



HASTINGS
Technology Metals Limited

APPENDIX 6

LABORATORY REPORT

Job Number: 17-12557
Revision: 01
Date: 29 August 2017

ADDRESS: Hastings Technology Metals

ATTENTION: Ernest Van

DATE RECEIVED: 11/08/2017

YOUR REFERENCE: Hastings Technology Metals

PURCHASE ORDER:

APPROVALS:



Douglas Todd
Laboratory Manager



Jenny Gould
Microbiology Manager



Sam Becker
Inorganics Manager

REPORT COMMENTS:

This report is issued by Analytical Reference Laboratory (WA) Pty Ltd
Samples are analysed on an as received basis unless otherwise noted.
Radium 226 & 228 analysis subcontracted to ALS, NATA Accred No. 825, Report Number EP1708671

METHOD REFERENCES:

Methods prefixed with "ARL" are covered under NATA Accreditation Number: 2377

Methods prefixed with "PM" are covered under NATA Accreditation Number: 2561

ARL No. 040	Arsenic by Hydride Atomic Absorption
ARL No. 29/402/403	Metals in Water by AAS/ICPOES/ICPMS
ARL No. 406	Mercury by Cold Vapour Atomic Absorption Spectrophotometry
ARL No. 029	Metals in Water by AAS
ARL No. 305	Chloride in Water by Discrete Analyser
ARL No. 301	Sulphate in Water by Discrete Analyser
ARL No. 313/319	NOx in Water by Discrete Analyser
ARL No. 037	Alkalinity in Water
ARL No. 014	pH in Water
ARL No. 017	Total Dissolved Solids (At 105°C)
ARL No. 016	Total Suspended Solids
PM 4.2	Total Coliforms by Membrane Filtration
PM 4.3	Thermotolerant Coliforms and E. coli by Membrane Filtration
Subcontracting	See Report Comments section for more information.



ARL GROUP

46-48 Banksia Road, Welshpool, Western Australia 6106

Telephone: 08 6253 4444 Facsimile: 08 6253 4440 www.arlwa.com.au www.promicro.com.au

LABORATORY REPORT

Hastings Technology Metals

ARL Job No: 17-12557

Revision: 01

Date: 29 August 2017

8 Heavy Metals in Water Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-1 FR_Bore 9/08/17	17-12557-2 FRW03 9/08/17	17-12557-3 RCO82 9/08/17	17-12557-4 BHW05 9/08/17
Arsenic - Dissolved	0.001	mg/L	<0.001	<0.001	<0.001	<0.001
Cadmium - Dissolved	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Chromium - Dissolved	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Copper - Dissolved	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Mercury - Dissolved	0.0002	mg/L	<0.0002	<0.0002	<0.0002	<0.0002
Nickel - Dissolved	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Lead - Dissolved	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Zinc - Dissolved	0.01	mg/L	<0.01	<0.01	<0.01	<0.01

8 Heavy Metals in Water Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-5 YWRC075 9/08/17	17-12557-6 YAG_Bore 9/08/17	17-12557-7 EDW_Bore 9/08/17	17-12557-8 MNG_Well 9/08/17
Arsenic - Dissolved	0.001	mg/L	0.002	<0.001	0.001	0.002
Cadmium - Dissolved	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Chromium - Dissolved	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Copper - Dissolved	0.01	mg/L	0.01	<0.01	<0.01	<0.01
Mercury - Dissolved	0.0002	mg/L	<0.0002	<0.0002	<0.0002	<0.0002
Nickel - Dissolved	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Lead - Dissolved	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Zinc - Dissolved	0.01	mg/L	0.48	<0.01	<0.01	<0.01

8 Heavy Metals in Water Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-9 EDH_Bore 9/08/17	17-12557-10 CONT_Bore 9/08/17	17-12557-11 Red_Hill 9/08/17	17-12557-12 WOO_Bore 9/08/17
Arsenic - Dissolved	0.001	mg/L	0.001	<0.001	0.002	0.001
Cadmium - Dissolved	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Chromium - Dissolved	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Copper - Dissolved	0.01	mg/L	<0.01	0.02	<0.01	<0.01
Mercury - Dissolved	0.0002	mg/L	<0.0002	<0.0002	<0.0002	<0.0002
Nickel - Dissolved	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Lead - Dissolved	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Zinc - Dissolved	0.01	mg/L	<0.01	0.02	<0.01	<0.01

ARL GROUP

46-48 Banksia Road, Welshpool, Western Australia 6106

Telephone: 08 6253 4444 Facsimile: 08 6253 4440 www.arlwa.com.au www.promicro.com.au

LABORATORY REPORT

Hastings Technology Metals

ARL Job No: 17-12557

Revision: 01

Date: 29 August 2017

8 Heavy Metals in Water Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-13 LYR_Pool 9/08/17	17-12557-14 Q01 9/08/17
Arsenic - Dissolved	0.001	mg/L	0.001	<0.001
Cadmium - Dissolved	0.002	mg/L	<0.002	<0.002
Chromium - Dissolved	0.01	mg/L	<0.01	<0.01
Copper - Dissolved	0.01	mg/L	<0.01	<0.01
Mercury - Dissolved	0.0002	mg/L	<0.0002	<0.0002
Nickel - Dissolved	0.01	mg/L	<0.01	<0.01
Lead - Dissolved	0.01	mg/L	<0.01	<0.01
Zinc - Dissolved	0.01	mg/L	<0.01	<0.01

Metals in Water Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-1 FR_Bore 9/08/17	17-12557-2 FRW03 9/08/17	17-12557-3 RCO82 9/08/17	17-12557-4 BHW05 9/08/17
Aluminium - Total	0.1	mg/L	0.3	<0.1	<0.1	<0.1
Calcium - Dissolved	0.1	mg/L	49	73	70	78
Iron - Total	0.01	mg/L	0.51	0.02	0.16	0.04
Potassium - Dissolved	0.1	mg/L	10	13	12	13
Magnesium - Dissolved	0.1	mg/L	42	60	45	48
Sodium - Dissolved	0.1	mg/L	530	250	220	220
Selenium - Total	0.001	mg/L	0.006	0.009	0.010	0.010
Uranium - Total	0.001	mg/L	0.035	0.014	0.028	0.030

