Appendix B – Lotsearch report

LOTSEARCH

LOTSEARCH ENVIRO PROFESSIONAL

Date: 22 May 2020 12:12:40

Reference: LS012466 EP

Address: 330 Captain Cook Drive, Kurnell, NSW 2231

Disclaimer:
The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features.
You should obtain independent advice before you make any decision based on the information within the report.
The detailed terms applicable to use of this report are set out at the end of this report.

Dataset Listing

Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features within Buffer
Cadastre Boundaries	NSW Department of Finance, Services & Innovation	05/03/2020	05/03/2020	Quarterly	-	-	-	-
Topographic Data	NSW Department of Finance, Services & Innovation	25/06/2019	25/06/2019	As required	-	-	-	-
List of NSW contaminated sites notified to EPA	Environment Protection Authority	14/05/2020	14/05/2020	Monthly	1000	0	0	2
Contaminated Land Records of Notice	Environment Protection Authority	21/04/2020	21/04/2020	Monthly	1000	0	0	1
Former Gasworks	Environment Protection Authority	21/04/2020	11/10/2017	Monthly	1000	0	0	0
National Waste Management Facilities Database	Geoscience Australia	15/05/2020	07/03/2017	Quarterly	1000	0	0	1
National Liquid Fuel Facilities	Geoscience Australia	05/02/2020	13/07/2012	Quarterly	1000	0	0	0
EPA PFAS Investigation Program	Environment Protection Authority	22/04/2020	22/04/2020	Monthly	2000	0	1	1
Defence PFAS Investigation & Management Program - Investigation Sites	Department of Defence	12/02/2020	12/02/2020	Monthly	2000	0	0	0
Defence PFAS Investigation & Management Program - Management Sites	Department of Defence	12/02/2020	12/02/2020	Monthly	2000	0	0	0
Airservices Australia National PFAS Management Program	Airservices Australia	22/04/2020	22/04/2020	Monthly	2000	0	0	0
Defence 3 Year Regional Contamination Investigation Program	Department of Defence	04/05/2020	04/05/2020	Monthly	2000	0	0	0
EPA Other Sites with Contamination Issues	Environment Protection Authority	04/02/2020	13/12/2018	Annually	1000	0	0	0
Licensed Activities under the POEO Act 1997	Environment Protection Authority	15/05/2020	15/05/2020	Monthly	1000	4	8	8
Delicensed POEO Activities still regulated by the EPA	Environment Protection Authority	15/05/2020	15/05/2020	Monthly	1000	0	0	0
Former POEO Licensed Activities now revoked or surrendered	Environment Protection Authority	15/05/2020	15/05/2020	Monthly	1000	4	4	8
UBD Business Directories (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directories (Road & Area Matches)	Hardie Grant			Not required	150	-	32	32
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant			Not required	500	0	0	0
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant			Not required	500	-	5	5
Points of Interest	NSW Department of Finance, Services & Innovation	19/02/2020	19/02/2020	Quarterly	1000	1	2	10
Tanks (Areas)	NSW Department of Customer Service - Spatial Services	19/02/2020	19/02/2020	Quarterly	1000	0	0	4
Tanks (Points)	NSW Department of Customer Service - Spatial Services	19/02/2020	19/02/2020	Quarterly	1000	0	0	2
Major Easements	NSW Department of Finance, Services & Innovation	19/02/2020	19/02/2020	Quarterly	1000	1	3	6
State Forest	Forestry Corporation of NSW	18/01/2018	18/01/2018	As required	1000	0	0	0
NSW National Parks and Wildlife Service Reserves	NSW Office of Environment & Heritage	21/01/2020	30/09/2019	Annually	1000	0	1	1
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1000	1	1	1
Botany Groundwater Management Zones	NSW Department of Planning, Industry and Environment	15/03/2018	01/10/2005	As required	1000	0	0	0

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features within Buffer
Groundwater Boreholes	NSW Dept. of Primary Industries - Water NSW; Commonwealth of Australia (Bureau of Meteorology)	24/07/2018	23/07/2018	Annually	2000	19	34	113
Geological Units 1:100,000	NSW Department of Planning, Industry and Environment	20/08/2014		None planned	1000	2	-	10
Geological Structures 1:100,000	NSW Department of Planning, Industry and Environment	20/08/2014		None planned	1000	0	-	0
Naturally Occurring Asbestos Potential	NSW Dept. of Industry, Resources & Energy	04/12/2015	24/09/2015	Unknown	1000	0	0	0
Atlas of Australian Soils	Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES)	19/05/2017	17/02/2011	As required	1000	1	1	2
Soil Landscapes	NSW Department of Planning, Industry and Environment	12/08/2014		None planned	1000	3	-	5
Environmental Planning Instrument Acid Sulfate Soils	NSW Department of Planning, Industry and Environment	24/04/2020	28/02/2020	Monthly	500	4	-	-
Atlas of Australian Acid Sulfate Soils	CSIRO	19/01/2017	21/02/2013	As required	1000	3	3	3
Dryland Salinity - National Assessment	National Land and Water Resources Audit	18/07/2014	12/05/2013	None planned	1000	0	0	0
Dryland Salinity Potential of Western Sydney	NSW Department of Planning, Industry and Environment	12/05/2017	01/01/2002	None planned	1000	-	-	-
Mining Subsidence Districts	NSW Department of Customer Service - Subsidence Advisory NSW	19/02/2020	19/02/2020	Quarterly	1000	0	0	0
Environmental Planning Instrument SEPP State Significant Precincts	NSW Department of Planning, Industry and Environment	24/04/2020	07/12/2018	Monthly	1000	0	0	0
Environmental Planning Instrument Land Zoning	NSW Department of Planning, Industry and Environment	26/03/2020	26/03/2020	Monthly	1000	3	7	12
Commonwealth Heritage List	Australian Government Department of the Agriculture, Water and the Environment	18/05/2020	20/11/2019	Quarterly	1000	0	0	0
National Heritage List	Australian Government Department of the Agriculture, Water and the Environment	18/05/2020	20/11/2019	Quarterly	1000	1	3	3
State Heritage Register - Curtilages	NSW Department of Planning, Industry and Environment	12/02/2020	09/11/2018	Quarterly	1000	0	2	2
Environmental Planning Instrument Heritage	NSW Department of Planning, Industry and Environment	24/04/2020	17/04/2020	Monthly	1000	0	4	7
Bush Fire Prone Land	NSW Rural Fire Service	04/02/2020	14/12/2019	Quarterly	1000	2	3	3
Native Vegetation of the Sydney Metropolitan Area	NSW Office of Environment & Heritage	01/03/2017	16/12/2016	As required	1000	14	22	25
Ramsar Wetlands of Australia	Department of the Agriculture, Water and the Environment	08/10/2014	24/06/2011	As required	1000	0	2	3
Groundwater Dependent Ecosystems	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	3	3	3
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	5	7	8
NSW BioNet Species Sightings	NSW Office of Environment & Heritage	18/05/2020	18/05/2020	Weekly	10000	-	-	-

Site Diagram

330 Captain Cook Drive, Kurnell, NSW 2231



Legend

- Site Boundary
- Internal Parcel Boundaries

Total Area: 714088m^2

Total Perimeter: 4805m

Scale: 0 50 100 200 300 400 500 Meters

Data Sources: Aerial Imagery: © Aerometrex Pty Ltd

Disclaimers:

Measurements are approximate only and may have been simplified or smaller lengths removed for readability.

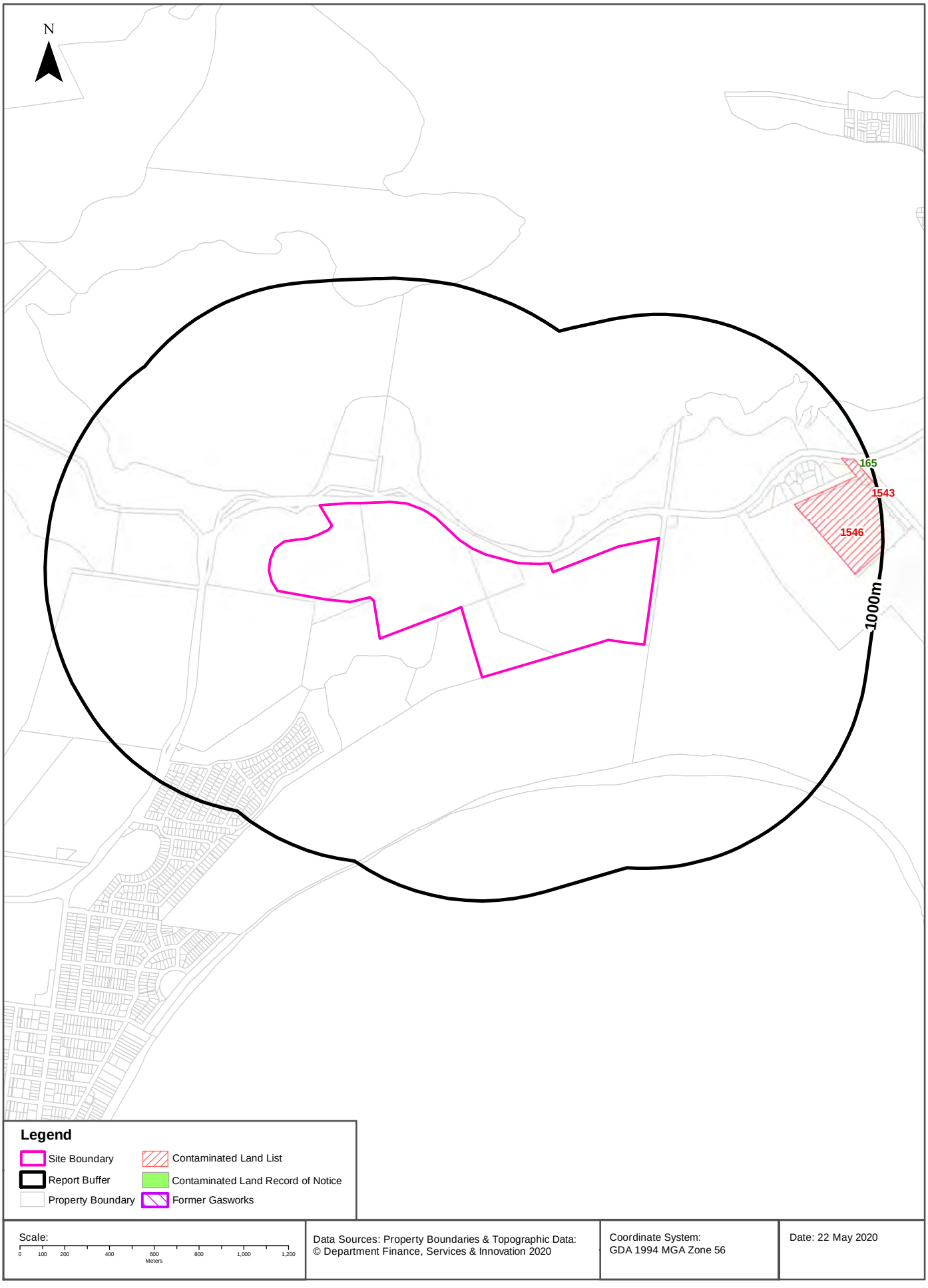
Parcels that make up a small percentage of the total site area have not been labelled for increased legibility.

Coordinate System: GDA 1994 MGA Zone 56

Date: 22 May 2020

Contaminated Land

330 Captain Cook Drive, Kurnell, NSW 2231



Contaminated Land

330 Captain Cook Drive, Kurnell, NSW 2231

List of NSW contaminated sites notified to EPA

Records from the NSW EPA Contaminated Land list within the dataset buffer:

Map Id	Site	Address	Suburb	Activity	Management Class	Status	Location Confidence	Dist (m)	Direction
1546	Former Phillips Imperial Chemicals site	260 Captain Cook Drive	Kurnell	Chemical Industry	Regulation under CLM Act not required	Current EPA List	Premise Match	620m	East
1543	Abbott Australasia	Captain Cook Drive	Kurnell	Chemical Industry	Contamination formerly regulated under the CLM Act	Current EPA List	Premise Match	976m	East

The values within the EPA site management class in the table above, are given more detailed explanations in the table below:

EPA site management class	Explanation
Contamination being managed via the planning process (EP&A Act)	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. The contamination of this site is managed by the consent authority under the Environmental Planning and Assessment Act 1979 (EP&A Act) planning approval process, with EPA involvement as necessary to ensure significant contamination is adequately addressed. The consent authority is typically a local council or the Department of Planning and Environment.
Contamination currently regulated under CLM Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). Management of the contamination is regulated by the EPA under the CLM Act. Regulatory notices are available on the EPA's Contaminated Land Public Record of Notices.
Contamination currently regulated under POEO Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. Management of the contamination is regulated under the Protection of the Environment Operations Act 1997 (POEO Act). The EPA's regulatory actions under the POEO Act are available on the POEO public register.
Contamination formerly regulated under the CLM Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). The contamination was addressed under the CLM Act.
Contamination formerly regulated under the POEO Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed under the Protection of the Environment Operations Act 1997 (POEO Act).
Contamination was addressed via the planning process (EP&A Act)	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed by the appropriate consent authority via the planning process under the Environmental Planning and Assessment Act 1979 (EP&A Act).
Ongoing maintenance required to manage residual contamination (CLM Act)	The EPA has determined that ongoing maintenance, under the Contaminated Land Management Act 1997 (CLM Act), is required to manage the residual contamination. Regulatory notices under the CLM Act are available on the EPA's Contaminated Land Public Record of Notices.
Regulation being finalised	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997. A regulatory approach is being finalised.
Regulation under the CLM Act not required	The EPA has completed an assessment of the contamination and decided that regulation under the Contaminated Land Management Act 1997 is not required.
Under assessment	The contamination is being assessed by the EPA to determine whether regulation is required. The EPA may require further information to complete the assessment. For example, the completion of management actions regulated under the planning process or Protection of the Environment Operations Act 1997. Alternatively, the EPA may require information via a notice issued under s77 of the Contaminated Land Management Act 1997 or issue a Preliminary Investigation Order.

NSW EPA Contaminated Land List Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

Contaminated Land

330 Captain Cook Drive, Kurnell, NSW 2231

Contaminated Land: Records of Notice

Record of Notices within the dataset buffer:

Map Id	Name	Address	Suburb	Notices	Area No	Location Confidence	Distance	Direction
165	Abbott Australasia	Captain Cook Drive	Kurnell	2 former	3352	Premise Match	976m	East

Contaminated Land Records of Notice Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority
Terms of use and disclaimer for Contaminated Land: Record of Notices, please visit
http://www.epa.nsw.gov.au/clm/clmdisclaimer.htm

Former Gasworks

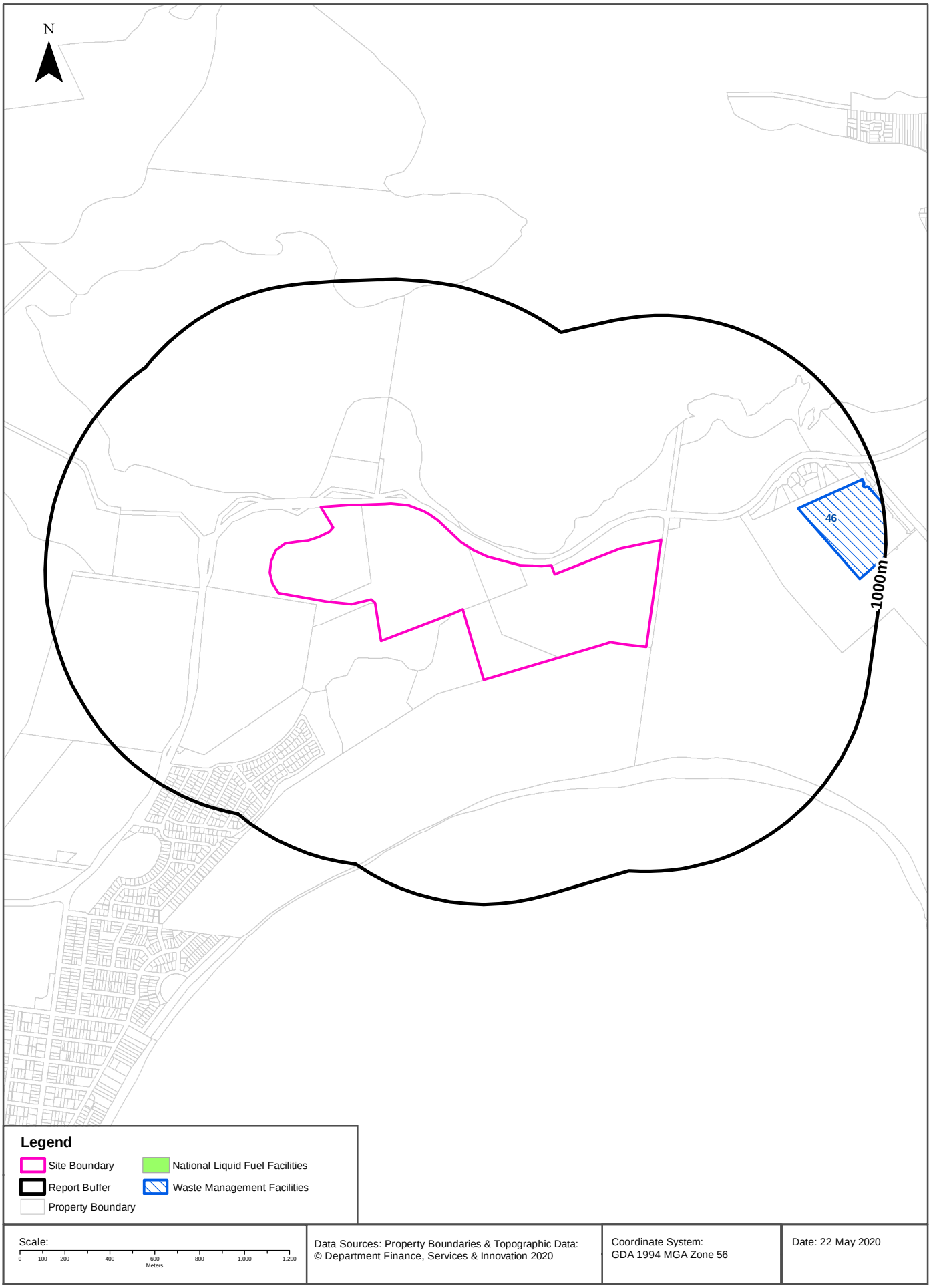
Former Gasworks within the dataset buffer:

Map Id	Location	Council	Further Info	Location Confidence	Distance	Direction
N/A	No records in buffer					

Former Gasworks Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Waste Management & Liquid Fuel Facilities

330 Captain Cook Drive, Kurnell, NSW 2231



Waste Management & Liquid Fuel Facilities

330 Captain Cook Drive, Kurnell, NSW 2231

National Waste Management Site Database

Sites on the National Waste Management Site Database within the dataset buffer:

Site Id	Owner	Name	Address	Suburb	Class	Landfill	Reprocess	Transfer	Comments	Loc Conf	Dist (m)	Direction
46	Breen Holdings Pty Ltd	Kurnel Landfill Company	260B Captain Cook Drive	Kurnell	Landfill	Operational			Original information on waste management site collected by WMAA in 2008 via survey	Premise Match	626 m	East

Waste Management Facilities Data Source: Geoscience Australia
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National Liquid Fuel Facilities

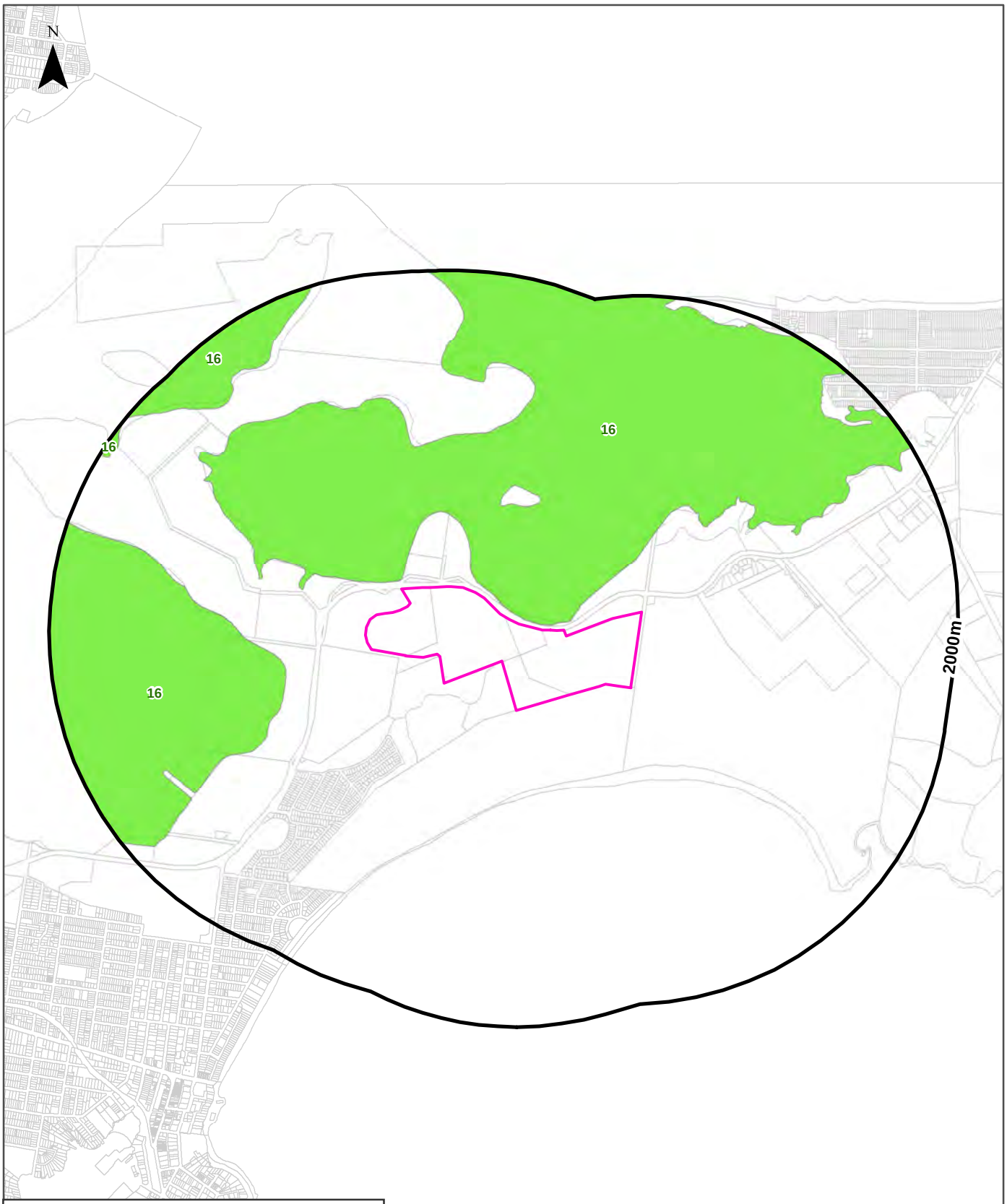
National Liquid Fuel Facilties within the dataset buffer:

