10	<0.10	4.52 4.82 6.35	109	126

INORG-055 | Inorganics - Nutrients (Water) | Batch BHE1633

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %	Spike %
				BHE1633-DUP1# Samp QC RPD %	BHE1633-DUP2# Samp QC RPD %		
Nitrate as N	mg/L	0.0050	<0.0050	0.0773 0.0663 15.3	0.370 0.361 2.49	97.1	##[2]
Nitrate as NO3 by calculation	mg/L	0.020	<0.020			[NA]	[NA]

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-057 | Inorganics - Nutrients (Water) | Batch BHE1821

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %	Spike %
				BHE1821-DUP1# Samp QC RPD %	MHE0096-01 Samp QC RPD %		
Ammonia as N	mg/L	0.0050	<0.0050	0.0110 0.00972 [NA]	<0.0050 <0.0050 [NA]	95.5	109

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-021 | Inorganics - Common Wastewater Parameters (Water) | Batch BHE1719

Analyte	Units	PQL	Blank	DUP1	LCS %	Spike %
				MHE0096-01 Samp QC RPD %		
MBAS	mg/L	0.10	<0.10	<0.10 <0.10 [NA]	92.0	90.0

Quality Control MHE0096

INORG-014 | Inorganics - Cyanide Species and Similar (Water) | Batch BHE1344

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %	Spike %
				BHE1344-DUP1#	BHE1344-DUP2#		BHE1344-MS1#
				Samp QC RPD %	Samp QC RPD %		
Total Cyanide	mg/L	0.0040	<0.0040	<0.0040 <0.0040 [NA]		91.8	80.2

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

QC Comments

Identifier	Description
[2]	Spike recovery is outside routine acceptance criteria (70-130%), this may be due to suspected non-homogeneity and/or matrix interference effects. However, an acceptable recovery was achieved for the LCS.
[3]	PQL has been raised due to matrix requiring dilution