Metals in Water Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-5 YWRC075 9/08/17	17-12557-6 YAG_Bore 9/08/17	17-12557-7 EDW_Bore 9/08/17	17-12557-8 MNG_Well 9/08/17
Aluminium - Total	0.1	mg/L	0.1	<0.1	<0.1	<0.1
Calcium - Dissolved	0.1	mg/L	67	110	74	52
Iron - Total	0.01	mg/L	0.37	0.02	0.12	0.01
Potassium - Dissolved	0.1	mg/L	8.5	9.7	15	4.4
Magnesium - Dissolved	0.1	mg/L	32	66	94	46
Sodium - Dissolved	0.1	mg/L	150	300	530	120
Selenium - Total	0.001	mg/L	0.003	0.008	0.004	0.003
Uranium - Total	0.001	mg/L	0.026	0.032	0.037	0.039

LABORATORY REPORT

Hastings Technology Metals

ARL Job No: 17-12557

Revision: 01

Date: 29 August 2017

Metals in Water Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-9 EDH_Bore 9/08/17	17-12557-10 CONT_Bore 9/08/17	17-12557-11 Red_Hill 9/08/17	17-12557-12 WOO_Bore 9/08/17
Aluminium - Total	0.1	mg/L	<0.1	0.1	<0.1	<0.1
Calcium - Dissolved	0.1	mg/L	82	71	260	100
Iron - Total	0.01	mg/L	0.05	0.33	0.03	0.03
Potassium - Dissolved	0.1	mg/L	4.0	4.6	22	28
Magnesium - Dissolved	0.1	mg/L	40	51	150	93
Sodium - Dissolved	0.1	mg/L	31	44	670	340
Selenium - Total	0.001	mg/L	0.001	<0.001	0.010	0.003
Uranium - Total	0.001	mg/L	0.001	0.029	0.25	0.009

Metals in Water Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-13 LYR_Pool 9/08/17	17-12557-14 Q01 9/08/17
Aluminium - Total	0.1	mg/L	<0.1	<0.1
Calcium - Dissolved	0.1	mg/L	70	69
Iron - Total	0.01	mg/L	0.23	0.06
Potassium - Dissolved	0.1	mg/L	52	14
Magnesium - Dissolved	0.1	mg/L	160	57
Sodium - Dissolved	0.1	mg/L	570	200
Selenium - Total	0.001	mg/L	<0.001	0.009
Uranium - Total	0.001	mg/L	0.006	0.012

Ions by Discrete Analyser Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-1 FR_Bore 9/08/17	17-12557-2 FRW03 9/08/17	17-12557-3 RCO82 9/08/17	17-12557-4 BHW05 9/08/17
Chloride	5	mg/L	700	400	310	350
Sulphate	1	mg/L	190	150	110	110
Nitrate-N	0.01	mg/L	12	22	18	16

Ions by Discrete Analyser Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-5 YWRC075 9/08/17	17-12557-6 YAG_Bore 9/08/17	17-12557-7 EDW_Bore 9/08/17	17-12557-8 MNG_Well 9/08/17
Chloride	5	mg/L	220	520	700	95
Sulphate	1	mg/L	75	180	310	95
Nitrate-N	0.01	mg/L	<0.01	17	18	5.1

LABORATORY REPORT

Hastings Technology Metals

ARL Job No: 17-12557

Revision: 01

Date: 29 August 2017

Ions by Discrete Analyser Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-9 EDH_Bore 9/08/17	17-12557-10 CONT_Bore 9/08/17	17-12557-11 Red_Hill 9/08/17	17-12557-12 WOO_Bore 9/08/17
Chloride	5	mg/L	83	82	890	620
Sulphate	1	mg/L	38	77	1,200	230
Nitrate-N	0.01	mg/L	2.7	0.70	8.3	12

Ions by Discrete Analyser Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-13 LYR_Pool 9/08/17	17-12557-14 Q01 9/08/17
Chloride	5	mg/L	950	400
Sulphate	1	mg/L	450	150
Nitrate-N	0.01	mg/L	<0.01	25

Physical Parameters Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-1 FR_Bore 9/08/17	17-12557-2 FRW03 9/08/17	17-12557-3 RCO82 9/08/17	17-12557-4 BHW05 9/08/17
Alkalinity	5	mgCaCO ₃ /L	310	240	230	280
pH	0.1	pH units	7.9	7.5	7.4	7.6
Total Dissolved Solids	5	mg/L	1,500	1,000	950	960
Total Suspended Solids	5	mg/L	26	5	11	<5

Physical Parameters Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-5 YWRC075 9/08/17	17-12557-6 YAG_Bore 9/08/17	17-12557-7 EDW_Bore 9/08/17	17-12557-8 MNG_Well 9/08/17
Alkalinity	5	mgCaCO ₃ /L	300	290	340	390
pH	0.1	pH units	7.6	7.4	7.6	8.3
Total Dissolved Solids	5	mg/L	690	1,400	1,900	680
Total Suspended Solids	5	mg/L	<5	<5	<5	<5

Physical Parameters Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-9 EDH_Bore 9/08/17	17-12557-10 CONT_Bore 9/08/17	17-12557-11 Red_Hill 9/08/17	17-12557-12 WOO_Bore 9/08/17
Alkalinity	5	mgCaCO ₃ /L	320	340	260	330
pH	0.1	pH units	7.5	8.2	8.1	7.6
Total Dissolved Solids	5	mg/L	600	530	3,100	1,500
Total Suspended Solids	5	mg/L	<5	33	7	<5

LABORATORY REPORT

Hastings Technology Metals

ARL Job No: 17-12557

Revision: 01

Date: 29 August 2017

Physical Parameters Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-13 LYR_Pool 9/08/17	17-12557-14 Q01 9/08/17
Alkalinity	5	mgCaCO ₃ /L	320	240
pH	0.1	pH units	9.0	7.6
Total Dissolved Solids	5	mg/L	2,200	1,100
Total Suspended Solids	5	mg/L	7	9