Map Id	Owner	Name	Address	Suburb	Class	Operational Status	Operator	Revision Date	Loc Conf	Dist (m)	Direction
N/A	No records in buffer										

National Liquid Fuel Facilities Data Source: Geoscience Australia
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PFAS Investigation & Management Programs

330 Captain Cook Drive, Kurnell, NSW 2231



PFAS Investigation & Management Programs

330 Captain Cook Drive, Kurnell, NSW 2231

EPA PFAS Investigation Program

Sites that are part of the EPA PFAS investigation program, within the dataset buffer:

Id	Site	Address	Loc Conf	Dist	Dir
16	Botany Bay area & Georges River		General Area/ Suburb Match	32m	North

EPA PFAS Investigation Program: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Defence PFAS Investigation Program

Sites being investigated by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

Defence PFAS Investigation Program Data Custodian: Department of Defence, Australian Government

Defence PFAS Management Program

Sites being managed by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

Defence PFAS Management Program Data Custodian: Department of Defence, Australian Government

Airservices Australia National PFAS Management Program

Sites being investigated or managed by Airservices Australia for PFAS contamination within the dataset buffer:

Map ID	Site Name	Impacts	Loc Conf	Dist	Dir
N/A	No records in buffer				

Airservices Australia National PFAS Management Program Data Custodian: Airservices Australia

Defence Sites

330 Captain Cook Drive, Kurnell, NSW 2231

Defence 3 Year Regional Contamination Investigation Program

Sites which have been assessed as part of the Defence 3 Year Regional Contamination Investigation Program within the dataset buffer:

Property ID	Base Name	Address	Known Contamination	Loc Conf	Dist	Dir
N/A	No records in buffer					

Defence 3 Year Regional Contamination Investigation Program, Data Custodian: Department of Defence, Australian Government

EPA Other Sites with Contamination Issues

330 Captain Cook Drive, Kurnell, NSW 2231

EPA Other Sites with Contamination Issues

This dataset contains other sites identified on the EPA website as having contamination issues. This dataset currently includes:

- James Hardie asbestos manufacturing and waste disposal sites
- Radiological investigation sites in Hunter's Hill
- Pasminco Lead Abatement Strategy Area

Sites within the dataset buffer:

Site Id	Site Name	Site Address	Dataset	Comments	Location Confidence	Distance	Direction
N/A	No records in buffer						

EPA Other Sites with Contamination Issues: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Current EPA Licensed Activities

330 Captain Cook Drive, Kurnell, NSW 2231



EPA Activities

330 Captain Cook Drive, Kurnell, NSW 2231

Licensed Activities under the POEO Act 1997

Licensed activities under the Protection of the Environment Operations Act 1997, within the dataset buffer:

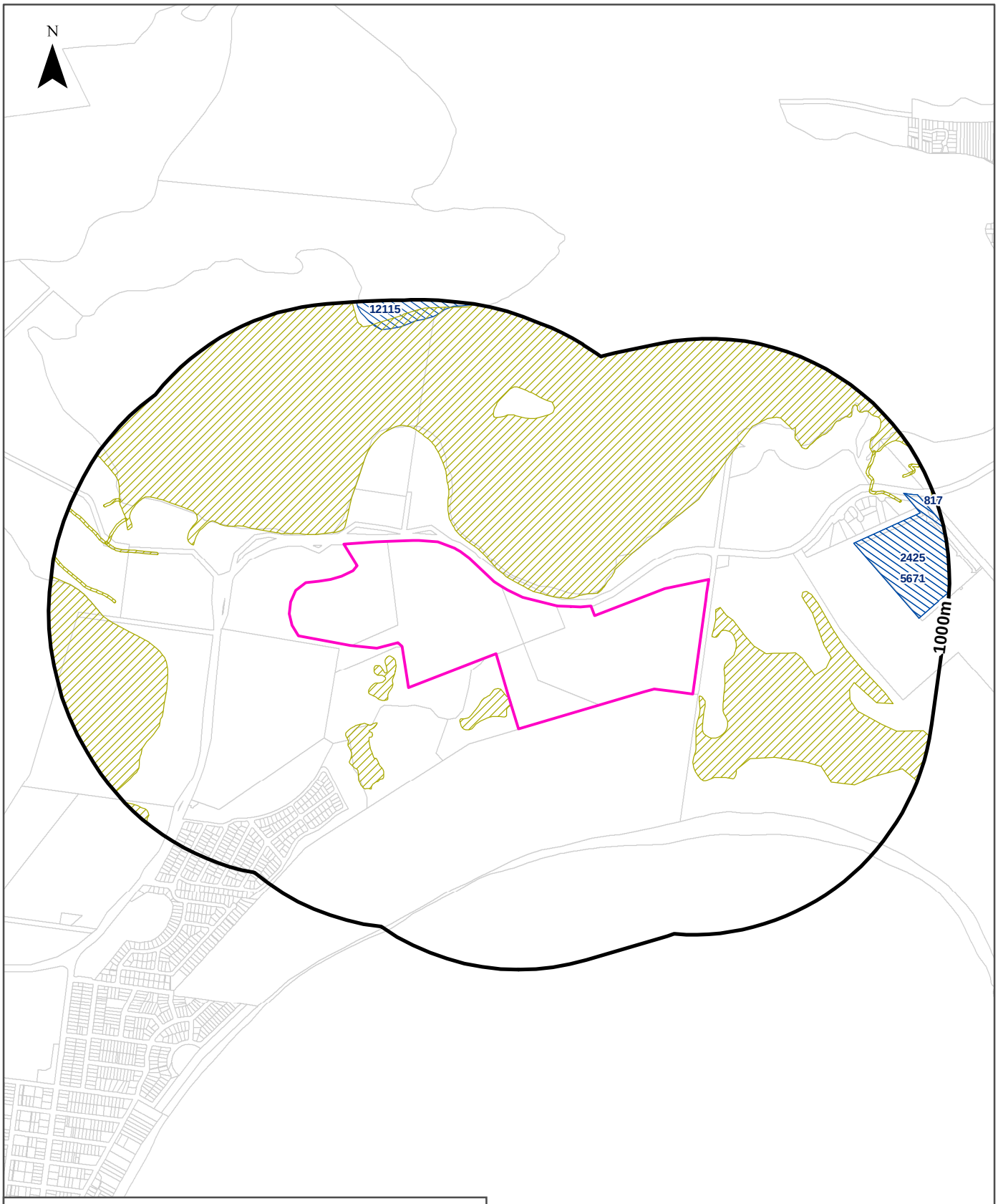
EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
4608	BREEN RESOURCES PTY LTD	KURNELL LAND FILL COMPANY	CAPTAIN COOK DRIVE	KURNELL	Recovery of general waste	Premise Match	0m	Onsite
4608	BREEN RESOURCES PTY LTD	KURNELL LAND FILL COMPANY	CAPTAIN COOK DRIVE	KURNELL	Waste disposal by application to land	Premise Match	0m	Onsite
20697	BREEN RESOURCES PTY LTD		Captain Cook Drive, KURNELL, NSW 2231		Non-thermal treatment of general waste	Premise Match	0m	Onsite
20697	BREEN RESOURCES PTY LTD		Captain Cook Drive, KURNELL, NSW 2231		Recovery of general waste; Waste storage - other types of waste	Premise Match	0m	Onsite
1728	SYDNEY WATER CORPORATION	CRONULLA SEWAGE TREATMENT SYSTEM including the STP adjacent to	CAPTAIN COOK DRIVE	KURNELL	Sewage treatment processing by large plants	Premise Match	19m	West
3629	ALLSANDS PTY LTD	ROCLA PTY LIMITED	CAPTAIN COOK DRIVE	KURNELL	Crushing, grinding or separating	Premise Match	20m	East
3629	ALLSANDS PTY LTD	ROCLA PTY LIMITED	CAPTAIN COOK DRIVE	KURNELL	Other Land-Based Extraction	Premise Match	20m	East
5658	BESMAW PTY. LIMITED	BESMAW PTY LTD trading as Holt Land Rehabilitation Centre	280-282 CAPTAIN COOK DRIVE	KURNELL	Other activities	Premise Match	20m	East

POEO Licence Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

Delicensed & Former Licensed EPA Activities

330 Captain Cook Drive, Kurnell, NSW 2231



EPA Activities

330 Captain Cook Drive, Kurnell, NSW 2231

Delicensed Activities still regulated by the EPA

Delicensed activities still regulated by the EPA, within the dataset buffer:

Licence No	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
N/A	No records in buffer							

Delicensed Activities Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Former Licensed Activities under the POEO Act 1997, now revoked or surrendered

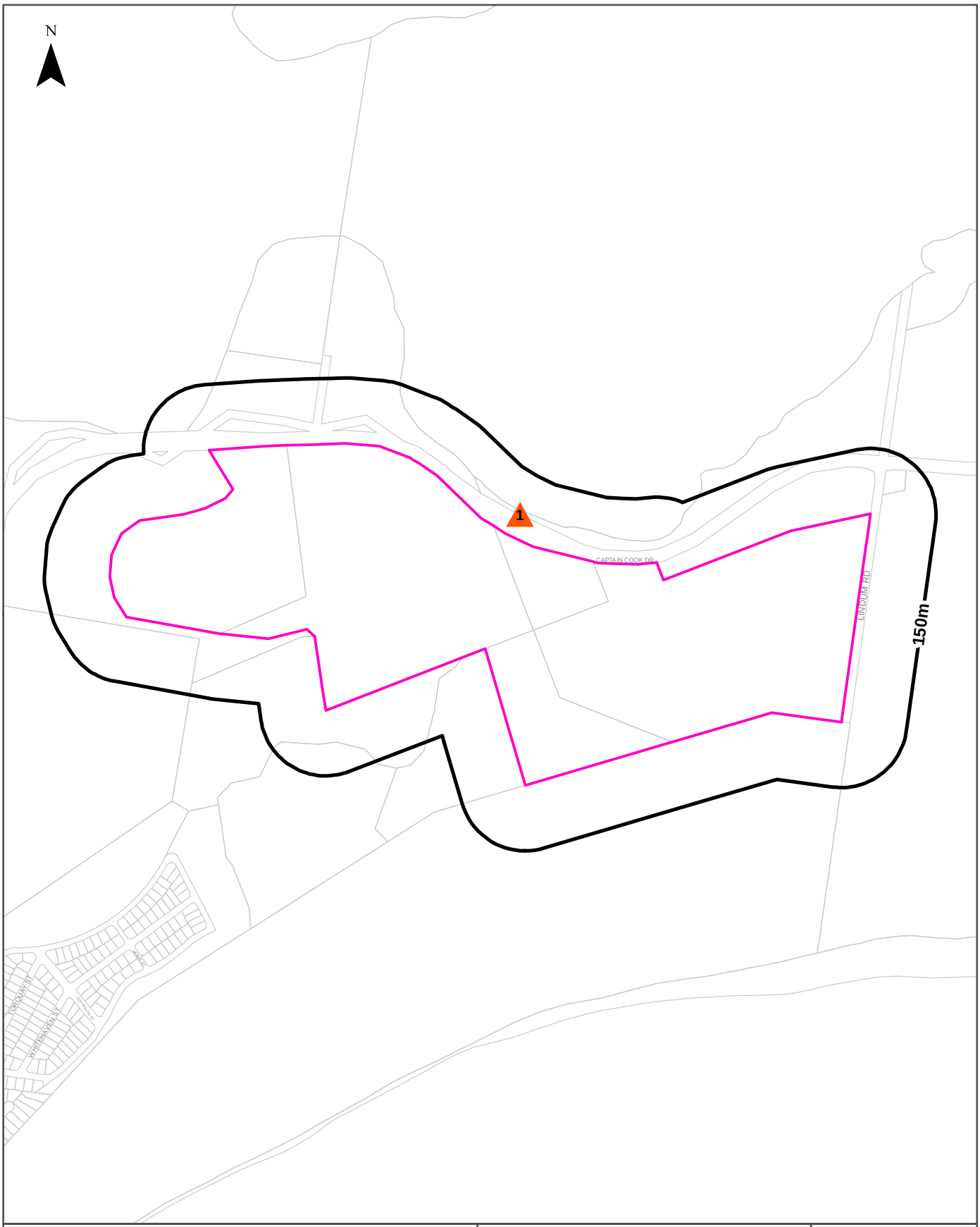
Former Licensed activities under the Protection of the Environment Operations Act 1997, now revoked or surrendered, within the dataset buffer:

Licence No	Organisation	Location	Status	Issued Date	Activity	Loc Conf	Distance	Direction
4653	LUHRMANN ENVIRONMENT MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW	Surrendered	06/09/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	0m	Onsite
4838	Robert Orchard	Various Waterways throughout New South Wales - SYDNEY NSW 2000	Surrendered	07/09/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	0m	Onsite
6375	SUTHERLAND SHIRE COUNCIL	WATERWAYS OF SUTHERLAND SHIRE COUNCIL AREA	Surrendered	26/06/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	0m	Onsite
6630	SYDNEY WEED & PEST MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW - PROSPECT, NSW, 2148	Surrendered	09/11/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	0m	Onsite
5671	SABAUDIA PTY LIMITED	LOT 6 CAPTAIN COOK DRIVE, KURNELL, NSW 2231	Revoked	08/08/2000	Crushing, grinding or separating	Premise Match	620m	East
2425	SOWELLI KURNELL PTY LIMITED	260 CAPTAIN COOK DRIVE, KURNELL, NSW 2231	Revoked	28/12/2000	Sewage treatment processing by small plants	Premise Match	620m	East
12115	MARITIME AUTHORITY OF NSW	Towra Point, KURNELL, NSW 2231	Surrendered	24/05/2004	Water-based extractive activity	Premise Match	881m	North
817	SERENITY COVE BUSINESS PARK PTY LTD (C/- DELOITTE TOUCHE TOHMATSU ADMINISTRATOR)	CAPTAIN COOK DRIVE, KURNELL, NSW 2231	Revoked	10/05/2000	Sewage treatment processing by small plants, Hazardous, Industrial or Group A Waste Generation or Storage	Premise Match	976m	East

Former Licensed Activities Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Historical Business Directories

330 Captain Cook Drive, Kurnell, NSW 2231



Legend

- Site Boundary
- Buffer 150m
- Property Boundary
- Business directory records mapped to a specific premise
- Business directory records mapped to a road intersection
- Business directory records mapped to a road corridor
- Business directory records mapped to a general area

Scale: 0 170 340 510 680 Meters

Coordinate System: GDA 1994 MGA Zone 56

Date: 22 May 2020

Data Sources: Reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018
Property Boundaries © NSW Department Finance, Services & Innovation 2020

Historical Business Directories

330 Captain Cook Drive, Kurnell, NSW 2231

Business Directory Records 1950-1991
Premise or Road Intersection Matches

Universal Business Directory records from years 1991, 1986, 1982, 1978, 1975, 1970, 1965, 1961 & 1950, mapped to a premise or road intersection within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer						

Reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018

Business Directory Records 1950-1991
Road or Area Matches

Universal Business Directory records from years 1991, 1986, 1982, 1978, 1975, 1970, 1965, 1961 & 1950, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

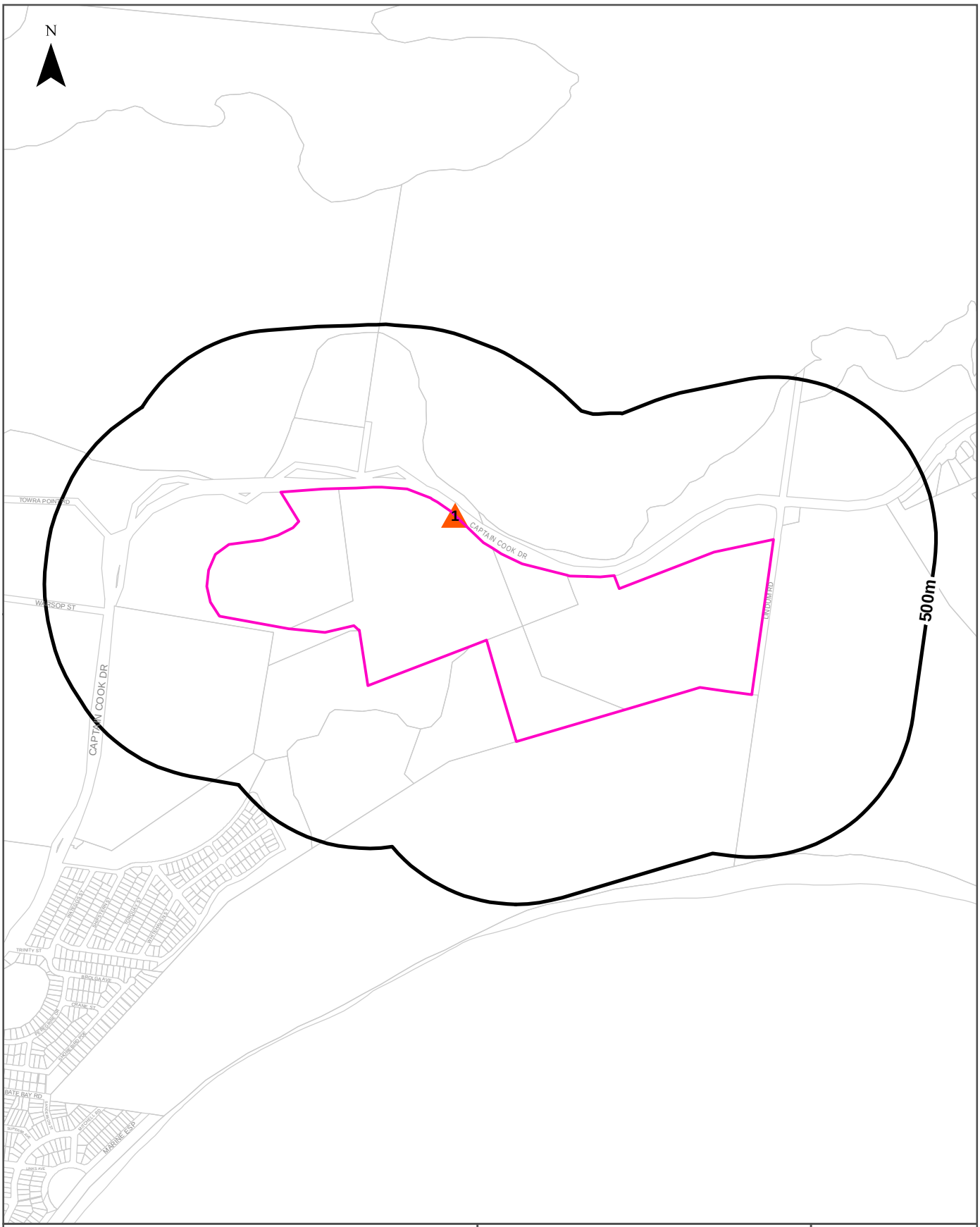
Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
1	Gravel, Sand &/or Soil Supplies	Hooker Industrial Sands Pty. Ltd., Captain Cook Dr., Cronulla. 2230	47953	1991	Road Match	0m
	FILTRATION SUPPLIERS.	Hooker Industrial Sands Pty. Ltd., Captain Cook Dr., Cronulla North. 2230	32750	1986	Road Match	0m
	FOUNDRY SUPPLIES-GENERAL, FACINGS.	Hooker Industrial Sands Pty. Ltd., Captain Cook Dr., Cronulla North. 2230	35320	1986	Road Match	0m
	GRAVEL, SAND &/OR SOIL SUPPLIES.	Hooker Industrial Sands Pty. Ltd., Captain Cook Dr., Cronulla North. 2230	40238	1986	Road Match	0m
	BUILDERS SUPPLIERS.	Hooker Industrial Sands Pty. Ltd., Captain Cook Dr., Cronulla North.2230	8622	1986	Road Match	0m
	FILTRATION SUPPLIERS. (F1850)	Hooker Industrial Sands Pty. Ltd., Captain Cook Dr., Cronulla North. 2230.	30581	1982	Road Match	0m
	FOUNDRY SUPPLIES-GENERAL,FACINGS. (F6025)	Hooker Industrial Sands Pty. Ltd., Captain Cook Dr., Cronulla North. 2230.	32932	1982	Road Match	0m
	GRAVEL, SAND &/OR SOIL SUPPLIES. (G7050)	Hooker Industrial Sands Pty. Ltd., Captain Cook Dr., Cronulla North. 2230.	37190	1982	Road Match	0m
	SAND BLASTING SUPPLIERS. *(S0530)	Hooker Industrial Sands, Captain Cook Drive, North Cronulla. 2230	72908	1982	Road Match	0m
	GOVERNMENT DEPARTMENTS - COMMONWEALTH.	Hooker Industrial Sands Captain Cook Drive, North Cronulla 2230	33395	1978	Road Match	0m
	SAND BLASTING SUPPLIERS.	Hooker Industrial Sands Captain Cook Drive, North Cronulla. 2230	64449	1978	Road Match	0m
	FOUNDRY SUPPLIES-GENERAL, FACINGS.	Hooker Industrial Sands Pty. Ltd, Captain Cook Dr., North Cronulla. 2230	29809	1978	Road Match	0m
	GRAVEL, SAND &/OR SOIL SUPPLIES	Hooker Industrial Sands Pty. Ltd, Captain Cook Dr., North Cronulla. 2230	33504	1978	Road Match	0m
	FOUNDRY SUPPLIES-GENERAL, FACINGS.	Hooker Industrial Sands Pty. Ltd. Captain Cook Dr., North Cronulla, 2230	29796	1978	Road Match	0m
	GRAVEL, SAND &/OR SOIL SUPPLIES	Hooker Industrial Sands Pty. Ltd. Captain Cook Dr., North Cronulla. 2230	33469	1978	Road Match	0m
	FILTRATION SUPPLIERS.	Hooker Industrial Sands Pty. Ltd., Captain Cook Dr., North Cronulla. 2230	27662	1978	Road Match	0m
	FOUNDRY SUPPLIES-GENERAL, FACINGS.	Hooker Industrial Sands Pty Ltd. Captain Cook Dr., North Cronulla 2230	34491	1975	Road Match	0m
	GRAVEL, SAND &/OR SOIL SUPPLIES.	Hooker Industrial Sands Pty Ltd. Captain Cook Dr., North Cronulla 2230	38917	1975	Road Match	0m
	GOVERNMENT DEPARTMENTS - AUSTRALIAN.	Hooker Industrial Sands Pty. Ltd. Captain Cook Drive, North Cronulla 2230	38852	1975	Road Match	0m
	FILTRATION SUPPLIERS.	Hooker Industrial Sands Pty. Ltd., Captain Cook Dr., North Cronulla. 2230	31862	1975	Road Match	0m
	FOUNDRY SUPPLIES-GENERAL, FACINGS.	Hooker Industrial Sands Pty. Ltd., Captain Cook Dr., North Cronulla. 2230	34505	1975	Road Match	0m
	GRAVEL, SAND &/OR SOIL SUPPLIES.	Hooker Industrial Sands Pty. Ltd., Captain Cook Dr., North Cronulla. 2230.	38960	1975	Road Match	0m
	FILTRATION SUPPLIERS (F175)	Hooker Industrial Sands., Captain Cook Dr., North Cronulla, 2230	302798	1970	Road Match	0m
	FILTRATION SUPPLIERS (F175)	Hooker Industrial Sands., Captain Cook Dr., North Cronulla, 2230	302799	1970	Road Match	0m
	FOUNDRY SUPPLIES-GENERAL, FACINGS, ETC.	Hooker Industrial Sands., Captain Cook Dr., North Cronulla, 2230	306189	1970	Road Match	0m
	FOUNDRY SUPPLIES-GENERAL, FACINGS, ETC.	Hooker Industrial Sands., Captain Cook Dr., North Cronulla, 2230	306188	1970	Road Match	0m
	GRAVEL, SAND/SOIL SUPPLIES (G570)	Hooker Industrial Sands., Captain Cook Dr., North Cronulla. 2230	311931	1970	Road Match	0m