Water Microbiology Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-2 FRW03 9/08/17	17-12557-14 Q01 9/08/17
Total Coliforms	0	CFU/100mL	0	0
E. Coli	0	CFU/50mL	0	0

Subcontracting Sample No: Sample Description: Sample Date:	LOR	UNITS	17-12557-2 FRW03 9/08/17	17-12557-3 RC082 9/08/17	17-12557-4 BHW05 9/08/17	17-12557-5 YWRC075 9/08/17
Radium 226	0.05	Bq/L	<0.05	<0.05	<0.05	0.21
Radium 228	0.08	Bq/L	<0.08	<0.08	<0.08	0.08

Result Definitions

LOR Limit of Reporting [NT] Not Tested [ND] Not Detected at indicated Limit of Reporting

* Denotes test not covered by NATA Accreditation

FOR MICROBIOLOGICAL TESTING - The data in this report may not be representative of a lot, batch or other samples and may not necessarily justify the acceptance or rejection of a lot or batch, a product recall or support legal proceedings. Tests are not routinely performed as duplicates unless specifically requested. Changes occur in the bacterial content of biological samples. Samples should be examined as soon as possible after collection, preferably within 6 hrs and must be stored at 4 degrees Celsius or below. Samples tested after 24 hrs cannot be regarded as satisfactory because of temperature abuse and variations.

LABORATORY REPORT

Job Number: 18-02946
Revision: 02
Date: 7 May 2018

ADDRESS: **Hastings Technology Metals Limited**
Suite 506, Level 5
50 Clarence Street
Sydney NSW 2000

ATTENTION: Ernest Van

DATE RECEIVED: 26/02/2018


YOUR REFERENCE: Yangibana

PURCHASE ORDER:

APPROVALS:



Fiona Reid
Inorganics Supervisor



Sam Becker
Inorganics Manager



Bozica Nyeverecz
Microbiologist



Douglas Todd
Laboratory Manager

REPORT COMMENTS:

This report is issued by Analytical Reference Laboratory (WA) Pty Ltd
Samples are analysed on an as received basis unless otherwise noted.
Radiation testing was subcontracted to ALS, Report No PR1818732. This is covered by CAI, which holds equivalency with NATA.

Gross Alpha and Beta were subcontracted to ALS, NATA Accred No 825, Report No EP1804877

METHOD REFERENCES:

Methods prefixed with "ARL" are covered under NATA Accreditation Number: 2377

Methods prefixed with "PM" are covered under NATA Accreditation Number: 2561

ARL No. 29/402/403	Metals in Water by AAS/ICPOES/ICPMS
ARL No. 029	Metals in Water by AAS
ARL No. 406	Mercury by Cold Vapour Atomic Absorption Spectrophotometry
ARL No. 308	Total Phosphorus in Water by Discrete Analyser
ARL No. 305	Chloride in Water by Discrete Analyser
ARL No. 321	Fluoride in Water by Discrete Analyser
ARL No. 301	Sulphate in Water by Discrete Analyser
ARL No. 313/319	NOx in Water by Discrete Analyser
ARL No. 021	Acidity in Water
ARL No. 037	Alkalinity in Water
ARL No. 014	pH in Water
ARL No. 017	Total Dissolved Solids (At 105°C)
ARL No. 016	Total Suspended Solids
PM 4.2	Total Coliforms by Membrane Filtration
PM 4.3	Thermotolerant Coliforms and E. coli by Membrane Filtration
Subcontracting	See Report Comments section for more information.



**WORLD RECOGNISED
ACCREDITATION**
Accredited for compliance with
ISO/IEC 17025 - Testing

Hastings Technology Metals Limited
Job No: 18-02946

LABORATORY REPORT
Revision: 02

Date: 7/05/18

Metals in Water			Sample No:	18-02946-1	18-02946-2	18-02946-3	18-02946-4	18-02946-5
			Sample Details:	YGBW03	SIPHON	BHW05	FRW03	FR BORE
ANALYTE	LOR	Units		25/02/2018	25/02/2018	25/02/2018	25/02/2018	25/02/2018
Aluminium - Dissolved	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Aluminium - Total	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic - Total	0.001	mg/L		0.001	<0.001	0.001	<0.001	<0.001
Calcium - Dissolved	0.1	mg/L		81	27	84	80	54
Cadmium - Total	0.002	mg/L		<0.002	<0.002	<0.002	<0.002	<0.002
Chromium - Total	0.01	mg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Copper - Total	0.01	mg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Iron - Total	0.01	mg/L		0.08	3.1	0.04	0.09	0.03
Mercury - Total	0.0002	mg/L		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Potassium - Dissolved	0.1	mg/L		9.7	11	13	14	11
Magnesium - Dissolved	0.1	mg/L		41	43	50	64	43
Molybdenum - Dissolved	0.01	mg/L		0.02	0.03	0.03	0.01	0.02
Molybdenum - Total	0.01	mg/L		0.03	0.03	0.04	0.02	0.02
Sodium - Dissolved	0.1	mg/L		160	210	220	300	770
Nickel - Total	0.01	mg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Lead - Total	0.01	mg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Selenium - Dissolved	0.001	mg/L		0.009	<0.001	0.004	0.012	0.008
Selenium - Total	0.001	mg/L		0.009	<0.001	0.006	0.013	0.008
Uranium - Total	0.001	mg/L		0.034	<0.001	0.036	0.015	0.035
Zinc - Total	0.01	mg/L		0.01	<0.01	<0.01	0.53	<0.01