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
1	GRAVEL, SAND/SOIL SUPPLIES (G570)	Hooker Industrial Sands., Captain Cook Dr., North Cronulla. 2230	311932	1970	Road Match	0m
	Motor Painters	Spooner, N., Captain Cook Drv., Kurnell	124256	1965	Road Match	0m
	Motor Panel Beaters	Spooner, N., Captain Cook Drv., Kurnell	125028	1965	Road Match	0m
	MOTOR GARAGES & ENGINEERS	Blundell, G., Captain Cook Drive KURNELL	346675	1961	Road Match	0m
	REAL ESTATE AGENTS/VALUERS	Davey, F., Captain Cook Drive KURNELL	365954	1961	Road Match	0m

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Dry Cleaners, Motor Garages & Service Stations

330 Captain Cook Drive, Kurnell, NSW 2231



Legend

- Site Boundary
- Buffer 500m
- Property Boundary
- Business directory records mapped to a specific premise
- Business directory records mapped to a road intersection
- Business directory records mapped to a road corridor
- Business directory records mapped to a general area

Scale: 0 230 460 690 920 Meters

Coordinate System: GDA 1994 MGA Zone 56

Date: 22 May 2020

Data Sources: Reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018
Property Boundaries © NSW Department Finance, Services & Innovation 2020

Historical Business Directories

330 Captain Cook Drive, Kurnell, NSW 2231

Dry Cleaners, Motor Garages & Service Stations 1948-1993 Premise or Road Intersection Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a premise or road intersection, within the dataset buffer.

Note: The Universal Business Directories were published between 1948 and 1993. Dry Cleaners, Motor Garages & Service Stations have been extracted from all of these directories except the following years 1951, 1955, 1957, 1960, 1963, 1973, 1974, 1977, 1987.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer						

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Dry Cleaners, Motor Garages & Service Stations 1948-1993 Road or Area Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published.

Note: The Universal Business Directories were published between 1948 and 1993. Dry Cleaners, Motor Garages & Service Stations have been extracted from all of these directories except the following years 1951, 1955, 1957, 1960, 1963, 1973, 1974, 1977, 1987.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
1	MOTOR GARAGES & ENGINEERS.	Blundell G., Captain Cook Drive., KURNELL	32766	1962	Road Match	0m
	MOTOR GARAGES & ENGINEERS	Blundell, G., Captain Cook Drive KURNELL	346675	1961	Road Match	0m
	MOTOR GARAGES & ENGINEERS.	Blundell, G., Captain Cook Drive., Kurnell	19371	1959	Road Match	0m
	MOTOR GARAGE/ENGINEERS.	Blundell G., Captain Cook Dry Kurnell	665	1958	Road Match	0m
	MOTOR GARAGES &/OR ENGINEERS.	Blundell G., Captain Cook Drv., Kurnell	57281	1956	Road Match	0m

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Aerial Imagery 2019

330 Captain Cook Drive, Kurnell, NSW 2231



Scale:	Data Sources: Aerial Imagery © Aerometrex Pty Ltd	Coordinate System: GDA 1994 MGA Zone 56	Date: 22 May 2020

0 140 280 420 560
Meters

Aerial Imagery 2014

330 Captain Cook Drive, Kurnell, NSW 2231



Scale:	Data Sources: Aerial Imagery © Aerometrex Pty Ltd	Coordinate System: GDA 1994 MGA Zone 56	Date: 22 May 2020

0 140 280 420 560
Meters

Aerial Imagery 2007

330 Captain Cook Drive, Kurnell, NSW 2231



Scale:	Data Sources: Aerial Imagery © Aerometrex Pty Ltd	Coordinate System: GDA 1994 MGA Zone 56	Date: 22 May 2020

0 140 280 420 560
Meters

Aerial Imagery 2000

330 Captain Cook Drive, Kurnell, NSW 2231



Scale:	Data Sources: Aerial Imagery © Aerometrex Pty Ltd	Coordinate System: GDA 1994 MGA Zone 56	Date: 22 May 2020

0 140 280 420 560
Meters

Aerial Imagery 1994

330 Captain Cook Drive, Kurnell, NSW 2231



Aerial Imagery 1990

330 Captain Cook Drive, Kurnell, NSW 2231



Aerial Imagery 1984

330 Captain Cook Drive, Kurnell, NSW 2231



Aerial Imagery 1978

330 Captain Cook Drive, Kurnell, NSW 2231



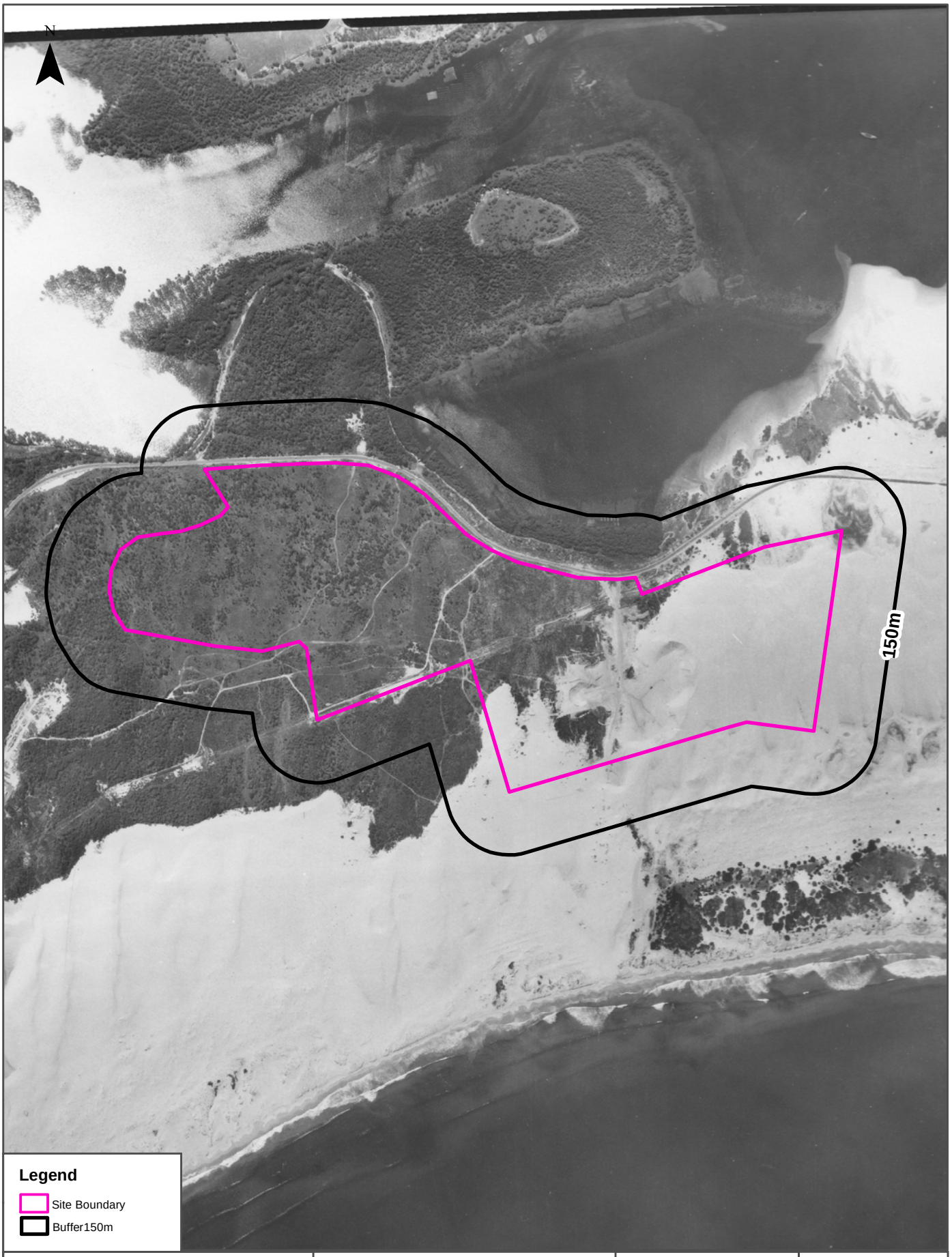
Aerial Imagery 1970

330 Captain Cook Drive, Kurnell, NSW 2231



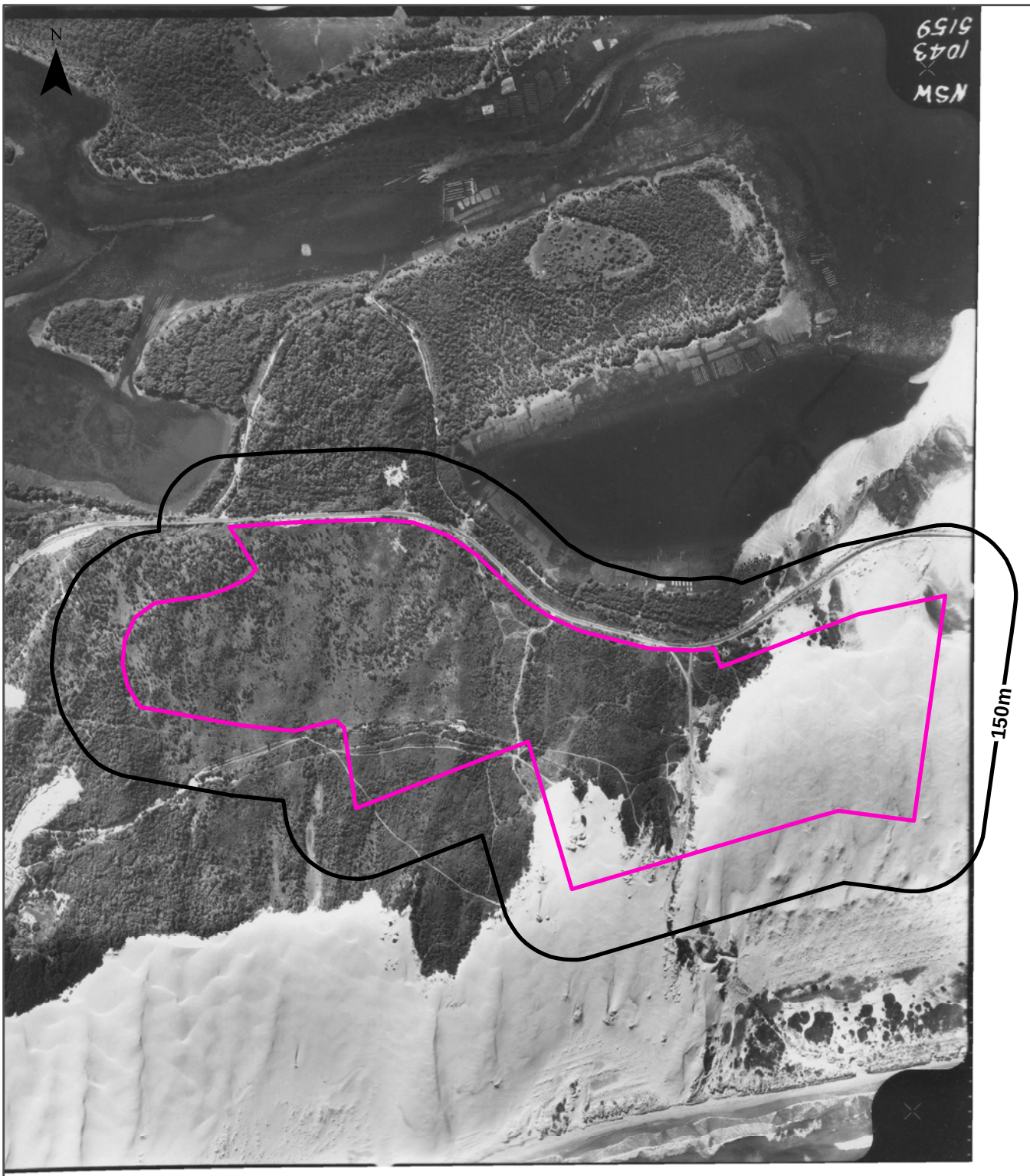
Aerial Imagery 1965

330 Captain Cook Drive, Kurnell, NSW 2231



Aerial Imagery 1961

330 Captain Cook Drive, Kurnell, NSW 2231



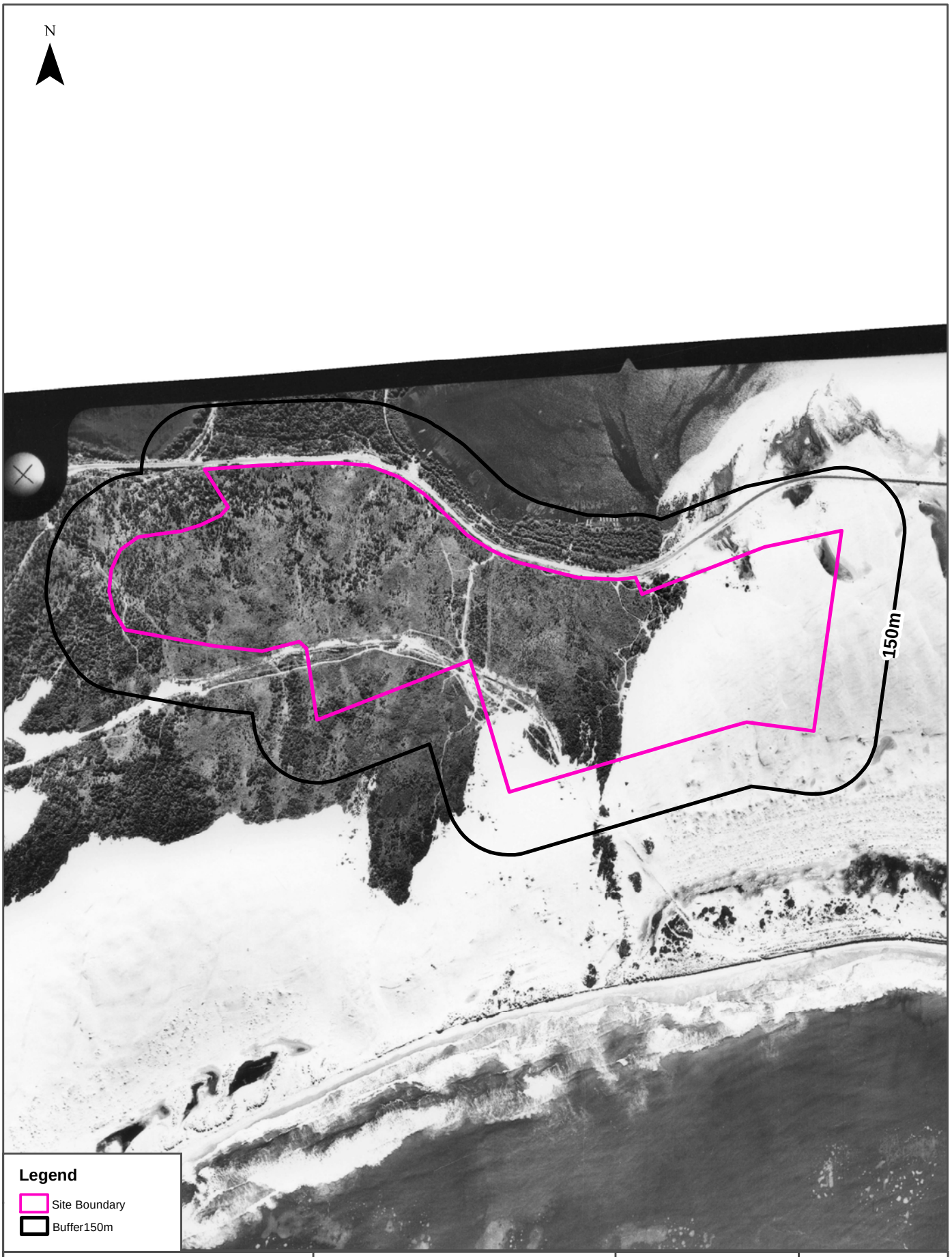
Legend

- Site Boundary
- Buffer150m

Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 20 May 2020
0 140 280 420 560 Meters	© NSW Department Finance, Services & Innovation	GDA 1994 MGA Zone 56	

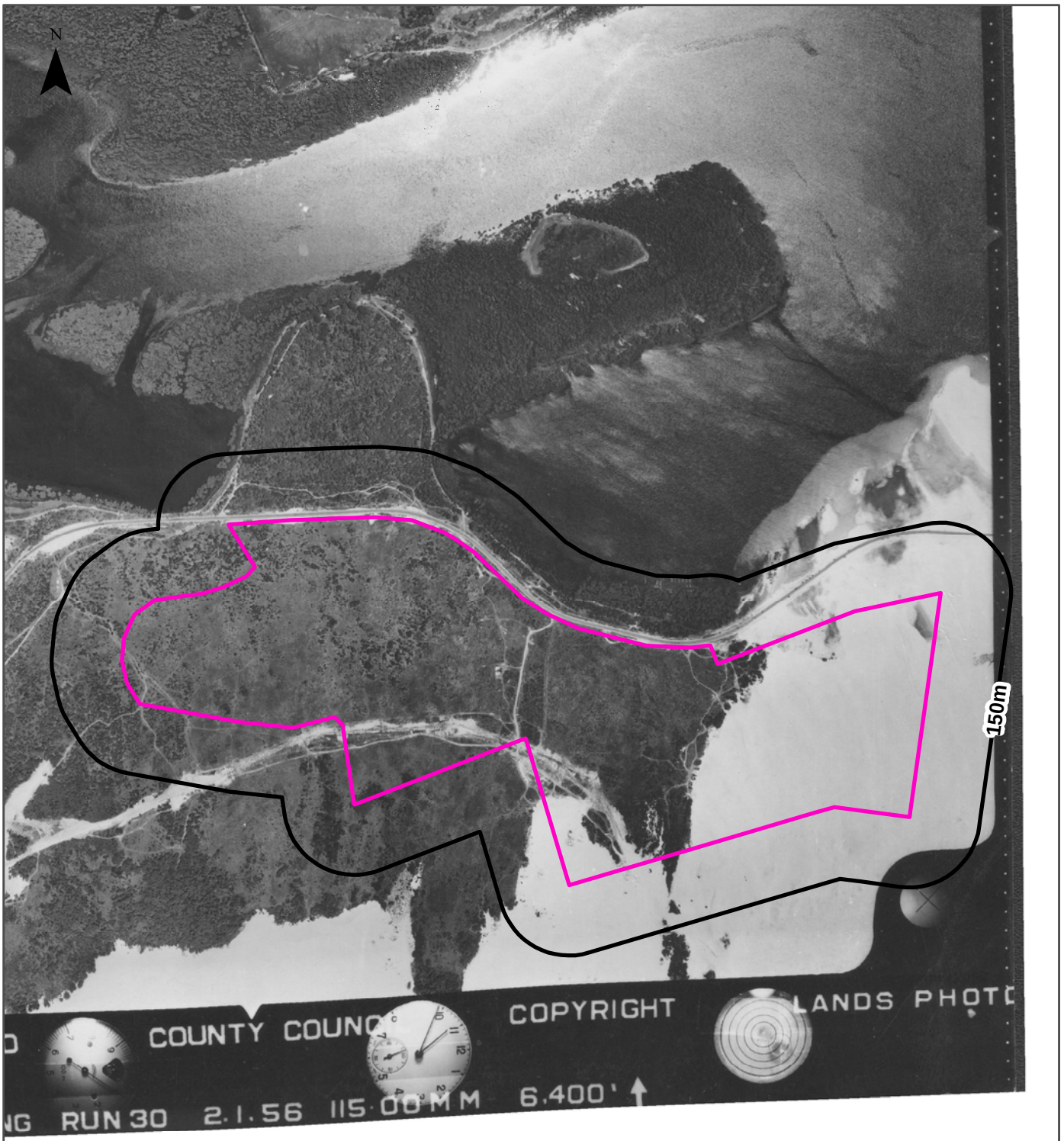
Aerial Imagery 1956

330 Captain Cook Drive, Kurnell, NSW 2231



Aerial Imagery 1956

330 Captain Cook Drive, Kurnell, NSW 2231



Legend

- Site Boundary
- Buffer150m

Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 20 May 2020
0 140 280 420 560 Meters	© NSW Department Finance, Services & Innovation	GDA 1994 MGA Zone 56	

Topographic Map 2015

330 Captain Cook Drive, Kurnell, NSW 2231



Legend

- Site Boundary
- Buffer 1000m

© Department of Finance, Services & Innovation 2018

Scale: 0 100 200 400 600 800 1,000 Meters	Data Sources: Topographic Map Data © NSW Land and Property Information	Coordinate System: GDA 1994 MGA Zone 56	Date: 22 May 2020

Historical Map 1976

330 Captain Cook Drive, Kurnell, NSW 2231

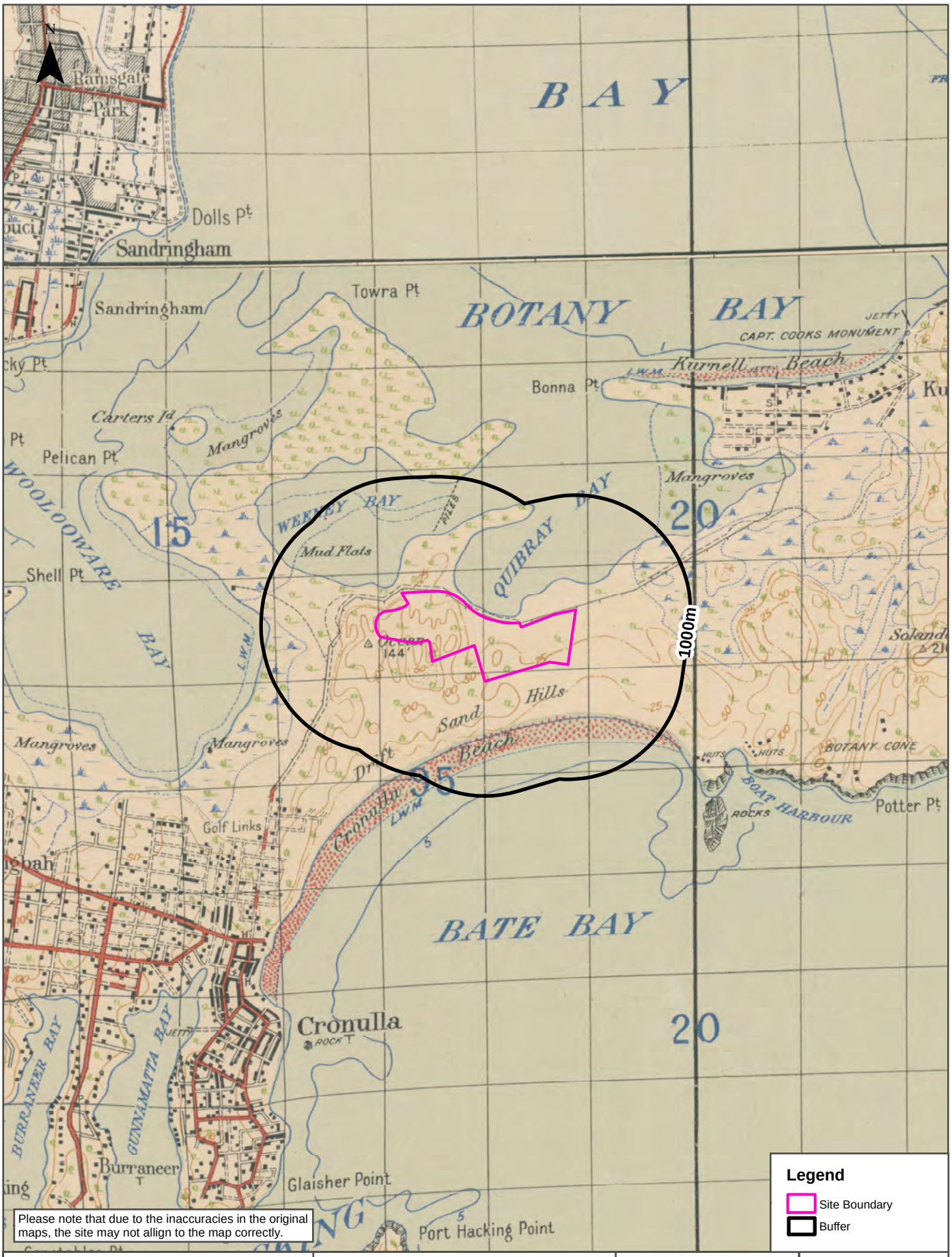


Please note that due to the inaccuracies in the original maps, the site may not allign to the map correctly.

Scale:	Data Sources:	Coordinate System:	Date:
0 225 450 900 1,350 1,800 2,250 Meters	NATMAP 1:100,000 Topographic Maps Geoscience Australia	GDA 1994 MGA Zone 56	22 May 2020

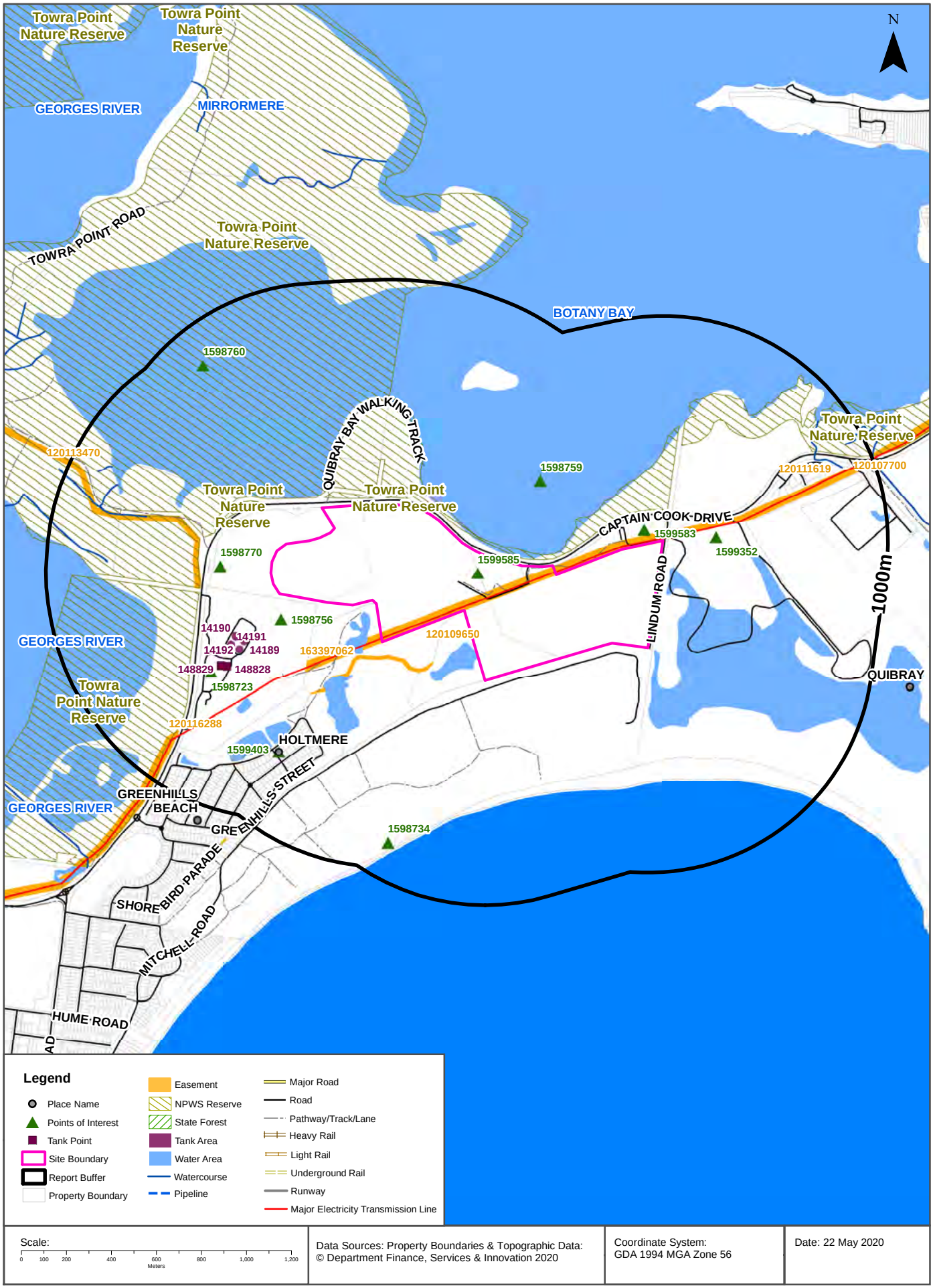
Historical Map c.1935

330 Captain Cook Drive, Kurnell, NSW 2231



Topographic Features

330 Captain Cook Drive, Kurnell, NSW 2231



Topographic Features

330 Captain Cook Drive, Kurnell, NSW 2231

Points of Interest

What Points of Interest exist within the dataset buffer?

Map Id	Feature Type	Label	Distance	Direction
1599585	Park	MARANG PARKLANDS	0m	Onsite
1599583	Sports Centre	Sports Centre	64m	East
1598756	Mountain/Hill/Peak	CONNELL HILL	111m	West
1598770	Park	CHARLOTTE BREEN MEMORIAL PARK	225m	West
1599352	Community Facility	HOLTS LANDS REHABILITATION CENTRE	236m	East
1598759	Bay / Inlet / Basin	QUIBRAY BAY	380m	North East
1598723	Sewage Works	Sewage Works	462m	West
1599403	Urban Place	HOLTMERE	671m	South West
1598760	Bay / Inlet / Basin	WEENEY BAY	823m	North West
1598734	Beach	CRONULLA BEACH	840m	South

Topographic Data Source: © Land and Property Information (2015)
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Topographic Features

330 Captain Cook Drive, Kurnell, NSW 2231

Tanks (Areas)

What are the Tank Areas located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
14189	Water	Operational		05/05/2018	245m	West
14190	Water	Operational		05/05/2018	251m	West
14192	Water	Operational		05/05/2018	286m	West
14191	Water	Operational		05/05/2018	294m	West

Tanks (Points)

What are the Tank Points located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
148828	Undefined	Operational		14/09/2000	398m	West
148829	Undefined	Operational		14/09/2000	411m	West

Tanks Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Major Easements

What Major Easements exist within the dataset buffer?
Note. Easements provided by LPI are not at the detail of local governments. They are limited to major easements such as Right of Carriageway, Electrical Lines (66kVa etc.), Easement to drain water & Significant subterranean pipelines (gas, water etc.).

Map Id	Easement Class	Easement Type	Easement Width	Distance	Direction
120109650	Primary	Undefined		0m	Onsite
120111619	Primary	Undefined		26m	East
163397062	Secondary	Easement for Access		65m	South West
120113470	Primary	Undefined		316m	West
120116288	Primary	Undefined		758m	South West
120107700	Primary	Undefined		996m	East

Easements Data Source: © Land and Property Information (2015)
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Topographic Features

330 Captain Cook Drive, Kurnell, NSW 2231

State Forest

What State Forest exist within the dataset buffer?

State Forest Number	State Forest Name	Distance	Direction
N/A	No records in buffer		

State Forest Data Source: © NSW Department of Finance, Services & Innovation (2018)
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National Parks and Wildlife Service Reserves

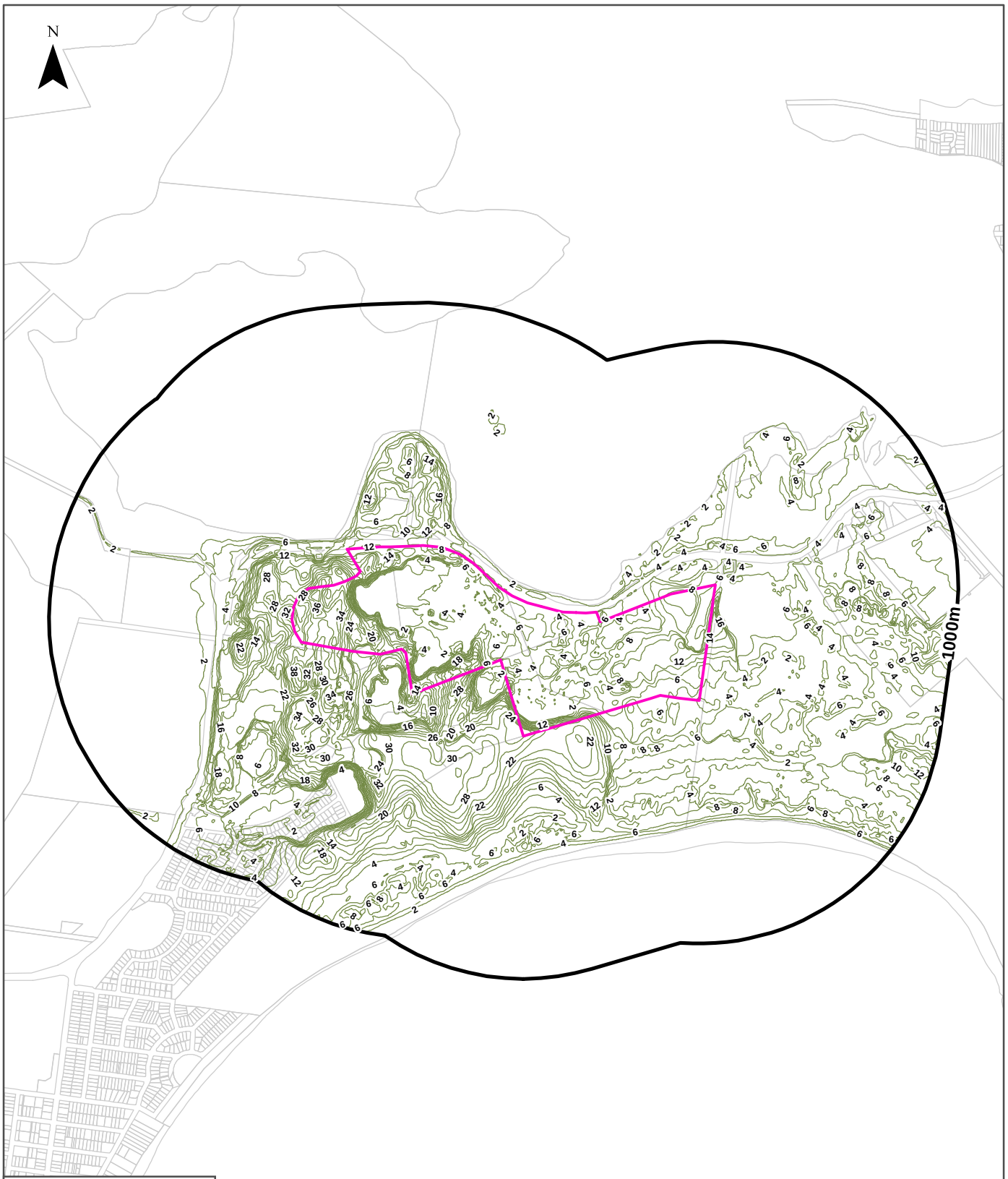
What NPWS Reserves exist within the dataset buffer?

Reserve Number	Reserve Type	Reserve Name	Gazetted Date	Distance	Direction
N0551	NATURE RESERVE	Towra Point Nature Reserve	06/08/1982	30m	North West

NPWS Data Source: © NSW Department of Finance, Services & Innovation (2018)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Elevation Contours (m AHD)

330 Captain Cook Drive, Kurnell, NSW 2231



Legend

- Elevation Contour (m AHD)
- Site Boundary
- Report Buffer
- Property Boundary

Accuracy & Currency: This contour data can be up to 0.4 of the contour interval out in height and must therefore not be used for any design or engineering works, but only as a general guide to topography. Gaps may occur along contour lines due to vertical topography, obscured topography in the source photography such as buildings, dense vegetation or dead ground, or the fact that original buildings have been replaced in the intervening thirty years since the original contour capture.