Metals in Water			Sample No:	18-02946-6	18-02946-7	18-02946-8	18-02946-9
			Sample Details:	YNG BORE	ED BORE	MINGA	WOODSYS BORE
ANALYTE	LOR	Units		25/02/2018	25/02/2018	25/02/2018	25/02/2018
Aluminium - Dissolved	0.1	mg/L		<0.1	<0.1	<0.1	<0.1
Aluminium - Total	0.1	mg/L		<0.1	<0.1	<0.1	<0.1
Arsenic - Total	0.001	mg/L		<0.001	0.001	0.002	0.001
Calcium - Dissolved	0.1	mg/L		120	88	54	120
Cadmium - Total	0.002	mg/L		<0.002	<0.002	<0.002	<0.002
Chromium - Total	0.01	mg/L		<0.01	<0.01	<0.01	<0.01
Copper - Total	0.01	mg/L		<0.01	<0.01	<0.01	<0.01
Iron - Total	0.01	mg/L		0.05	0.05	0.02	0.03
Mercury - Total	0.0002	mg/L		<0.0002	<0.0002	<0.0002	<0.0002
Potassium - Dissolved	0.1	mg/L		9.9	18	3.8	31
Magnesium - Dissolved	0.1	mg/L		69	100	46	100
Molybdenum - Dissolved	0.01	mg/L		0.01	0.01	<0.01	<0.01
Molybdenum - Total	0.01	mg/L		0.01	0.01	<0.01	<0.01
Sodium - Dissolved	0.1	mg/L		430	750	120	500
Nickel - Total	0.01	mg/L		<0.01	<0.01	<0.01	<0.01
Lead - Total	0.01	mg/L		<0.01	<0.01	<0.01	<0.01
Selenium - Dissolved	0.001	mg/L		0.008	0.005	0.003	0.003
Selenium - Total	0.001	mg/L		0.008	0.005	0.003	0.004
Uranium - Total	0.001	mg/L		0.037	0.044	0.004	0.012
Zinc - Total	0.01	mg/L		<0.01	<0.01	<0.01	<0.01

Hastings Technology Metals Limited
Job No: 18-02946

LABORATORY REPORT
Revision: 02

Date: 7/05/18

Total Phosphorus in Water			Sample No:	18-02946-1	18-02946-2	18-02946-3	18-02946-4	18-02946-5
			Sample Details:	YGBW03	SIPHON	BHW05	FRW03	FR BORE
ANALYTE	LOR	Units		25/02/2018	25/02/2018	25/02/2018	25/02/2018	25/02/2018
Total Phosphorus	0.01	mg/L		0.17	0.16	0.07	0.20	0.08

Total Phosphorus in Water			Sample No:	18-02946-6	18-02946-7	18-02946-8	18-02946-9
			Sample Details:	YNG BORE	ED BORE	MINGA	WOODSYS BORE
ANALYTE	LOR	Units		25/02/2018	25/02/2018	25/02/2018	25/02/2018
Total Phosphorus	0.01	mg/L		0.06	0.10	0.10	0.09

Ions by Discrete Analyser			Sample No:	18-02946-1	18-02946-2	18-02946-3	18-02946-4	18-02946-5
			Sample Details:	YGBW03	SIPHON	BHW05	FRW03	FR BORE
ANALYTE	LOR	Units		25/02/2018	25/02/2018	25/02/2018	25/02/2018	25/02/2018
Chloride	5	mg/L		260	410	370	400	600
Fluoride	0.1	mg/L		2.5	0.8	2.2	2.4	2.5
Sulphate	1	mg/L		86	71	120	160	170
Nitrate-N	0.01	mg/L		15	<0.01	14	18	12

Ions by Discrete Analyser			Sample No:	18-02946-6	18-02946-7	18-02946-8	18-02946-9
			Sample Details:	YNG BORE	ED BORE	MINGA	WOODSYS BORE
ANALYTE	LOR	Units		25/02/2018	25/02/2018	25/02/2018	25/02/2018
Chloride	5	mg/L		530	740	91	600
Fluoride	0.1	mg/L		1.8	1.9	1.3	1.1
Sulphate	1	mg/L		180	320	89	260
Nitrate-N	0.01	mg/L		17	18	4.9	12

Physical Parameters			Sample No:	18-02946-1	18-02946-2	18-02946-3	18-02946-4	18-02946-5
			Sample Details:	YGBW03	SIPHON	BHW05	FRW03	FR BORE
ANALYTE	LOR	Units		25/02/2018	25/02/2018	25/02/2018	25/02/2018	25/02/2018
Acidity	5	mg CaCO ₃ /L		35	<5	32	24	12
Alkalinity	5	mg CaCO ₃ /L		250	140	280	250	310
pH	0.1	pH units		7.6	9.0	7.7	7.4	8.1
Total Dissolved Solids	5	mg/L		770	790	990	1,100	1,600
Total Suspended Solids	5	mg/L		<5	8	<5	8	<5

Physical Parameters			Sample No:	18-02946-6	18-02946-7	18-02946-8	18-02946-9
			Sample Details:	YNG BORE	ED BORE	MINGA	WOODSYS BORE
ANALYTE	LOR	Units		25/02/2018	25/02/2018	25/02/2018	25/02/2018
Acidity	5	mg CaCO ₃ /L		19	26	<5	27
Alkalinity	5	mg CaCO ₃ /L		260	320	350	330
pH	0.1	pH units		7.7	7.5	8.2	7.6
Total Dissolved Solids	5	mg/L		1,300	2,000	560	1,600
Total Suspended Solids	5	mg/L		<5	<5	<5	<5

Misc. Inorganics in Water			Sample No:	18-02946-1	18-02946-2	18-02946-3	18-02946-4	18-02946-5
			Sample Details:	YGBW03	SIPHON	BHW05	FRW03	FR BORE
ANALYTE	LOR	Units		25/02/2018	25/02/2018	25/02/2018	25/02/2018	25/02/2018
Hardness	5	mg CaCO ₃ /L		370	240	420	460	310

Hastings Technology Metals Limited
Job No: 18-02946

LABORATORY REPORT
Revision: 02

Date: 7/05/18

Misc. Inorganics in Water			Sample No:	18-02946-6	18-02946-7	18-02946-8	18-02946-9
			Sample Details:	YNG BORE	ED BORE	MINGA	WOODSYS BORE
ANALYTE	LOR	Units		25/02/2018	25/02/2018	25/02/2018	25/02/2018
Hardness	5	mg CaCO ₃ /L		580	630	320	710

Water Microbiology			Sample No:	18-02946-2
			Sample Details:	SIPHON
ANALYTE	LOR	Units		25/02/2018
Total Coliforms	0	CFU/100mL		Present (2)
E. Coli	0	CFU/100mL		0

Subcontracting			Sample No:	18-02946-2	18-02946-3	18-02946-4
			Sample Details:	SIPHON	BHW05	FRW03
ANALYTE	LOR	Units		25/02/2018	25/02/2018	25/02/2018
Radium 226	0.2	Bq/L		<0.2	<0.2	<0.2
Radium 228	0.2	Bq/L		<0.2	<0.2	<0.2
U-238	0.001	Bq/L		<0.001	0.424	0.175
Th-232	0.001	Bq/L		<0.001	<0.001	<0.001
K-40	2	Bq/L		<2	<2	<2
Gross Alpha	0.05	Bq/L		0.10	2.11	0.74
Gross Beta	0.1	Bq/L		0.25	0.88	<0.5

Result Definitions

LOR Limit of Reporting [NT] Not Tested [ND] Not Detected at indicated Limit of Reporting
* Denotes test not covered by NATA Accreditation

FOR MICROBIOLOGICAL TESTING - The data in this report may not be representative of a lot, batch or other samples and may not necessarily justify the acceptance or rejection of a lot or batch, a product recall or support legal proceedings. Tests are not routinely performed as duplicates unless specifically requested. Changes occur in the bacterial content of biological samples. Samples should be examined as soon as possible after collection, preferably within 6 hrs and must be stored at 4 degrees Celsius or below. Samples tested after 24 hrs cannot be regarded as satisfactory because of temperature abuse and variations.

LABORATORY REPORT

Job Number: 18-05162
Revision: 00
Date: 18 April 2018

ADDRESS: **Hastings Technology Metals Limited**
Suite 506, Level 5
50 Clarence Street
Sydney NSW 2000

ATTENTION: Ernest Van

DATE RECEIVED: 5/04/2018

YOUR REFERENCE: Yangibana

PURCHASE ORDER:

APPROVALS:



Douglas Todd
Laboratory Manager



Fiona Reid
Inorganics Supervisor



Sam Becker
Inorganics Manager

REPORT COMMENTS:

This report is issued by Analytical Reference Laboratory (WA) Pty Ltd
Samples are analysed on an as received basis unless otherwise noted.

METHOD REFERENCES:

Methods prefixed with "ARL" are covered under NATA Accreditation Number: 2377
Methods prefixed with "PM" are covered under NATA Accreditation Number: 2561

ARL No. 29/402/403	Metals in Water by AAS/ICPOES/ICPMS
ARL No. 406	Mercury by Cold Vapour Atomic Absorption Spectrophotometry
ARL No. 029	Metals in Water by AAS
ARL No. 308	Total Phosphorus in Water by Discrete Analyser
ARL No. 305	Chloride in Water by Discrete Analyser
ARL No. 321	Fluoride in Water by Discrete Analyser
ARL No. 301	Sulphate in Water by Discrete Analyser
ARL No. 313/319	NOx in Water by Discrete Analyser
ARL No. 021	Acidity in Water
ARL No. 037	Alkalinity in Water
ARL No. 014	pH in Water
ARL No. 017	Total Dissolved Solids (At 105°C)
ARL No. 016	Total Suspended Solids
Subcontracting	See Report Comments section for more information.



LABORATORY REPORT

Hastings Technology Metals Limited

ARL Job No: 18-05162

Revision: 00

Date: 18 April 2018

Metals in Water Sample No: Sample Description: Sample Date:	LOR	UNITS	18-05162-1 LY-River 4/04/2018	18-05162-2 FRW03 4/04/2018	18-05162-3 BHW05 4/04/2018	18-05162-4 SIPHON 4/04/2018	18-05162-5 WOODSYS 4/04/2018
Arsenic - Total	0.001	mg/L	0.002	0.001	0.002	<0.001	0.002
Cadmium - Total	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium - Total	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Copper - Total	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	0.03
Mercury - Total	0.0002	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel - Total	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Lead - Total	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc - Total	0.01	mg/L	<0.01	0.14	<0.01	<0.01	<0.01
Aluminium - Total	0.1	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Iron - Total	0.01	mg/L	0.01	<0.01	<0.01	0.42	<0.01
Selenium - Total	0.001	mg/L	0.002	0.010	0.004	<0.001	0.003
Uranium - Total	0.001	mg/L	0.008	0.016	0.039	<0.001	0.012
Molybdenum - Total	0.01	mg/L	<0.01	0.01	0.05	<0.01	<0.01
Aluminium - Dissolved	0.1	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Calcium - Dissolved	0.1	mg/L	68	84	97	17	120
Potassium - Dissolved	0.1	mg/L	43	12	13	11	24
Magnesium - Dissolved	0.1	mg/L	150	73	60	45	110
Molybdenum - Dissolved	0.01	mg/L	<0.01	0.01	0.04	<0.01	<0.01
Sodium - Dissolved	0.1	mg/L	390	190	200	190	310
Selenium - Dissolved	0.001	mg/L	0.002	0.010	0.004	<0.001	0.003
Antimony - Dissolved	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Barium - Dissolved	0.01	mg/L	0.08	0.04	0.07	0.04	0.03
Boron - Dissolved	0.05	mg/L	1.8	0.76	0.61	0.51	1.1
Beryllium - Dissolved	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt - Dissolved	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01