Scale:	Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2020	Coordinate System: GDA 1994 MGA Zone 56	Date: 22 May 2020

0 100 200 400 Meters

Hydrogeology & Groundwater

330 Captain Cook Drive, Kurnell, NSW 2231

Hydrogeology

Description of aquifers on-site:

Description
Porous, extensive aquifers of low to moderate productivity

Description of aquifers within the dataset buffer:

Description
Porous, extensive aquifers of low to moderate productivity

Hydrogeology Map of Australia : Commonwealth of Australia (Geoscience Australia)
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Botany Groundwater Management Zones

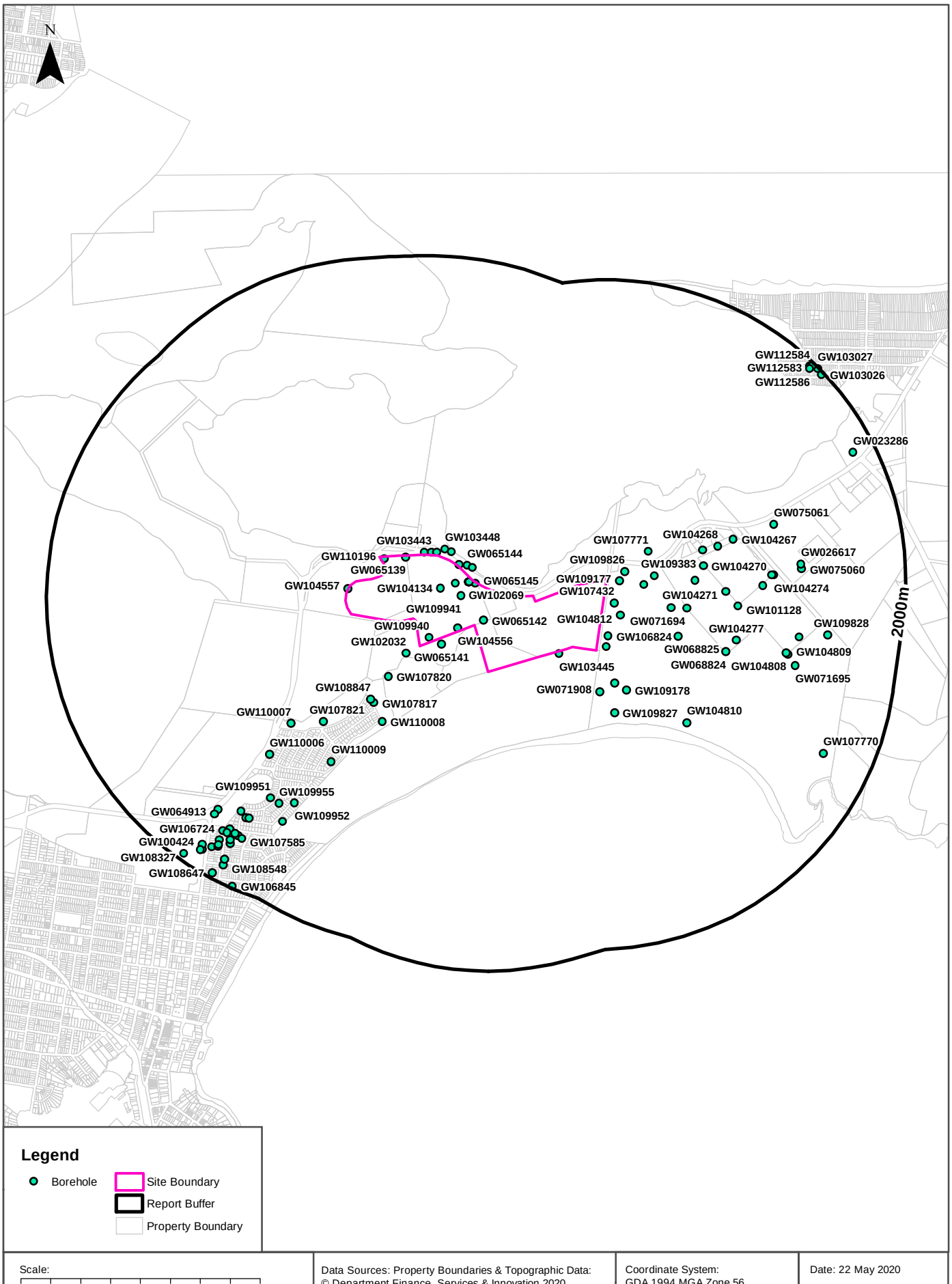
Groundwater management zones relating to the Botany Sand Beds aquifer within the dataset buffer:

Management Zone No.	Restriction	Distance	Direction
N/A	No records in buffer		

Botany Groundwater Management Zones Data Source : NSW Department of Primary Industries

Groundwater Boreholes

330 Captain Cook Drive, Kurnell, NSW 2231



Hydrogeology & Groundwater

330 Captain Cook Drive, Kurnell, NSW 2231

Groundwater Boreholes

Boreholes within the dataset buffer:

GW No.	Licence No	Work Type	Owner Type	Authorised Purpose	Intended Purpose	Name	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m bgl)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW102069	10BL158678	Bore		Monitoring Bore	Monitoring Bore		11/07/1996	21.20	21.20		15.70			0m	Onsite
GW102074	10BL158678	Bore		Monitoring Bore	Monitoring Bore		03/06/1994	10.50	10.50		5.75			0m	Onsite
GW109941	10BL602619	Well	Private	Monitoring Bore	Monitoring Bore		12/05/2008	9.75	9.75					0m	Onsite
GW065139		Bore	Private		Monitoring Bore		13/05/1992	17.50		501-1000 ppm				0m	Onsite
GW102067	10BL158678	Bore		Monitoring Bore	Monitoring Bore		12/02/1998	9.00	9.00					0m	Onsite
GW102070	10BL158678	Bore		Monitoring Bore	Monitoring Bore		15/07/1998	9.40	9.40					0m	Onsite
GW102076	10BL158678	Bore		Monitoring Bore	Monitoring Bore		15/07/1996	9.15	9.20		3.75			0m	Onsite
GW102068	10BL158678	Bore		Monitoring Bore	Monitoring Bore		13/01/1998	9.00	9.00					0m	Onsite
GW065145		Bore	Private		Monitoring Bore		01/05/1992	12.00		0-500 ppm				0m	Onsite
GW104134	10BL160171, 10WA114705	Bore		Industrial	Industrial		05/07/2001	14.90	15.20	490				0m	Onsite
GW102072	10BL158678	Bore		Monitoring Bore	Monitoring Bore		02/06/1994	8.20	8.50		2.70			0m	Onsite
GW110548	10BL602039, 10WA114791	Excavation	Private	Industrial	Industrial		11/12/2009	2.00						0m	Onsite
GW110196	10BL602969	Well	Private	Monitoring Bore	Monitoring Bore		10/12/2008	15.00	15.00		8.20			0m	Onsite
GW102075	10BL158678	Bore		Monitoring Bore	Monitoring Bore		15/07/1996	8.05	8.10		2.45			0m	Onsite
GW102071	10BL158678	Bore		Monitoring Bore	Monitoring Bore		03/06/1994	8.50	8.50		2.55			0m	Onsite
GW104556	10BL160310	Bore	Private	Monitoring Bore	Monitoring Bore		18/06/2001	7.50	7.50	660	4.20			0m	Onsite
GW102073	10BL158678	Bore		Monitoring Bore	Monitoring Bore		03/06/1994	10.00	10.00					0m	Onsite
GW065142		Bore	Private		Monitoring Bore		01/05/1992	13.50	9.98	0-500 ppm				0m	Onsite
GW109940	10BL602619	Well	Private	Monitoring Bore	Monitoring Bore		14/05/2008	26.50	26.50		23.00			0m	Onsite
GW104557	10BL160310	Bore	Private	Monitoring Bore	Monitoring Bore		19/06/2001	30.00	30.00	570	26.80			2m	West
GW103444	10BL159833	Bore		Monitoring Bore	Monitoring Bore		29/03/2000	8.34	8.34					12m	North West
GW065140		Bore	Private		Monitoring Bore		01/05/1992	21.00		0-500 ppm				16m	North West
GW103443	10BL159833	Bore		Monitoring Bore	Monitoring Bore		29/03/2000	11.64	11.64					18m	North West
GW103445	10BL159833	Bore		Monitoring Bore	Monitoring Bore		29/03/2000	7.00	7.00					19m	South East
GW103447	10BL159833	Bore		Monitoring Bore	Monitoring Bore		26/05/2000	11.00	11.00					20m	North West

GW No.	Licence No	Work Type	Owner Type	Authorised Purpose	Intended Purpose	Name	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m bgl)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW065141	10BL160310	Bore	Private	Monitoring Bore	Monitoring Bore		15/05/1992	7.00	7.00	0-500 ppm	2.80			41m	South West
GW065144		Bore	Private		Monitoring Bore		13/05/1992	12.00		0-500 ppm				46m	North
GW103448	10BL159833	Bore		Monitoring Bore	Monitoring Bore		26/05/2000	7.00	7.00					56m	North West
GW065143		Bore	Private		Monitoring Bore		14/05/1992	13.50		0-500 ppm				57m	North West
GW103446	10BL159833	Bore		Monitoring Bore	Monitoring Bore		26/05/2000	7.00	7.00					58m	North
GW106825	10BL161408	Bore		Monitoring Bore	Monitoring Bore		27/11/1997	9.00	9.00		3.23			65m	East
GW106824	10BL161408	Bore		Monitoring Bore	Monitoring Bore		27/11/1997	15.00	15.00		3.10			65m	East
GW107432	10BL165297, 10WA113950	Spear	Private	Domestic	Domestic		06/10/2005	4.00	4.00	Good	2.00	0.500		75m	East
GW109177	10BL165852, 10WA114751	Collector system	Private	Industrial, Industrial - Sand & Gravel	Industrial		07/08/2008	3.00						89m	East
GW102032	10BL158693, 10WA114667	Bore		Experimental/ research	Experimental/research		27/08/1998	7.50	7.50		1.04	2.500		103m	South West
GW104812	10BL161408	Bore	Private	Monitoring Bore	Monitoring Bore		27/09/2002	14.40	14.40					126m	East
GW109826	10BL601895	Well	Private	Monitoring Bore	Monitoring Bore		25/05/2007	11.00	11.00					132m	East
GW104813	10BL161408	Bore	Private	Monitoring Bore	Monitoring Bore		21/04/2002	16.20	16.20		4.50			253m	South East
GW104811	10BL161408	Bore	Private	Monitoring Bore	Monitoring Bore		25/04/2002	14.00	14.00		4.92			257m	East
GW071908	10BL150448	Bore	Private	Irrigation	Irrigation		19/04/1991	29.30		500	3.40	8.800	10.00	281m	South East
GW107820	10BL165880, 10WA114795	Bore		Recreation (groundwater)			12/02/2007							290m	South West
GW109383	10BL602511, 10WA114751	Spear	Private	Industrial, Industrial - Sand & Gravel	Industrial		09/10/2008	7.00	7.00					324m	East
GW109178	10BL601853, 10WA114751	Excavation	Private	Industrial, Industrial - Sand & Gravel	Industrial - Sand & Gravel		07/08/2008	3.00						335m	South East
GW107771	10BL165977, 10WA114071	Spear		Stock	Stock		01/01/1992	5.00				20.000		336m	East
GW109827	10BL601895	Well	Private	Monitoring Bore	Monitoring Bore		24/05/2007	18.00	18.00					437m	South East
GW071694	10BL150446	Bore	Private	Irrigation	Irrigation		01/10/1990	15.00		0-500 ppm			10.00	458m	East
GW108847	10BL600306, 10BL601164, 10WA114777	Excavation	Private	Industrial, Industrial - Sand & Gravel, Test Bore	Industrial, Industrial - Sand & Gravel		29/04/2008	3.00						482m	South West
GW107817	10BL165756	Bore		Artificial Recharge			08/02/2007							486m	South West
GW068825		Bore	Private		Irrigation		24/10/1990	15.00	15.00	501-1000 ppm	1.20	13.400		528m	East
GW104276	10BL160415	Bore	Private	Monitoring Bore	Monitoring Bore		17/07/2001	12.90	12.90	834				560m	East
GW110008	10BL600168	Well	Private	Monitoring Bore	Monitoring Bore		10/02/2006	21.00	21.00					563m	South West

GW No.	Licence No	Work Type	Owner Type	Authorised Purpose	Intended Purpose	Name	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m bgl)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW104275	10BL160415	Bore	Private	Monitoring Bore	Monitoring Bore		26/05/1997	2.10	2.10	408				595m	East
GW104270	10BL160415	Bore	Private	Monitoring Bore	Monitoring Bore		21/05/1997	5.00	5.00	390				655m	East
GW104269	10BL160415	Bore	Private	Monitoring Bore	Monitoring Bore		21/05/1997	4.10	4.10	592				672m	East
GW107821	10BL165881, 10WA114797	Bore		Recreation (groundwater)			12/02/2007							743m	South West
GW104810	10BL161408	Bore	Private	Monitoring Bore	Monitoring Bore		25/09/2002	14.60	14.60		0.80			776m	South East
GW104268	10BL160415	Bore	Private	Monitoring Bore	Monitoring Bore		24/05/1997	4.00	4.00	568				776m	East
GW104271	10BL160415	Bore	Private	Monitoring Bore	Monitoring Bore		22/05/1997	5.50	5.50	360				803m	East
GW110007	10BL600168	Well	Private	Monitoring Bore	Monitoring Bore		10/02/2006	10.20	10.20					835m	South West
GW068824		Bore	Private		Irrigation		20/10/1990	18.00	18.00	0-500 ppm	1.20	3.700		859m	East
GW104267	10BL160415	Bore	Private	Monitoring Bore	Monitoring Bore		24/05/1997	4.00	4.00	464				889m	East
GW101128	10BL158095	Bore	Private	Monitoring Bore	Monitoring Bore		26/05/1997	5.80	5.80		3.50			899m	East
GW104277	10BL160415	Bore	Private	Monitoring Bore	Monitoring Bore		19/07/2001	19.50	19.50	316				917m	East
GW110009	10BL600168	Well	Private	Monitoring Bore	Monitoring Bore		14/08/2003	20.00	20.00					973m	South West
GW104272	10BL160415	Bore	Private	Monitoring Bore	Monitoring Bore		23/05/1997	5.80	5.80	1440				1049m	East
GW110006	10BL600168	Well	Private	Monitoring Bore	Monitoring Bore		10/02/2006	8.00	8.00					1086m	South West
GW104273	10BL160415	Bore	Private	Monitoring Bore	Monitoring Bore		23/05/1997	4.00	4.00	1010				1106m	East
GW104274	10BL160415	Bore	Private	Monitoring Bore	Monitoring Bore		16/07/2001	6.40	6.40	2530				1120m	East
GW075061		Bore	NSW Office of Water		Monitoring Bore	BOTANY BORE AT ABBOTTS LABORATORY (WEST)	29/05/2001	5.35	5.35				13.23	1178m	East
GW104808	10BL161408	Bore	Private	Monitoring Bore	Monitoring Bore		27/09/2002	4.00	4.00		2.20			1260m	East
GW104809	10BL161408	Bore	Private	Monitoring Bore	Monitoring Bore		25/04/2002	18.50	18.50					1272m	East
GW075060		Bore	NSW Office of Water			BOTANY BORE AT ABBOTTS LABORATORY (EAST)	29/05/2001	6.10	6.10				13.23	1306m	East
GW026617	10BL019132, 10WA112980	Bore	Private	Domestic	Irrigation		01/12/1966	8.80	8.80					1306m	East
GW109952	10BL602573	Well	Private	Monitoring Bore	Monitoring Bore		17/03/2008	24.50	24.50					1317m	South West
GW071695	10BL150447	Bore	Private	Irrigation	Irrigation		29/04/1991	14.00		0-500 ppm			20.00	1331m	East
GW104278	10BL160415	Bore	Private	Monitoring Bore	Monitoring Bore		19/07/2001	20.00	20.00	494				1333m	East
GW109951	10BL602573	Well	Private	Monitoring Bore	Monitoring Bore		14/03/2008	18.20	18.20					1342m	South West
GW109955	10BL602573	Well	Private	Monitoring Bore	Monitoring Bore		26/03/2008	13.50	13.50					1354m	South West
GW109953	10BL602573	Well	Private	Monitoring Bore	Monitoring Bore		14/03/2008	23.00	23.00					1460m	South West
GW109954	10BL602573	Well	Private	Monitoring Bore	Monitoring Bore		11/03/2008	17.30	17.30					1510m	South West

GW No.	Licence No	Work Type	Owner Type	Authorised Purpose	Intended Purpose	Name	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m bgl)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW109828	10BL601895	Well	Private	Monitoring Bore	Monitoring Bore		25/05/2007	18.00	18.00					1516m	East
GW028994	10BL019679, 10WA112989	Bore	Private	Mineral Xplore	Industrial		01/04/1967	17.00	17.10					1525m	South West
GW109956	10BL602573	Well	Private	Monitoring Bore	Monitoring Bore		11/03/2008	8.00	8.00					1533m	South West
GW023190	10BL016578	Bore	Local Govt	Recreation (groundwater)	Recreation (groundwater)		01/11/1965	12.10	12.20					1580m	South West
GW064913		Bore	Private		Recreation (groundwater)		17/04/1991	16.00		501-1000 ppm				1620m	South West
GW101508	10BL158084, 10CA114665	Bore	Private	Irrigation, Recreation (groundwater)	Recreation (groundwater)		14/08/1997		14.00					1650m	South West
GW106191	10BL163781, 10WA113677	Spear	Private	Domestic	Domestic		28/03/2004	6.00	6.00					1659m	South West
GW106188	10BL163797, 10WA113686	Spear	Private	Domestic	Domestic		08/03/2004	6.00	6.00					1663m	South West
GW107770	10BL165978, 10WA114072	Bore		Domestic			24/01/2007							1668m	South East
GW107585	10BL165701, 10WA114023	Spear	Private	Domestic	Domestic		30/10/2005	7.00	7.00					1669m	South West
GW107448	10BL163730, 10WA113665	Spear	Private	Domestic	Domestic		01/09/2005	8.00	8.00					1679m	South West
GW106724	10BL163728, 10WA113664	Spear	Private	Domestic	Domestic		07/01/2005	6.00	6.00					1685m	South West
GW106171	10BL163770, 10WA113675	Bore	Private	Domestic	Domestic		08/01/2004	6.00	6.00					1714m	South West
GW109026	10BL602061, 10WA114435	Spear	Private	Domestic	Domestic		11/07/2008	6.00		Good	4.00	0.500		1734m	South West
GW111559	10BL600788, 10WA114221	Spear	Private	Domestic	Domestic		21/01/2007	8.00	8.00					1749m	South West
GW106228	10BL163710, 10WA113657	Spear	Private	Domestic	Domestic		28/12/2004	6.00	6.00					1779m	South West
GW107429	10BL165391, 10WA113971	Spear	Private	Domestic	Domestic		30/09/2005	6.00	6.00					1792m	South West
GW108569	10BL601244, 10WA114308	Spear	Private	Domestic	Domestic		31/03/2007	7.00	7.00					1816m	South West
GW100424	10BL153153, 10CA114649	Bore	Private	Irrigation, Recreation (groundwater)	Irrigation, Recreation (groundwater)		21/10/1993	15.00	16.50		4.50	15.000		1833m	South West
GW108210	10BL600008, 10WA114080	Spear	Private	Domestic	Domestic		21/08/2006	6.00	6.00		4.00	0.500		1844m	South West

GW No.	Licence No	Work Type	Owner Type	Authorised Purpose	Intended Purpose	Name	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m bgl)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW023286	10BL016738, 10WA112841	Well	Private	Domestic, General Use	General Use			3.60	3.70	Good				1852m	North East
GW111524	10BL600998, 10BL601901, 10CA114649	Bore	Private	Irrigation, Recreation (groundwater), Test Bore	Irrigation, Recreation (groundwater)		31/05/2006	9.50	9.50	good	4.60	5.500		1860m	South West
GW069138	10BL145301, 10CA114649	Bore	Private	Irrigation, Recreation (groundwater)	Irrigation, Recreation (groundwater)		21/04/1993	0.00	16.50		4.60	15.000		1868m	South West
GW108548	10BL601194, 10WA114298	Spear	Private	Domestic	Domestic		20/02/2007	6.00	6.00		4.00	0.500		1882m	South West
GW108327	10BL600055	Bore		Test Bore			21/08/2007							1955m	South West
GW112586	10BL603997	Bore	Private	Monitoring Bore	Monitoring Bore		21/05/2010	3.00	3.00		2.50			1955m	North East
GW108647	10BL601398, 10WA114337	Spear	Private	Domestic	Domestic		22/03/2007	6.00	6.00		3.00	0.500		1962m	South West
GW112583	10BL603997	Bore	Private	Monitoring Bore	Monitoring Bore		21/05/2010	3.00	3.00		2.50			1964m	North East
GW112584	10BL603997	Bore	Private	Monitoring Bore	Monitoring Bore		21/05/2010	3.00	3.00		2.50			1968m	North East
GW112585	10BL603997	Bore	Private	Monitoring Bore	Monitoring Bore		21/05/2010	3.00	3.00		2.50			1976m	North East
GW103026	10BL155214, 10WA114653	Bore	Private	Industrial	Industrial		07/08/2000	20.10	20.10	19340	1.50			1983m	North East
GW106845	10BL162527, 10WA113440	Spear	Private	Domestic	Domestic		11/02/2005	7.00	7.00					1985m	South West
GW103027	10BL155214, 10WA114653	Bore		Industrial	Industrial		08/08/2000		14.00	876				1990m	North East

Borehole Data Source : NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corporation for all bores prefixed with GW. All other bores © Commonwealth of Australia (Bureau of Meteorology) 2015. Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Hydrogeology & Groundwater

330 Captain Cook Drive, Kurnell, NSW 2231

Driller's Logs

Drill log data relevant to the boreholes within the dataset buffer:

Groundwater No	Drillers Log	Distance	Direction
GW102067	0.00m-1.00m Sand Fill 1.00m-9.00m Sand (natural)	0m	Onsite
GW102068	0.00m-9.00m Sand	0m	Onsite
GW102069	0.00m-21.20m Sand	0m	Onsite
GW102070	0.00m-2.70m Fill, Sand and Gravel 2.70m-9.40m Sand (natural)	0m	Onsite
GW102071	0.00m-1.50m Fill, Sandy Gravel 1.50m-8.50m Sand, Natural	0m	Onsite
GW102072	0.00m-4.00m Sandy Gravel Fill 4.00m-8.50m Sand, natural	0m	Onsite
GW102073	0.00m-10.00m Sand	0m	Onsite
GW102074	0.00m-0.20m Gravel Fill 0.20m-10.50m Sand, natural	0m	Onsite
GW102075	0.00m-2.00m Sand 2.00m-5.00m Silty Sand 5.00m-8.10m Sand	0m	Onsite
GW102076	0.00m-9.20m Sand	0m	Onsite
GW104134	0.00m-1.00m FILL 1.00m-2.00m SAND/CLAY 2.00m-5.10m SAND GREY AND YELLOW 5.10m-5.30m CLAY BLACK SOFT 5.30m-12.80m SAND GREY 12.80m-15.20m CLAY MUD	0m	Onsite
GW104556	0.00m-1.50m FILL, GRAVELLY SAND 1.50m-7.50m SAND FINE TO MEDIUM GRAINED	0m	Onsite
GW109940	0.00m-4.00m FILL 4.00m-26.50m SAND	0m	Onsite
GW109941	0.00m-2.50m FILL 2.50m-9.75m SAND	0m	Onsite
GW110196	0.00m-15.00m SAND, FINE TO MED. GRAINED	0m	Onsite
GW104557	0.00m-30.00m SAND:FINE GRAINED,BROWN,BEIGE,YELLOW	2m	West
GW103444	0.00m-8.34m SAND:YELLOW,MOIST,BECOMING GREY	12m	North West
GW103443	0.00m-0.70m SAND: BROWN, MOIST, FINE GRAINED 0.70m-11.64m SAND:YELLOW,MOIST,FINE GRAINED	18m	North West
GW103445	0.00m-0.20m SILTY SAND 0.20m-7.00m SAND:YELLOW MOIST,FINE GRAINED	19m	South East
GW103447	0.00m-3.00m SAND:DARK BROWN,SOME GRAVEL 3.00m-11.00m SAND:YELLOW,MOIST,FINE GRAINED	20m	North West
GW103448	0.00m-7.00m SAND:BROWN,MOIST,YELLOW,FN/GRAINED	56m	North West
GW103446	0.00m-7.00m SAND:BROWN,GREY,MEDIUM GRAINED	58m	North
GW107432	0.00m-4.00m sand, white	75m	East
GW102032	0.00m-5.00m Cronulla Sand, Fine Yellow 5.00m-7.50m Grey Marine Clay with Silty Clay	103m	South West
GW104812	0.00m-10.50m FILL 10.50m-14.40m SAND	126m	East

Groundwater No	Drillers Log	Distance	Direction
GW109826	0.00m-1.50m CLAYEY SAND, FINE TO MEDIUM GRAINED SAND,ROCK FRAG. 1.50m-2.50m SAND,FINE TO MEDIUM GRAINED,BROWN,SOME SHELL FRAGMENTS 2.50m-11.00m SAND,MEDIUM GRAINED,LIGHT BROWN	132m	East
GW104813	0.00m-11.50m FILL 11.50m-16.20m SAND	253m	South East
GW104811	0.00m-14.00m CLEAN FILL	257m	East
GW109383	0.00m-7.00m UNCONSOLIDATED SANDS	324m	East
GW109827	0.00m-2.00m CLAYEY SAND,MEDIUM TO COARSE GRAINED,LOW PLASTICITY,BROWN 2.00m-3.60m SAND, FINE TO MEDIUM GRAINED,BROWN TO GREY,SHELL FRAG. 3.60m-18.00m SAND,FINE TO MEDIUM GRAINED,GREY,SOME CLAY	437m	South East
GW068825	0.00m-1.50m Fine-medium Grained,brown Sand 1.50m-12.50m Fine-medium Grained,dark Brown To Dark Grey Sand, Coarsening With Depth. Shells Up To 50 Mm. Diameter. 12.50m-15.00m Fine-medium Grained White Sandstone	528m	East
GW104276	0.00m-0.50m SAND, LIGHT GREY,DRY,SHELLS 0.50m-3.00m SAND,YELLOW/BROWN,SHELLS 3.00m-3.10m SAND,DARK GREY 3.10m-4.00m SAND,LIGHT GREY 4.00m-6.00m SAND,BROWN,DARK GREY,CLAY,SHELLS 6.00m-12.90m SAND,GREY,QUARTZ,SHELLS	560m	East
GW110008	0.00m-21.00m SAND,L/BROWN,FINE GRAINED,WELL SORTED.	563m	South West
GW104275	0.00m-0.60m SAND, YELLOW FINE TO MEDIUM 0.60m-1.50m SAND BLACK,DARK, GREY 1.50m-2.10m SAND GREY, FINE TO MEDIUM	595m	East
GW104270	0.00m-0.10m SAND,DARK BROWN 0.10m-2.50m SAND, YELLOW BROWN 2.50m-5.00m SAND,DARK BROWN,PEATY	655m	East
GW104269	0.00m-0.10m SAND AND BRICK FRAGMENTS 0.10m-2.20m SAND, MEDIUM GRAINED,YELLOW,BROWN 2.20m-2.60m SAND,MEDIUM GRAINED 2.60m-3.30m SAND,SILTY,MED.GRAINED,PEATY 3.30m-4.10m SAND,MED. GRAINED,LIGHT BROWN	672m	East
GW104268	0.00m-0.10m GRAVEL,DARK BROWN 0.10m-0.20m SAND,DARK BROWN 0.20m-0.50m SAND,FINE TO MEDIUM GRAINED 0.50m-4.00m SAND,FINE TO MEDIUM GRAINED,PEATY	776m	East
GW104810	0.00m-14.60m SAND	776m	South East
GW104271	0.00m-1.20m SAND, FINE TO MEDIUM GRAINED 1.20m-3.60m SAND,MEDIUM GRAINED,YELLOW BROWN 3.60m-5.50m SAND,PEATY,DARK BROWN	803m	East
GW110007	0.00m-1.00m SAND,BROWN,FINE GRAINED,WELL SORTED SAND 1.00m-10.20m SAND,LIGHT BROWN,DIE GRAINED,WELL SORTED SAND	835m	South West
GW068824	0.00m-1.50m Brown Fine-medium Grained Sand With 25-30% Crushed Shell2.80m-16.50m Fine-medium Grained, Dark Grey Sand.coarsening Downward With Some Shell 16.50m-17.00m Silty Clay-high Placticity, Black, Marine 17.00m-18.00m Fine-medium Grained, White Sandstone	859m	East
GW104267	0.00m-0.20m SANDY GRAVEL 0.20m-0.40m SAND: FINE TO MEDIUM GRAINED, BROWN 0.40m-4.00m SAND: " " " " GREY	889m	East
GW101128	0.00m-0.30m Sandy gravel 0.30m-0.60m yellow sand 0.60m-5.80m grey sand	899m	East
GW104277	0.00m-2.00m SAND,YELLOW/BROWN/SHELL FRAG. 2.00m-4.00m SAND,GREY/BROWN 4.00m-6.00m PEATY SAND,DARK GREY 6.00m-19.50m SAND,GREY,QUARTZ,MINOR SHELL CONT.	917m	East
GW110009	0.00m-10.00m SAND,FINE TO MEDIUM GRAINED, QUARTZOSE,TREACES OF SHELL FRAG. 10.00m-20.00m SAND, FINE TO MEDIUM GRAINED,QUARTZOSE,YELLOW,PEATS BANDS	973m	South West
GW104272	0.00m-5.80m SAND,FINE TO MEDIUM,DARK BROWN	1049m	East

Groundwater No	Drillers Log	Distance	Direction
GW110006	0.00m-0.20m FILL,GRAVEL/SAND 0.20m-1.00m SAND BROWN, FINE GRAINED,WELL SORTED SAND 1.00m-8.00m SAND,L/BROWN,FINE GRAINED WELL SORTD SAND	1086m	South West
GW104273	0.00m-0.10m SAND,DARK BROWN 0.10m-0.20m SAND,FINE TO MEDIUM 0.20m-4.00m SAND, " " " YELLOW,BROWN	1106m	East
GW104274	0.00m-0.10m SAND, BLACK, DRY,LOOSE,ORG. CONT. 0.10m-3.00m SAND,YELLOW/GREY,SHELL COMP. 3.00m-4.00m CLAYEY SAND 4.00m-5.00m SAN, YELLOW BROWN 5.00m-6.00m CLAYEY SAND 6.00m-6.40m CLAY,YELLOW BROWN	1120m	East
GW075061	0.00m-1.50m sand; yellow sand 1.50m-2.00m sand; coffee coloured sand 2.00m-5.00m sand; clean grey sand 5.00m-5.35m sandy clay; orange brown weathered sandstone; soft to hard; bedrock 5.35m	1178m	East
GW104808	0.00m-4.00m SAND	1260m	East
GW104809	0.00m-3.70m SAND 3.70m-4.20m SAND 4.20m-18.50m SAND	1272m	East
GW026617	0.00m-1.82m Sand Yellow 1.82m-4.26m Sand Grey Wet 4.26m-4.87m Sand Grey Very Clean Wet Water Supply 4.87m-8.83m Sand Grey White Very Clean Water Supply	1306m	East
GW075060	0.00m-1.50m Sand; yellow sand 1.50m-3.00m Sand; coffee coloured sand 3.00m-6.10m sand; clean grey sand	1306m	East
GW109952	0.00m-5.45m FILL 5.45m-24.50m SAND	1317m	South West
GW104278	0.00m-1.50m SAND,YELLOW/BROWN/SHELLS 1.50m-3.10m SAND,GREY,HIGH SHELL CONTENT 3.10m-4.50m PEAT,DARK BROWN BLACK,FINE SAND 4.50m-6.00m CLAYEY SAND,DARK BROWN,QUARTZ 6.00m-20.00m SAND,GREY, QUARTZ DOMINATED	1333m	East
GW109951	0.00m-0.50m FILL 0.50m-16.50m SAND 16.50m-18.20m SANDSTONE EXTREMELY WEATHERED	1342m	South West
GW109955	0.00m-10.45m FILL 10.45m-13.50m SAND	1354m	South West
GW109953	0.00m-12.00m FILL 12.00m-23.00m SAND	1460m	South West
GW109954	0.00m-0.10m FILL 0.10m-16.70m SAND 16.70m-17.30m SANDSTONE EXTREMELY WEATHERED	1510m	South West
GW109828	0.00m-17.00m SAND,F/TO MEDIUM GRAINED,L/BROWN,GREY BANDS,SHELL FRAG,SILT 17.00m-18.00m SANDY CLAY,HIGH PLASTICITY, ORANGE,BROWN,GREY,STIFF,SILT	1516m	East
GW028994	0.00m-8.53m Sand 8.53m-12.80m Sand 12.80m-13.71m Sand Fossils:shell Fragments 13.71m-17.06m Sand Dark 17.06m-17.09m Clay Sandy	1525m	South West
GW109956	0.00m-0.30m FILL 0.30m-8.00m SAND	1533m	South West
GW023190	0.00m-12.19m Sand Water Supply	1580m	South West
GW101508	0.00m-9.00m SAND. LIGHT BROWN, FINE 9.00m-14.00m SAND. LIGHT BROWN WITH GRAVEL TO 25mm	1650m	South West
GW106191	0.00m-6.00m sand	1659m	South West
GW106188	0.00m-6.00m sand	1663m	South West
GW107448	0.00m-8.00m sand	1679m	South West
GW106724	0.00m-6.00m sand	1685m	South West

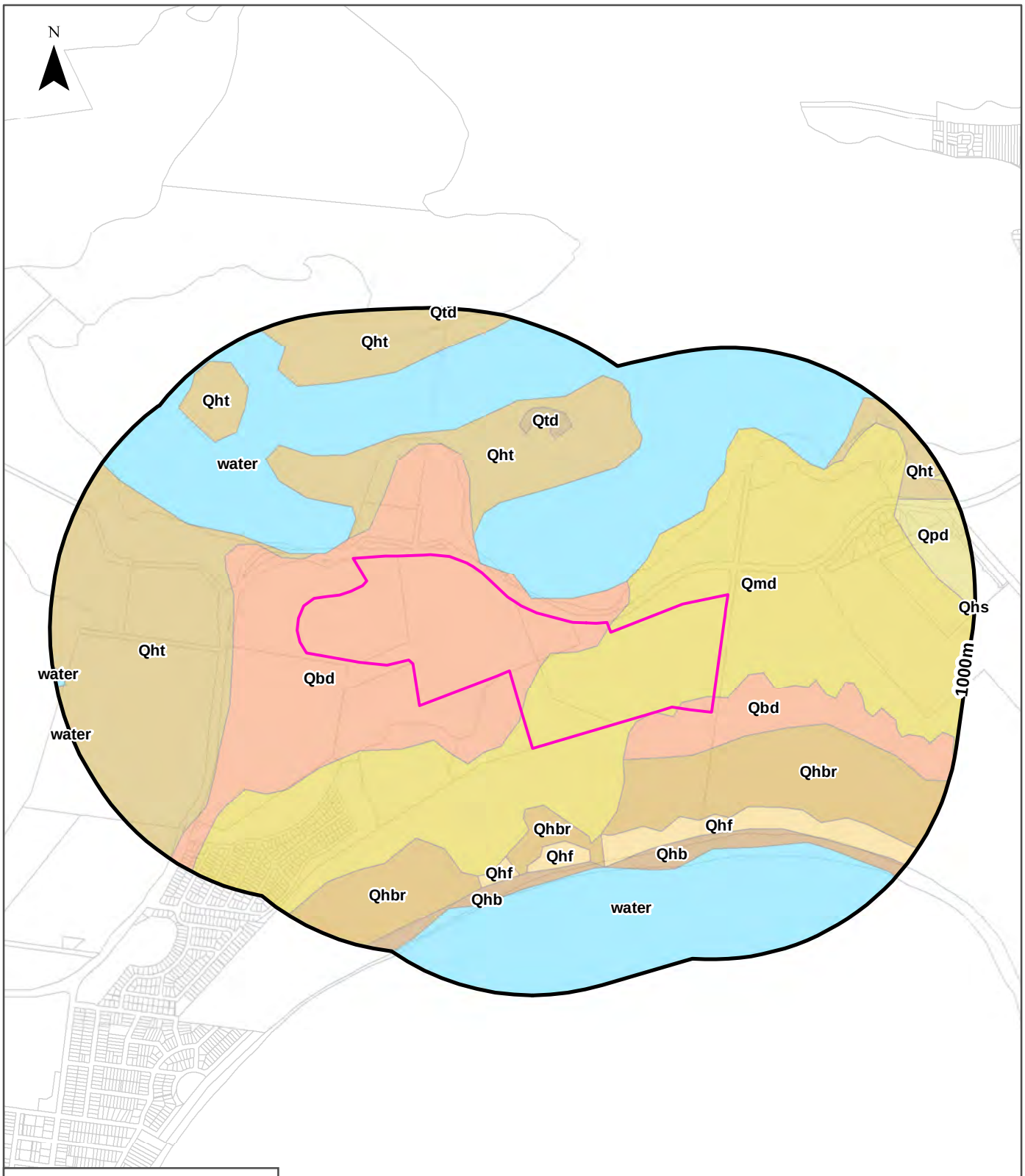
Groundwater No	Drillers Log	Distance	Direction
GW106171	0.00m-6.00m sand	1714m	South West
GW111559	0.00m-8.00m ALL SAND	1749m	South West
GW106228	0.00m-6.00m sand	1779m	South West
GW107429	0.00m-6.00m sand	1792m	South West
GW108569	0.00m-7.00m sand	1816m	South West
GW100424	0.00m-3.00m LIGHT BROWN SAND 3.00m-7.00m YELLOW SAND 7.00m-8.50m WHITE SAND 8.50m-11.50m LIGHT BROWN SAND 11.50m-13.70m GREY SAND 13.70m-15.00m GREY SILTY SAND 15.00m-16.50m DARK GREY SHALEY CLAY	1833m	South West
GW108210	0.00m-0.30m topsoil 0.30m-4.50m sand, yellow 4.50m-6.00m sand, grey	1844m	South West
GW023286	0.00m-3.66m Sand Water Supply	1852m	North East
GW111524	0.00m-0.70m SAND WHITE 0.70m-1.50m SAND YELLOW 1.50m-4.00m SAND WHITE 4.00m-9.50m SAND GREY AND SMALL SHELLS	1860m	South West
GW069138	0.00m-3.00m Light Brown Sand 3.00m-7.00m Yellow Sand 7.00m-8.50m White Sand 8.50m-11.50m Light Brown Sand 11.50m-13.70m Grey Sand 13.70m-15.00m Grey Sand (silty) 15.00m-16.50m Dark Grey Shaley Clay	1868m	South West
GW108548	0.00m-0.30m Topsoil 0.30m-6.00m Sand, yellow	1882m	South West
GW112586	0.00m-0.05m BITUMEN 0.05m-0.20m FILL,CLAYEY SANDY GRAVELLY,SOME GRAVELS 0.20m-0.50m FILL,SAND YELLOW,SANDSTONE INCLUSIONS 0.50m-0.60m CLAYEY SAND,YELLOW BROWN 0.60m-0.70m CLAYEY SAND L/DARK BROWN 0.70m-1.40m CLAYEY SAND L/BROWN YELLOW DAMP TO MOIST 1.40m-1.70m CLAYEY SAND MOIST TO WET 1.70m-3.00m CLAYEY SAND SATURATED	1955m	North East
GW108647	0.00m-0.30m tospoil 0.30m-6.00m sand, yellow	1962m	South West
GW112583	0.00m-0.10m CONCRETE 0.10m-0.80m SAND,L/BROWN,YELLOW,DAMP,LOOSE 0.80m-1.30m SAND D/BROWN 1.30m-1.80m SAND,BROWN,BLACK MOIST TO WET 1.80m-2.40m SAND, L/BROWN SATURATED 2.40m-3.00m SAND. SHELL INCLUSIONS	1964m	North East
GW112584	0.00m-0.05m BITUMEN 0.05m-0.20m FILL,CLAYEY GRAVELLY SAND,GREY BROWN,SOME GRAVELS 0.20m-0.50m CLAYEY SAND,YELLOW/BROWN 0.50m-0.90m CLAYEY SAND BROWN 0.90m-1.40m CLAYEY SAND GREY/WHITE,DAMP/MOIST 1.40m-1.70m CLAYEY SAND GREY BROWN,WET,SATURATED 1.70m-3.00m CLAYEY SAND.DARK BROWN,SHELL INCLUSIONS	1968m	North East
GW112585	0.00m-0.15m FILL,SAND BROWN,GRAVEL INCLUSIONS 0.15m-0.20m CLAYEY SAND YELLOW DRY TO DAMP 0.20m-0.80m CLAYEY SAND YELLOW TO DARK BROWN 0.80m-1.50m CLAYEY SAND L/BROWN DAMP TO MOIST 1.50m-1.80m CLAYEY SAMD DAM,P TO WET 1.80m-3.00m C;AYEY SAND,SOME GREY,SHELL INCLUSIONS	1976m	North East
GW103026	0.00m-1.50m sand 1.50m-1.90m concrete 1.90m-7.40m shells 7.40m-7.70m sand 7.70m-13.70m sand 13.70m-15.50m sand 15.50m-20.10m sand grey and brown	1983m	North East

Groundwater No	Drillers Log	Distance	Direction
GW106845	0.00m-7.00m sand	1985m	South West
GW103027	0.00m-1.50m SAND 1.50m-1.90m CONCRETE 1.90m-14.00m SAND AND SHELLS	1990m	North East

Drill Log Data Source: NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corp
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Geology 1:100,000

330 Captain Cook Drive, Kurnell, NSW 2231



Geology

330 Captain Cook Drive, Kurnell, NSW 2231

Geological Units

What are the Geological Units onsite?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dataset
Qbd	medium to fine 'marine' quartz sand and podsols	Unnamed					Wollongong & Port Hacking	1:100,000
Qmd	'marine' quartz sand	Unnamed					Wollongong & Port Hacking	1:100,000

What are the Geological Units within the dataset buffer?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dataset
Qbd	medium to fine 'marine' quartz sand and podsols	Unnamed					Wollongong & Port Hacking	1:100,000
Qhb	coarse quartz sand, varying amounts of shell fragments	Unnamed					Wollongong & Port Hacking	1:100,000
Qhbr	quartz sand, minor shell content, silt and fine sand	Unnamed					Wollongong & Port Hacking	1:100,000
Qhf	medium to fine-grained 'marine' sand	Unnamed					Wollongong & Port Hacking	1:100,000
Qhs	peat, sandy peat, mud	Unnamed					Wollongong & Port Hacking	1:100,000
Qht	sandy mud, muddy sand	Unnamed					Wollongong & Port Hacking	1:100,000
Qmd	'marine' quartz sand	Unnamed					Wollongong & Port Hacking	1:100,000
Qpd	medium to fine-grained 'marine' sand with podsols	Unnamed					Wollongong & Port Hacking	1:100,000
Qtd	clean to muddy, shelly, mostly 'marine' sand, sometimes with low dunes	Unnamed					Wollongong & Port Hacking	1:100,000
water							Wollongong & Port Hacking	1:100,000

Geological Structures

What are the Geological Structures onsite?

Feature	Name	Description	Map Sheet	Dataset
No features				1:100,000

What are the Geological Structures within the dataset buffer?