LABORATORY REPORT

Hastings Technology Metals Limited

ARL Job No: 18-05162

Revision: 00

Date: 18 April 2018

Metals in Water Sample No: Sample Description: Sample Date:	LOR	UNITS	18-05162-6 FR-POOL 4/04/2018	18-05162-7 YANG BORE 4/04/2018	18-05162-8 FR WELL 4/04/2018
Arsenic - Total	0.001	mg/L	0.002	<0.001	0.001
Cadmium - Total	0.002	mg/L	<0.002	<0.002	<0.002
Chromium - Total	0.01	mg/L	<0.01	<0.01	<0.01
Copper - Total	0.01	mg/L	<0.01	<0.01	<0.01
Mercury - Total	0.0002	mg/L	<0.0002	<0.0002	<0.0002
Nickel - Total	0.01	mg/L	<0.01	<0.01	<0.01
Lead - Total	0.01	mg/L	<0.01	<0.01	<0.01
Zinc - Total	0.01	mg/L	<0.01	<0.01	0.02
Aluminium - Total	0.1	mg/L	<0.1	<0.1	0.2
Iron - Total	0.01	mg/L	0.20	<0.01	<0.01
Selenium - Total	0.001	mg/L	<0.001	0.006	0.006
Uranium - Total	0.001	mg/L	<0.001	0.037	0.038
Molybdenum - Total	0.01	mg/L	<0.01	0.01	0.03
Aluminium - Dissolved	0.1	mg/L	<0.1	<0.1	<0.1
Calcium - Dissolved	0.1	mg/L	30	130	60
Potassium - Dissolved	0.1	mg/L	19	9.4	9.9
Magnesium - Dissolved	0.1	mg/L	7.7	83	53
Molybdenum - Dissolved	0.01	mg/L	<0.01	0.01	0.02
Sodium - Dissolved	0.1	mg/L	8.0	310	530
Selenium - Dissolved	0.001	mg/L	<0.001	0.006	0.006
Antimony - Dissolved	0.001	mg/L	<0.001	<0.001	<0.001
Barium - Dissolved	0.01	mg/L	0.08	0.04	0.04
Boron - Dissolved	0.05	mg/L	<0.05	0.73	1.2
Beryllium - Dissolved	0.01	mg/L	<0.01	<0.01	<0.01
Cobalt - Dissolved	0.01	mg/L	<0.01	<0.01	<0.01

LABORATORY REPORT

Hastings Technology Metals Limited

ARL Job No: 18-05162

Revision: 00

Date: 18 April 2018

Total Phosphorus in Water Sample No: Sample Description: Sample Date:	LOR	UNITS	18-05162-1 LY-River 4/04/2018	18-05162-2 FRW03 4/04/2018	18-05162-3 BHW05 4/04/2018	18-05162-4 SIPHON 4/04/2018	18-05162-5 WOODSYS 4/04/2018
Total Phosphorus	0.01	mg/L	0.13	0.25	0.24	0.03	0.35

Total Phosphorus in Water Sample No: Sample Description: Sample Date:	LOR	UNITS	18-05162-6 FR-POOL 4/04/2018	18-05162-7 YANG BORE 4/04/2018	18-05162-8 FR WELL 4/04/2018
Total Phosphorus	0.01	mg/L	0.21	0.25	0.27

Ions by Discrete Analyser Sample No: Sample Description: Sample Date:	LOR	UNITS	18-05162-1 LY-River 4/04/2018	18-05162-2 FRW03 4/04/2018	18-05162-3 BHW05 4/04/2018	18-05162-4 SIPHON 4/04/2018	18-05162-5 WOODSYS 4/04/2018
Chloride	5	mg/L	600	380	360	390	610
Fluoride	0.1	mg/L	1.3	2.5	2.1	0.6	1.1
Sulphate	1	mg/L	350	160	110	58	270
Nitrate-N	0.01	mg/L	<0.01	16	13	<0.01	12

Ions by Discrete Analyser Sample No: Sample Description: Sample Date:	LOR	UNITS	18-05162-6 FR-POOL 4/04/2018	18-05162-7 YANG BORE 4/04/2018	18-05162-8 FR WELL 4/04/2018
Chloride	5	mg/L	8	510	620
Fluoride	0.1	mg/L	0.2	1.7	2.4
Sulphate	1	mg/L	<1	180	180
Nitrate-N	0.01	mg/L	<0.01	17	12

Physical Parameters Sample No: Sample Description: Sample Date:	LOR	UNITS	18-05162-1 LY-River 4/04/2018	18-05162-2 FRW03 4/04/2018	18-05162-3 BHW05 4/04/2018	18-05162-4 SIPHON 4/04/2018	18-05162-5 WOODSYS 4/04/2018
Acidity	5	mgCaCO ₃ /L	<5	18	10	<5	6
Alkalinity	5	mgCaCO ₃ /L	230	280	300	90	350
pH	0.1	pH units	8.6	7.1	7.1	9.0	7.4
Total Dissolved Solids	5	mg/L	1,500	1,100	1,000	720	1,600
Total Suspended Solids	5	mg/L	13	<5	8	18	10

LABORATORY REPORT

Hastings Technology Metals Limited

ARL Job No: 18-05162

Revision: 00

Date: 18 April 2018

Physical Parameters	LOR	UNITS	18-05162-6 FR-POOL 4/04/2018	18-05162-7 YANG BORE 4/04/2018	18-05162-8 FR WELL 4/04/2018
Acidity	5	mgCaCO ₃ /L	5	<5	6
Alkalinity	5	mgCaCO ₃ /L	130	290	320
pH	0.1	pH units	7.9	7.4	7.7
Total Dissolved Solids	5	mg/L	170	1,300	1,400
Total Suspended Solids	5	mg/L	41	<5	5

Misc. Inorganics in Water	LOR	UNITS	18-05162-1 LY-River 4/04/2018	18-05162-2 FRW03 4/04/2018	18-05162-3 BHW05 4/04/2018	18-05162-4 SIPHON 4/04/2018	18-05162-5 WOODSYS 4/04/2018
Hardness	5	mgCaCO ₃ /L	790	510	490	230	750

Misc. Inorganics in Water	LOR	UNITS	18-05162-6 FR-POOL 4/04/2018	18-05162-7 YANG BORE 4/04/2018	18-05162-8 FR WELL 4/04/2018
Hardness	5	mgCaCO ₃ /L	110	670	370