Feature	Name	Description	Map Sheet	Dataset
No features				1:100,000

Geological Data Source : NSW Department of Industry, Resources & Energy
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Naturally Occurring Asbestos Potential

330 Captain Cook Drive, Kurnell, NSW 2231

Naturally Occurring Asbestos Potential

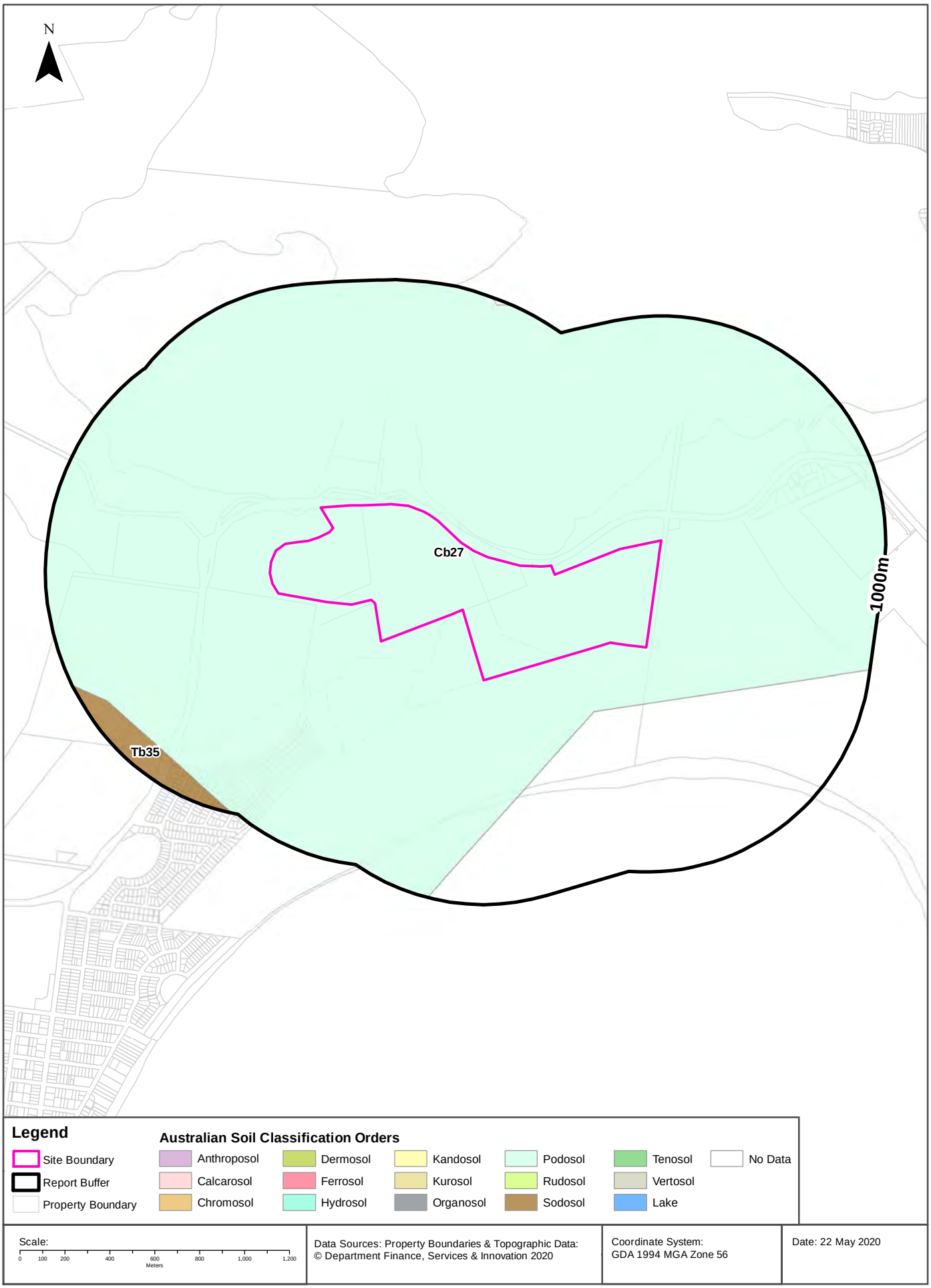
Naturally Occurring Asbestos Potential within the dataset buffer:

Potential	Sym	Strat Name	Group	Formation	Scale	Min Age	Max Age	Rock Type	Dom Lith	Description	Dist	Dir
No records in buffer												

Mining Subsidence District Data Source: © State of New South Wales through NSW Department of Industry, Resources & Energy

Atlas of Australian Soils

330 Captain Cook Drive, Kurnell, NSW 2231



Soils

330 Captain Cook Drive, Kurnell, NSW 2231

Atlas of Australian Soils

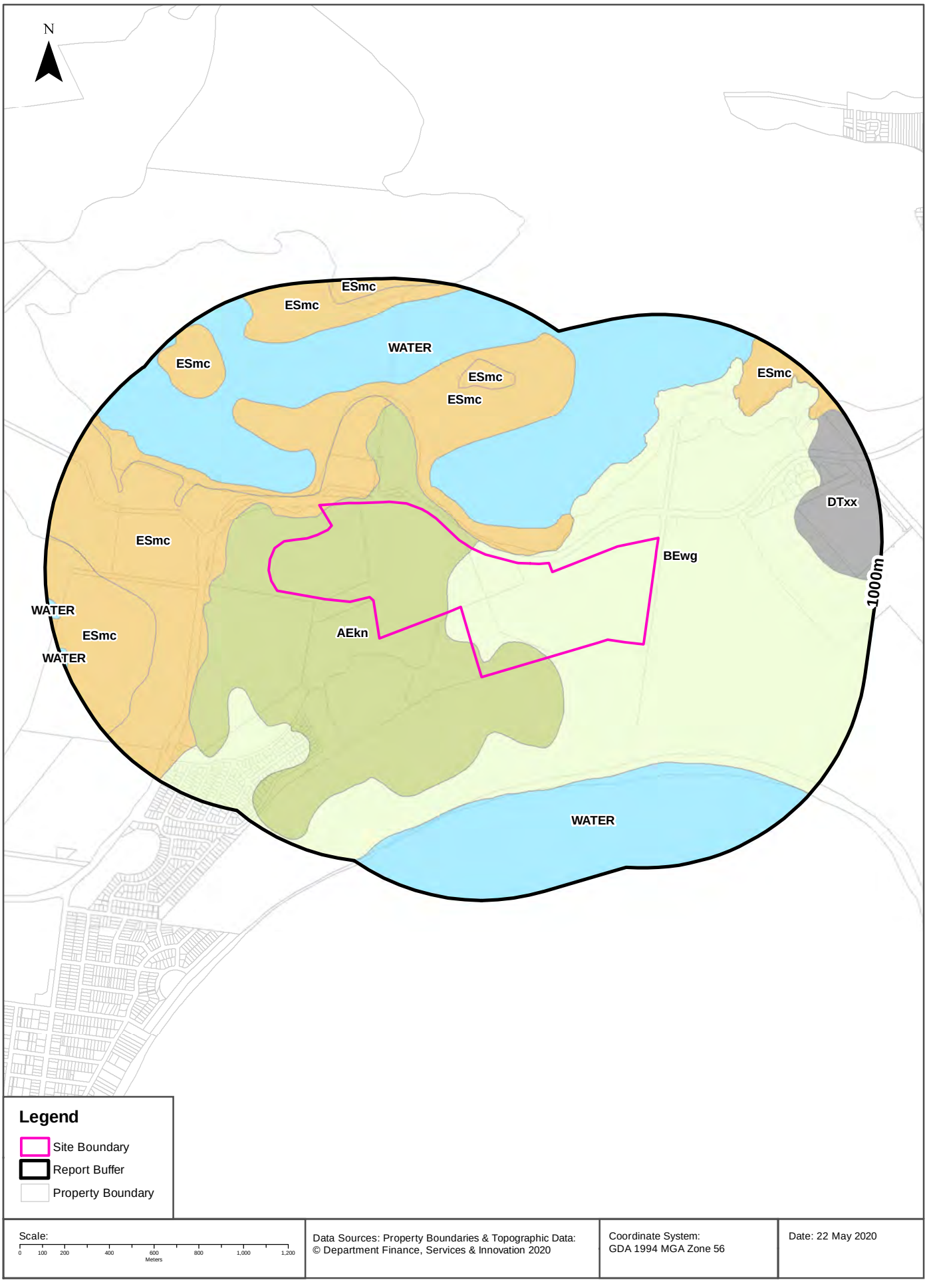
Soil mapping units and Australian Soil Classification orders within the dataset buffer:

Map Unit Code	Soil Order	Map Unit Description	Distance
Cb27	Podosol	Coastal sand plains and dunes, lagoons, and swampy areas: chief soils are leached sands (Uc2.3 and Uc2.2). Associated are dunes of siliceous sands (Uc1.2) and/or calcareous sands (Uc1.l) fringing the coastline; and swampy areas of (Uf6) soils and (Uc1.2) soils with peaty surfaces. Unit Cb27 has similarities with units Cb28 and Ca6.	0m
Tb35	Sodosol	Dissected plateau remnants--flat to undulating ridge tops with moderate to steep side slopes: chief soils are hard acidic yellow and yellow mottled soils (Dy3.41), (Dy2.21), and (Dy2.41) and hard acidic red soils (Dr2.21); many shallow profiles occur and profile thickness varies considerably over short distances. Associated are: (Gn3.54), (Gn3.14), and possibly other (Gn3) soils; (Db1.2) soils on some ridges; (Dy5.81) soils in areas transitional to unit Mb2; soils common to unit Mb2; and eroded lateritic remnants. Small areas of other soils are likely. Flat ferruginous shale or sandstone fragments are common on and/or in and/or below the soils of this unit.	866m

Atlas of Australian Soils Data Source: CSIRO
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Soil Landscapes

330 Captain Cook Drive, Kurnell, NSW 2231



Soils

330 Captain Cook Drive, Kurnell, NSW 2231

Soil Landscapes

What are the onsite Soil Landscapes?

Soil Code	Name	Group	Process	Map Sheet	Scale
AEkn	KURNELL		AEOLIAN	Wollongong & Port Hacking	1:100,000
BEwg	WOLLONGONG		BEACH	Wollongong & Port Hacking	1:100,000
ESmc	MANGROVE CREEK		ESTUARINE	Wollongong & Port Hacking	1:100,000

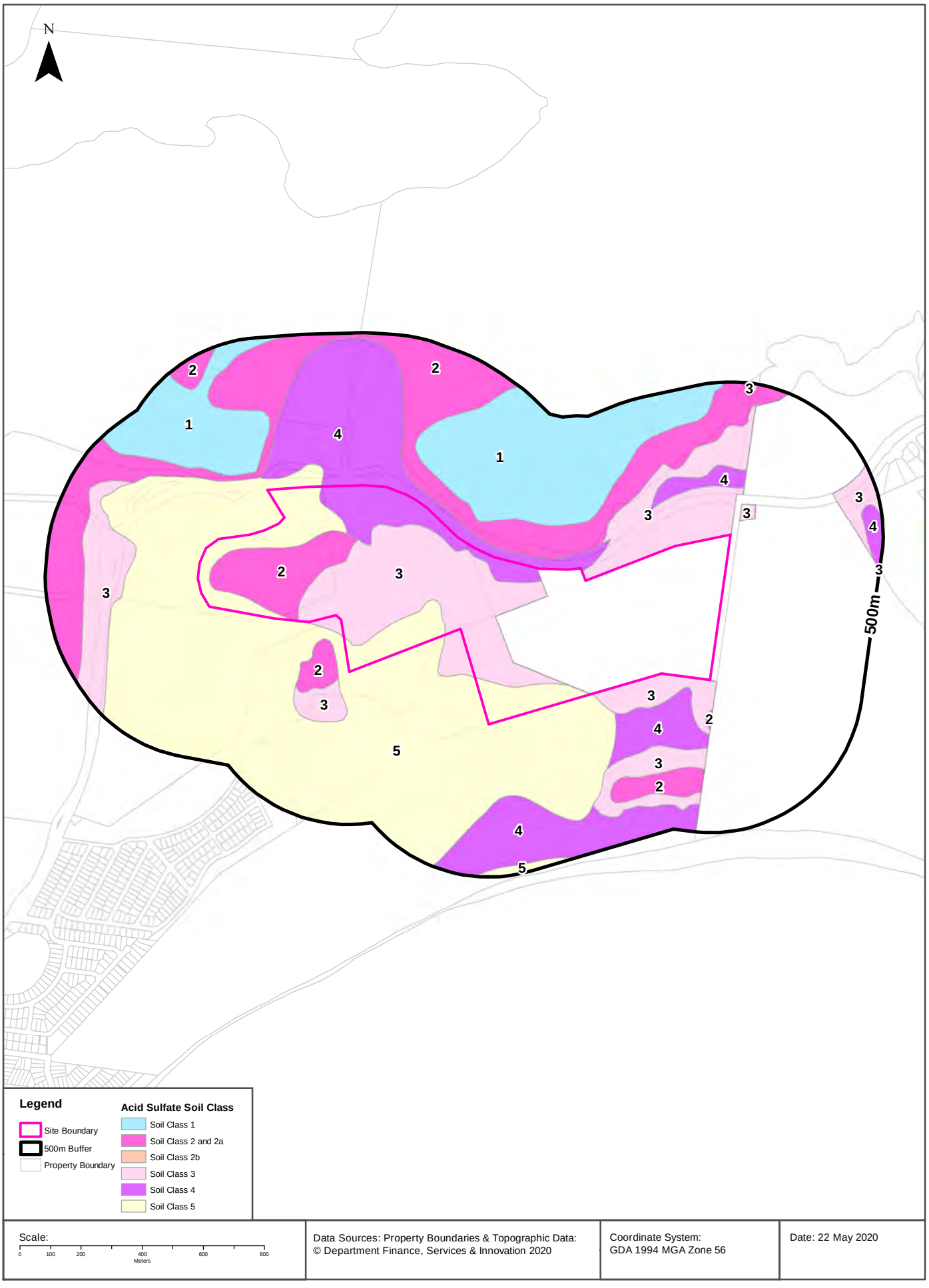
What are the Soil Landscapes within the dataset buffer?

Soil Code	Name	Group	Process	Map Sheet	Scale
AEkn	KURNELL		AEOLIAN	Wollongong & Port Hacking	1:100,000
BEwg	WOLLONGONG		BEACH	Wollongong & Port Hacking	1:100,000
DTxx	DISTURBED TERRAIN		DISTURBED TERRAIN	Wollongong & Port Hacking	1:100,000
ESmc	MANGROVE CREEK		ESTUARINE	Wollongong & Port Hacking	1:100,000
WATER	WATER		WATER	Wollongong & Port Hacking	1:100,000

Soils Landscapes Data Source : NSW Office of Environment and Heritage
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Acid Sulfate Soils

330 Captain Cook Drive, Kurnell, NSW 2231



Acid Sulfate Soils

330 Captain Cook Drive, Kurnell, NSW 2231

Environmental Planning Instrument - Acid Sulfate Soils

What is the on-site Acid Sulfate Soil Plan Class that presents the largest environmental risk?

Soil Class	Description	EPI Name
2	Works below natural ground surface present an environmental risk; Works by which the watertable is likely to be lowered present an environmental risk	Sutherland Shire Local Environmental Plan 2015

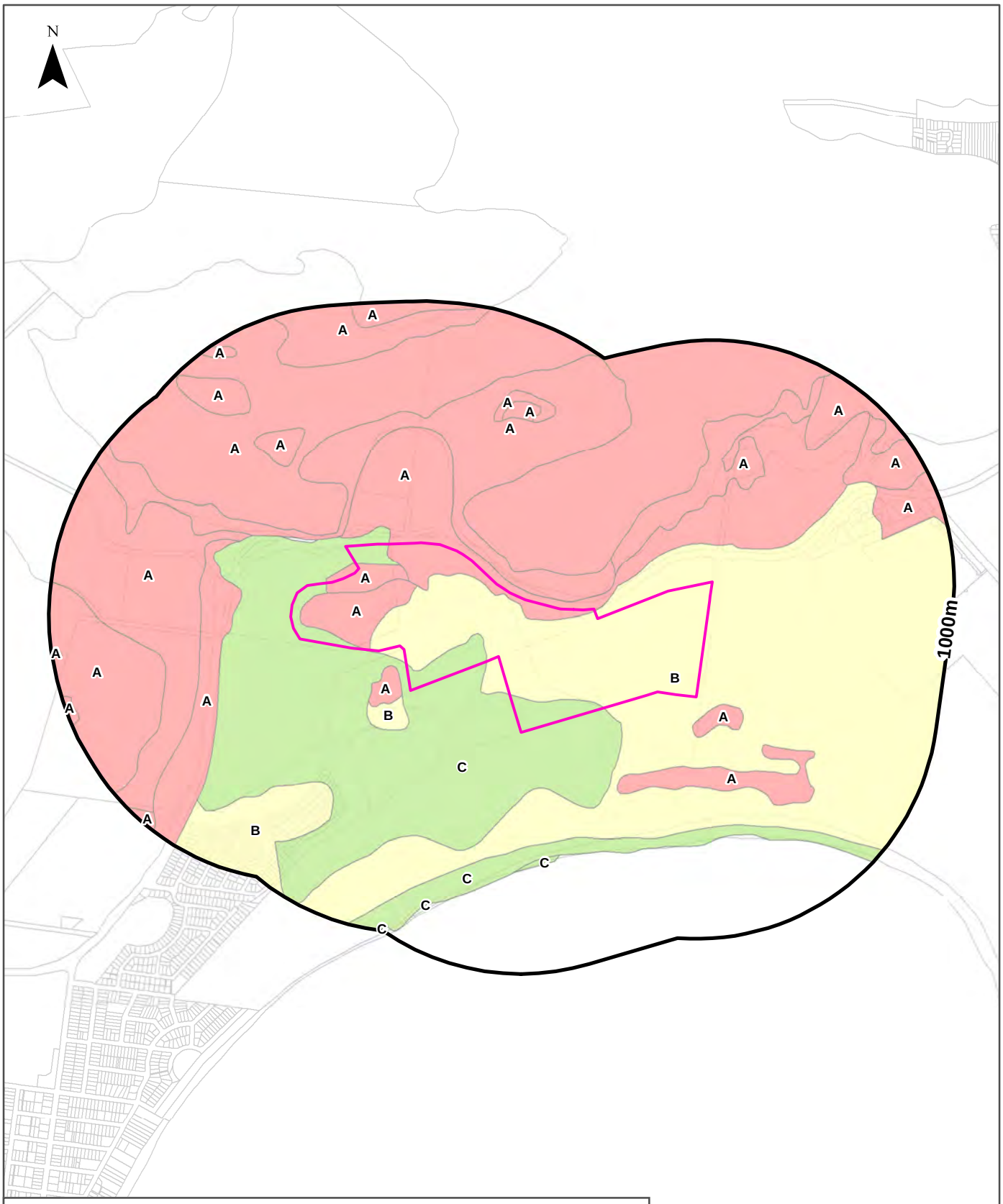
If the on-site Soil Class is 5, what other soil classes exist within 500m?

Soil Class	Description	EPI Name	Distance	Direction
N/A				

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Atlas of Australian Acid Sulfate Soils

330 Captain Cook Drive, Kurnell, NSW 2231



Legend

Site Boundary
Report Buffer
Property Boundary

Probability of occurrence of Acid Sulfate Soils

A. High (>70%)
B. Low (6-70%)
C. Extremely Low (1-5%)
D. No Chance (0%)
No Data

Scale: 0 100 200 400 600 800 1,000 1,200 Meters

Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2020

Coordinate System: GDA 1994 MGA Zone 56

Date: 22May 2020

Acid Sulfate Soils

330 Captain Cook Drive, Kurnell, NSW 2231

Atlas of Australian Acid Sulfate Soils

Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

Class	Description	Distance
A	High Probability of occurrence. >70% chance of occurrence.	0m
B	Low Probability of occurrence. 6-70% chance of occurrence.	0m
C	Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small localised areas.	0m

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO
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Dryland Salinity

330 Captain Cook Drive, Kurnell, NSW 2231

Dryland Salinity - National Assessment

Is there Dryland Salinity - National Assessment data onsite?

No

Is there Dryland Salinity - National Assessment data within the dataset buffer?

No

What Dryland Salinity assessments are given?

Assessment 2000	Assessment 2020	Assessment 2050	Distance	Direction
N/A	N/A	N/A	N/A	N/A

Dryland Salinity Data Source : National Land and Water Resources Audit
The Commonwealth and all suppliers of source data used to derive the maps of "Australia, Forecast Areas Containing Land of High Hazard or Risk of Dryland Salinity from 2000 to 2050" do not warrant the accuracy or completeness of information in this product. Any person using or relying upon such information does so on the basis that the Commonwealth and data suppliers shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information. Any persons using this information do so at their own risk.
In many cases where a high risk is indicated, less than 100% of the area will have a high hazard or risk.

Dryland Salinity Potential of Western Sydney

Dryland Salinity Potential of Western Sydney within the dataset buffer?