Subcontracting	LOR	UNITS	18-05162-6 FR-POOL 4/04/2018	18-05162-7 YANG BORE 4/04/2018	18-05162-8 FR WELL 4/04/2018
Radium 226	0.05	Bq/L	<0.05	<0.05	0.05
Radium 228	0.08	Bq/L	<0.08	<0.08	<0.08

Result Definitions

LOR Limit of Reporting

[NT] Not Tested

[ND] Not Detected at indicated Limit of Reporting

* Denotes test not covered by NATA Accreditation

FOR MICROBIOLOGICAL TESTING - The data in this report may not be representative of a lot, batch or other samples and may not necessarily justify the acceptance or rejection of a lot or batch, a product recall or support legal proceedings. Tests are not routinely performed as duplicates unless specifically requested. Changes occur in the bacterial content of biological samples. Samples should be examined as soon as possible after collection, preferably within 6 hrs and must be stored at 4 degrees Celsius or below. Samples tested after 24 hrs cannot be regarded as satisfactory because of temperature abuse and variations.

LABORATORY REPORT

Job Number: 17-16525
Revision: 01
Date: 8 November 2017

ADDRESS: **Hastings Technology Metals Limited**
Suite 506, Level 5
50 Clarence Street
Sydney NSW 2000



ATTENTION:

DATE RECEIVED: 24/10/2017

YOUR REFERENCE: Yangibana

PURCHASE ORDER:

APPROVALS:



Douglas Todd
Laboratory Manager

Sam Becker
Inorganics Manager

REPORT COMMENTS:

This report is issued by Analytical Reference Laboratory (WA) Pty Ltd
Samples are analysed on an as received basis unless otherwise noted.
Radium 226 & 228 analysis subcontracted to ALS, NATA Accred No. 825, Report Number EP1712039

METHOD REFERENCES:

Methods prefixed with "ARL" are covered under NATA Accreditation Number: 2377
Methods prefixed with "PM" are covered under NATA Accreditation Number: 2561

ARL No. 29/402/403	Metals in Water by AAS/ICPOES/ICPMS
ARL No. 406	Mercury by Cold Vapour Atomic Absorption Spectrophotometry
ARL No. 029	Metals in Water by AAS
ARL No. 305	Chloride in Water by Discrete Analyser
ARL No. 301	Sulphate in Water by Discrete Analyser
ARL No. 313/319	NOx in Water by Discrete Analyser
ARL No. 037	Alkalinity in Water
ARL No. 014	pH in Water
ARL No. 017	Total Dissolved Solids (At 105°C)
ARL No. 016	Total Suspended Solids
Subcontracting	See Report Comments section for more information.



ARL GROUP

LABORATORY REPORT

Hastings Technology Metals Limited

ARL Job No: 17-16525

Revision: 01

Date: 8 November 2017

Metals in Water Sample No: Sample Description: Sample Date:	LOR	UNITS	17-16525-1 FRW03 22/10/2017	17-16525-2 BHRC161 22/10/2017	17-16525-3 BHW05 22/10/2017	17-16525-4 YGBW03 22/10/2017
Arsenic - Total	0.001	mg/L	0.001	<0.001	0.001	<0.001
Cadmium - Total	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Chromium - Total	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Copper - Total	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Mercury - Total	0.0002	mg/L	<0.0002	<0.0002	<0.0002	<0.0002
Nickel - Total	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Lead - Total	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Zinc - Total	0.01	mg/L	0.02	<0.01	0.02	0.04
Aluminium - Total	0.1	mg/L	<0.1	<0.1	<0.1	<0.1
Iron - Total	0.01	mg/L	0.05	0.03	0.03	0.02
Selenium - Total	0.001	mg/L	0.010	0.010	0.007	0.007
Uranium - Total	0.001	mg/L	0.011	0.023	0.026	0.023
Sodium - Dissolved	0.1	mg/L	160	150	160	120
Potassium - Dissolved	0.1	mg/L	14	11	13	10
Calcium - Dissolved	0.1	mg/L	73	71	80	83
Magnesium - Dissolved	0.1	mg/L	59	46	48	43

Metals in Water Sample No: Sample Description: Sample Date:	LOR	UNITS	17-16525-5 Yangibana 22/10/2017	17-16525-6 Edmund Bore 22/10/2017	17-16525-7 Edmund Homestead 22/10/2017	17-16525-8 QC 22/10/2017
Arsenic - Total	0.001	mg/L	<0.001	0.001	0.001	0.001
Cadmium - Total	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Chromium - Total	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Copper - Total	0.01	mg/L	<0.01	<0.01	0.03	<0.01
Mercury - Total	0.0002	mg/L	<0.0002	<0.0002	<0.0002	<0.0002
Nickel - Total	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Lead - Total	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Zinc - Total	0.01	mg/L	<0.01	<0.01	0.02	<0.01
Aluminium - Total	0.1	mg/L	<0.1	<0.1	<0.1	<0.1
Iron - Total	0.01	mg/L	0.02	0.04	0.02	0.03
Selenium - Total	0.001	mg/L	0.006	0.004	0.002	0.004
Uranium - Total	0.001	mg/L	0.029	0.031	0.001	0.032
Sodium - Dissolved	0.1	mg/L	200	450	26	450
Potassium - Dissolved	0.1	mg/L	9.5	16	2.8	16
Calcium - Dissolved	0.1	mg/L	110	75	81	74
Magnesium - Dissolved	0.1	mg/L	65	95	40	93

LABORATORY REPORT

Hastings Technology Metals Limited

ARL Job No: 17-16525

Revision: 01

Date: 8 November 2017

Metals in Water Sample No: Sample Description: Sample Date:	LOR	UNITS	17-16525-9 Contessis Bore 22/10/2017	17-16525-10 Redhill Bore 22/10/2017	17-16525-11 Lyons River 22/10/2017	17-16525-12 Minga Well 22/10/2017
Arsenic - Total	0.001	mg/L	<0.001	0.002	0.002	0.002
Cadmium - Total	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Chromium - Total	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Copper - Total	0.01	mg/L	0.06	<0.01	<0.01	<0.01
Mercury - Total	0.0002	mg/L	<0.0002	<0.0002	<0.0002	<0.0002
Nickel - Total	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Lead - Total	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Zinc - Total	0.01	mg/L	0.05	0.02	<0.01	<0.01
Aluminium - Total	0.1	mg/L	<0.1	<0.1	<0.1	<0.1
Iron - Total	0.01	mg/L	0.01	0.02	0.18	<0.01
Selenium - Total	0.001	mg/L	<0.001	0.007	0.002	0.002
Uranium - Total	0.001	mg/L	0.027	0.13	0.006	0.003
Sodium - Dissolved	0.1	mg/L	37	410	630	88
Potassium - Dissolved	0.1	mg/L	4.4	17	69	4.0
Calcium - Dissolved	0.1	mg/L	73	170	47	52
Magnesium - Dissolved	0.1	mg/L	53	98	210	46

Ions by Discrete Analyser Sample No: Sample Description: Sample Date:	LOR	UNITS	17-16525-1 FRW03 22/10/2017	17-16525-2 BHRC161 22/10/2017	17-16525-3 BHW05 22/10/2017	17-16525-4 YGBW03 22/10/2017
Chloride	5	mg/L	400	370	400	340
Sulphate	1	mg/L	160	110	110	100
Nitrate-N	0.01	mg/L	23	17	15	14

Ions by Discrete Analyser Sample No: Sample Description: Sample Date:	LOR	UNITS	17-16525-5 Yangibana 22/10/2017	17-16525-6 Edmund Bore 22/10/2017	17-16525-7 Edmund Homestead 22/10/2017	17-16525-8 QC 22/10/2017
Chloride	5	mg/L	510	750	75	750
Sulphate	1	mg/L	200	350	35	290
Nitrate-N	0.01	mg/L	17	17	2.9	17

Ions by Discrete Analyser Sample No: Sample Description: Sample Date:	LOR	UNITS	17-16525-9 Contessis Bore 22/10/2017	17-16525-10 Redhill Bore 22/10/2017	17-16525-11 Lyons River 22/10/2017	17-16525-12 Minga Well 22/10/2017
Chloride	5	mg/L	81	720	1,100	110
Sulphate	1	mg/L	81	700	550	100

LABORATORY REPORT

Hastings Technology Metals Limited

ARL Job No: 17-16525

Revision: 01

Date: 8 November 2017

Ions by Discrete Analyser	LOR	UNITS	17-16525-9 Contessis Bore 22/10/2017	17-16525-10 Redhill Bore 22/10/2017	17-16525-11 Lyons River 22/10/2017	17-16525-12 Minga Well 22/10/2017
Nitrate-N	0.01	mg/L	1.1	7.7	<0.01	4.7

Physical Parameters	LOR	UNITS	17-16525-1 FRW03 22/10/2017	17-16525-2 BHRC161 22/10/2017	17-16525-3 BHW05 22/10/2017	17-16525-4 YGBW03 22/10/2017
Alkalinity	5	mgCaCO ₃ /L	230	250	290	280
pH	0.1	pH units	8.3	7.7	7.6	8.0
Total Dissolved Solids	5	mg/L	1,100	970	1,100	900
Total Suspended Solids	5	mg/L	<5	<5	<5	<5

Physical Parameters	LOR	UNITS	17-16525-5 Yangibana 22/10/2017	17-16525-6 Edmund Bore 22/10/2017	17-16525-7 Edmund Homestead 22/10/2017	17-16525-8 QC 22/10/2017
Alkalinity	5	mgCaCO ₃ /L	280	310	310	340
pH	0.1	pH units	8.1	7.6	7.9	7.6
Total Dissolved Solids	5	mg/L	1,400	1,800	580	1,800
Total Suspended Solids	5	mg/L	<5	<5	<5	<5

Physical Parameters	LOR	UNITS	17-16525-9 Contessis Bore 22/10/2017	17-16525-10 Redhill Bore 22/10/2017	17-16525-11 Lyons River 22/10/2017	17-16525-12 Minga Well 22/10/2017
Alkalinity	5	mgCaCO ₃ /L	350	250	290	380
pH	0.1	pH units	8.2	7.5	9.1	8.2
Total Dissolved Solids	5	mg/L	600	2,100	2,900	700
Total Suspended Solids	5	mg/L	<5	<5	18	<5

Subcontracting	LOR	UNITS	17-16525-7 Edmund Homestead 22/10/2017	17-16525-9 Contessis Bore 22/10/2017	17-16525-10 Redhill Bore 22/10/2017	17-16525-11 Lyons River 22/10/2017
Radium 226	0.05	Bq/L	<0.05	<0.05	<0.05	<0.05
Radium 228	0.08	Bq/L	<0.08	<0.08	<0.08	<0.08

Result Definitions

LOR Limit of Reporting

[NT] Not Tested

[ND] Not Detected at indicated Limit of Reporting

* Denotes test not covered by NATA Accreditation

FOR MICROBIOLOGICAL TESTING - The data in this report may not be representative of a lot, batch or other samples and may not necessarily justify the acceptance or rejection of a lot or batch, a product recall or support legal proceedings. Tests are not routinely performed as duplicates unless specifically requested. Changes occur in the bacterial content of biological samples. Samples should be examined as soon as possible after collection, preferably within 6 hrs and must be stored at 4 degrees Celsius or below. Samples tested after 24 hrs cannot be regarded as satisfactory because of temperature abuse and variations.



Analytical Reference Laboratory

ARL GROUP



LABORATORY REPORT

Hastings Technology Metals Limited

ARL Job No: 17-16525

Revision: 01

Date: 8 November 2017

ARL GROUP

46-48 Banksia Road, Welshpool, Western Australia 6106

Telephone: 08 6253 4444 Facsimile: 08 6253 4440 www.arlwa.com.au www.promicro.com.au