Feature Id	Classification	Description	Distance	Direction
N/A	Outside Data Coverage			

Dryland Salinity Potential of Western Sydney Data Source : NSW Office of Environment and Heritage
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Mining Subsidence Districts

330 Captain Cook Drive, Kurnell, NSW 2231

Mining Subsidence Districts

Mining Subsidence Districts within the dataset buffer:

District	Distance	Direction
There are no Mining Subsidence Districts within the report buffer		

Mining Subsidence District Data Source: © Land and Property Information (2016)
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State Environmental Planning Policy

330 Captain Cook Drive, Kurnell, NSW 2231

State Significant Precincts

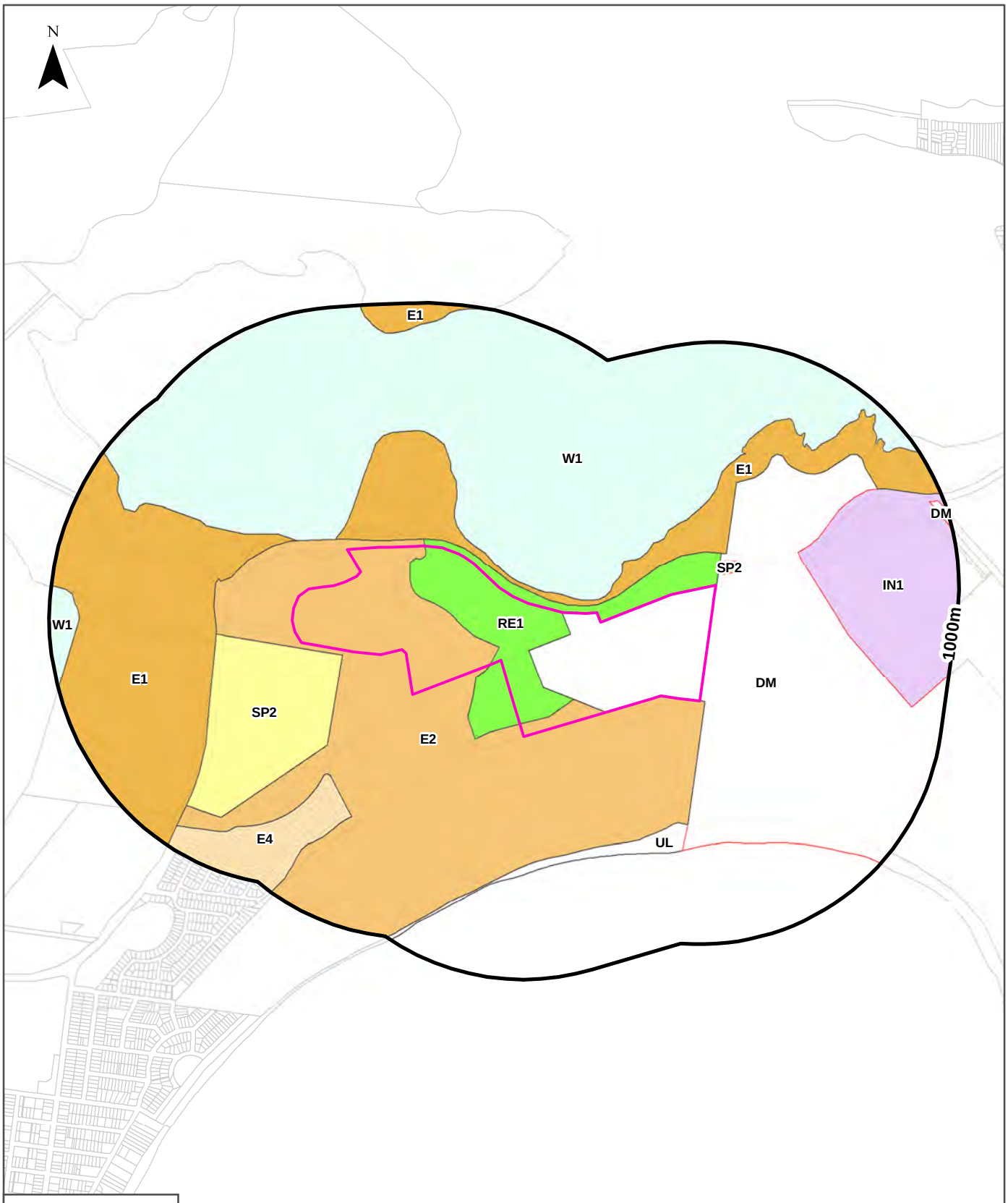
What SEPP State Significant Precincts exist within the dataset buffer?

Map Id	Precinct	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
N/A	No Records in Buffer							

State Environment Planning Policy Data Source: NSW Crown Copyright - Planning & Environment
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EPI Planning Zones

330 Captain Cook Drive, Kurnell, NSW 2231



Scale: 0 100 200 400 600 800 1,000 1,200 Meters	Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2020 Planning: NSW Crown Copyright - Planning & Environment	Coordinate System: GDA 1994 MGA Zone 56	Date: 22 May 2020

Environmental Planning Instrument

330 Captain Cook Drive, Kurnell, NSW 2231

Land Zoning

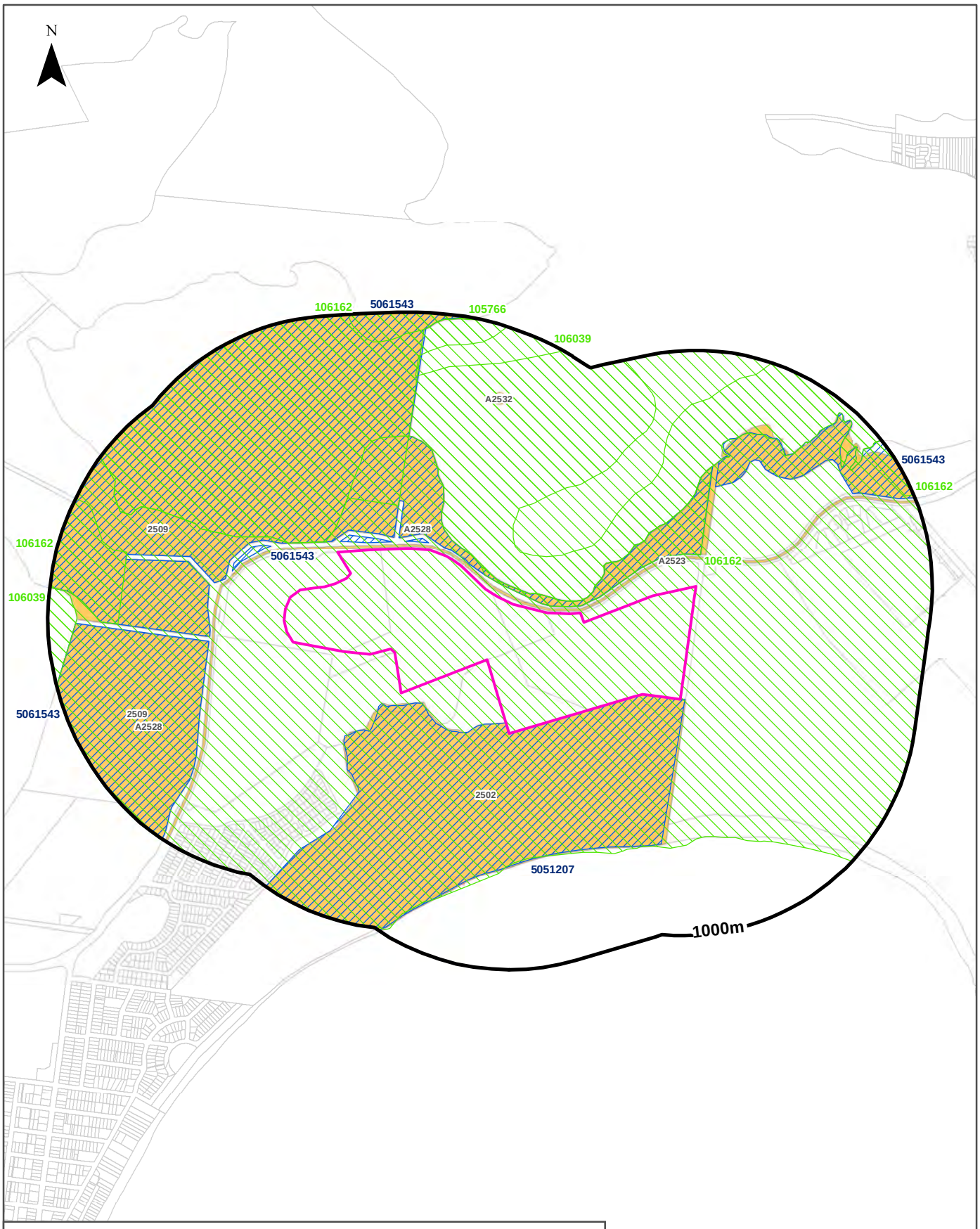
What EPI Land Zones exist within the dataset buffer?

Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
E2	Environmental Conservation		Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	06/03/2020		0m	Onsite
DM	Deferred Matter		Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	06/03/2020		0m	Onsite
RE1	Public Recreation		Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	06/03/2020		0m	Onsite
SP2	Infrastructure	Sewerage System	Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	06/03/2020		19m	West
E1	National Parks and Nature Reserves		Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	06/03/2020		30m	North East
W1	Natural Waterways		Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	06/03/2020		51m	North
SP2	Infrastructure	Sewerage System	Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	06/03/2020		52m	East
E1	National Parks and Nature Reserves		Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	06/03/2020		206m	North West
IN1	General Industrial		Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	06/03/2020		362m	East
E4	Environmental Living		Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	06/03/2020		476m	South West
UL	Unzoned Land		Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	06/03/2020		507m	South
W1	Natural Waterways		Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	06/03/2020		877m	West

Environmental Planning Instrument Data Source: NSW Crown Copyright - Planning & Environment
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Heritage Items

330 Captain Cook Drive, Kurnell, NSW 2231



Legend

Property Boundary	Site Boundary	Commonwealth Heritage List	State Heritage Items
	Report Buffer	National Heritage List	EPI Heritage Items

Scale: 0 100 200 400 600 800 1,000 1,200 Meters

Data Sources: Property Boundaries & Topographic Data: © Department Finance, Services & Innovation 2020
Heritage - NSW Crown Copyright - Planning & Environment

Coordinate System: GDA 1994 MGA Zone 56

Date: 22 May 2020

Heritage

330 Captain Cook Drive, Kurnell, NSW 2231

Commonwealth Heritage List

What are the Commonwealth Heritage List Items located within the dataset buffer?

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch
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National Heritage List

What are the National Heritage List Items located within the dataset buffer?
Note. Please click on Place Id to activate a hyperlink to online website.

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
105766	Kurnell Peninsula	Captain Cook Dr, Kurnell NSW	1/16/035/0005	Historic	Place removed in part from NHL		0m	Onsite
106162	Kamay Botany Bay	Captain Cook Dr, Kurnell NSW	1/16/035/0034	Historic	Nominated place		30m	North East
106039	Botany Bay	Foreshore Rd, Botany NSW	1/16/007/0013	Historic	Nomination now ineligible for PPAL		51m	North

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch
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State Heritage Register - Curtilages

What are the State Heritage Register Items located within the dataset buffer?

Map Id	Name	Address	LGA	Listing Date	Listing No	Plan No	Distance	Direction
5051207	Cronulla Sand Dune and Wanda Beach Coastal Landscape	Captain Cook Drive, Cronulla	Sutherland	26/09/2003	01668	1912	0m	South
5061543	Kamay Botany Bay National Park and Towra Point Reserve	Cape Solander Drive Kurnell	Sutherland	29/11/2013	01918	2565	30m	North West

Heritage Data Source: NSW Crown Copyright - Office of Environment & Heritage
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Environmental Planning Instrument - Heritage

What are the EPI Heritage Items located within the dataset buffer?

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
2502	Cronulla Sand Dune and Wanda Beach Coastal Landscape	Item - General	State	Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	03/04/2020	0m	South
A2523	Four wheel drive track	Item - Archaeological	Local	Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	03/04/2020	9m	North East
A2528	Towra Point Nature Reserve and Quibray Bay	Item - Archaeological	State	Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	03/04/2020	30m	North West
2509	Towra Point Nature Reserve and Quibray Bay	Item - General	State	Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	03/04/2020	30m	North West
2509	Towra Point Nature Reserve and Quibray Bay	Item - General	State	Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	03/04/2020	329m	West
A2528	Towra Point Nature Reserve and Quibray Bay	Item - Archaeological	State	Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	03/04/2020	329m	West
A2532	Pells Island Oyster Farm	Item - Archaeological	Local	Sutherland Shire Local Environmental Plan 2015	23/06/2015	23/06/2015	03/04/2020	679m	North

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Natural Hazards - Bush Fire Prone Land

330 Captain Cook Drive, Kurnell, NSW 2231



Natural Hazards

330 Captain Cook Drive, Kurnell, NSW 2231

Bush Fire Prone Land

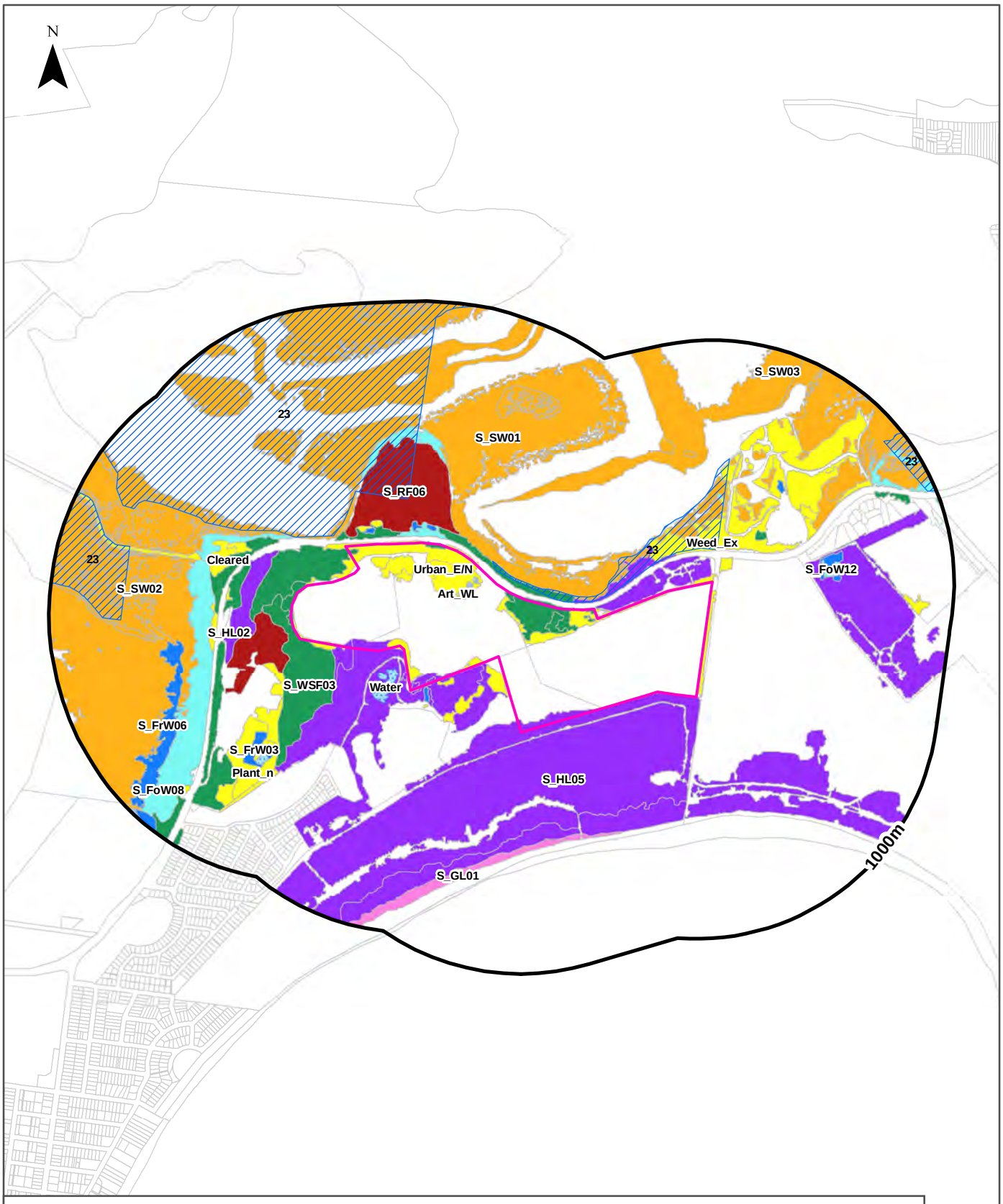
What are the nearest Bush Fire Prone Land Categories that exist within the dataset buffer?

Bush Fire Prone Land Category	Distance	Direction
Vegetation Buffer	0m	Onsite
Vegetation Category 2	0m	Onsite
Vegetation Category 1	30m	North West

NSW Bush Fire Prone Land - © NSW Rural Fire Service under Creative Commons 4.0 International Licence

Ecological Constraints - Native Vegetation & RAMSAR Wetlands

330 Captain Cook Drive, Kurnell, NSW 2231



Legend

- Site Boundary
- Report Buffer
- Property Boundary
- Rainforest
- Wet Sclerophyll Forests
- Dry Sclerophyll Forests
- Forested Wetlands
- Grassy Woodlands
- Heathlands
- Grasslands
- Freshwater Wetlands
- Saline Wetlands
- Artificial Wetlands
- Water
- Other
- RAMSAR Wetlands

Scale:	Propert Boundary Data Source:	Coordinate System:	Date: 22 May 2020
0 100 200 400 600 800 1,000 1,200 Meters	© Department Finance, Services & Innovation 2020	GDA 1994 MGA Zone 56	

Ecological Constraints

330 Captain Cook Drive, Kurnell, NSW 2231

Native Vegetation

What native vegetation exists within the dataset buffer?

Map ID	Map Unit Name	Threatened Ecological Community NSW	Threatened Ecological Community EPBC Act	Understorey	Disturbance	Disturbance Index	Dominant Species	Dist	Direction
Art_WL	Art_WL: Artificial Wetland			00: Not assessed	00: Not assessed	0: Not assessed	Artificial wetland	0m	Onsite
Plant_n	Plant_n: Plantation (native and/or exotic)			00: Not assessed	00: Not assessed	0: Not assessed	Native or Exotic Plantations	0m	Onsite
S_HL02	S_HL02: Coastal Sand Tea-tree-Banksia Scrub			11: Semi sheltered dry/mesic	13: Weeds	2: Moderate	B.integrifolia/L.laevigatum/M.elliptica	0m	Onsite
S_HL02	S_HL02: Coastal Sand Tea-tree-Banksia Scrub			11: Semi sheltered dry/mesic	14: Canopy gaps	2: Moderate	B.integrifolia/L.laevigatum/M.elliptica	0m	Onsite
S_HL05	S_HL05: Coastal Foredune Wattle Scrub			20: Weeds and exotics	13: Weeds	3: High	B.integrifolia/L.laevigatum/M.elliptica	0m	Onsite
S_HL05	S_HL05: Coastal Foredune Wattle Scrub			20: Weeds and exotics	15: Regrowth	3: High	B.integrifolia/L.laevigatum/M.elliptica	0m	Onsite
S_HL05	S_HL05: Coastal Foredune Wattle Scrub			20: Weeds and exotics	19: Clearing/Part clearing	4: Very high	B.integrifolia/L.laevigatum/M.elliptica	0m	Onsite
S_WSF03	S_WSF03: Coastal Sand Littoral Forest	Kurnell Dune Forest		11: Semi sheltered dry/mesic	13: Weeds	3: High	A.costata/E.botryoides/B.integrifolia/C.anarchardioides	0m	Onsite
S_WSF03	S_WSF03: Coastal Sand Littoral Forest	Kurnell Dune Forest		11: Semi sheltered dry/mesic	13: Weeds	3: High	B.integrifolia/C.glauca/littoral spp.	0m	Onsite
S_WSF03	S_WSF03: Coastal Sand Littoral Forest	Kurnell Dune Forest		11: Semi sheltered dry/mesic	15: Regrowth	2: Moderate	A.costata/E.botryoides/B.integrifolia/C.anarchardioides	0m	Onsite
S_WSF03	S_WSF03: Coastal Sand Littoral Forest	Kurnell Dune Forest		20: Weeds and exotics	13: Weeds	3: High	A.costata/E.botryoides/B.integrifolia/C.anarchardioides	0m	Onsite
Urban_E/N	Urban_E/N: Urban Exotic/Native			00: Not assessed	00: Not assessed	0: Not assessed	Urban Exotic/Native	0m	Onsite
Weed_Ex	Weed_Ex: Weeds and Exotics			00: Not assessed	00: Not assessed	0: Not assessed	Aquatic Exotics	0m	Onsite
Weed_Ex	Weed_Ex: Weeds and Exotics			00: Not assessed	00: Not assessed	0: Not assessed	Exotic Species >90%cover	0m	Onsite
S_FrW03	S_FrW03: Coastal Freshwater Wetland	Sydney Freshwater Wetlands		00: Not assessed	00: Not assessed	0: Not assessed	Freshwater Lagoon with sedges	8m	South West
S_FoW08	S_FoW08: Estuarine Swamp Oak Forest	Swamp Oak Floodplain Forest		20: Weeds and exotics	13: Weeds	3: High	A.costata/E.botryoides/B.integrifolia/C.anarchardioides	24m	North West
S_RF06	S_RF06: Coastal Dune Littoral Rainforest	Littoral Rainforest	Littoral Rainforest and Coastal Vine Thickets (possible)	10: Mesic/rainforest	13: Weeds	3: High	B.integrifolia/C.anarchardioides/A.smithii	30m	West
S_SW01	S_SW01: Estuarine Mangrove Forest			00: Not assessed	00: Not assessed	0: Not assessed	Mangroves	34m	North

Map ID	Map Unit Name	Threatened Ecological Community NSW	Threatened Ecological Community EPBC Act	Understorey	Disturbance	Disturbance Index	Dominant Species	Dist	Direction
S_SW02	S_SW02: Estuarine Saltmarsh	Coastal Saltmarsh	Subtropical and Temperate Coastal Saltmarsh (possible)	00: Not assessed	00: Not assessed	0: Not assessed	S.repens/S.quinqueflora/S.virginicusJ.krausii	37m	North East
Water	Water			00: Not assessed	00: Not assessed	0: Not assessed	Water	40m	South West
S_FrW06	S_FrW06: Estuarine Reedland	Swamp Oak Floodplain Forest		00: Not assessed	00: Not assessed	0: Not assessed	P.australis/B.juncea	44m	North West
S_SW03	S_SW03: Seagrass Meadows			00: Not assessed	00: Not assessed	0: Not assessed	Seagrass (DPI)	95m	North East
Cleared	Cleared			00: Not assessed	00: Not assessed	0: Not assessed	Cleared	299m	West
S_GL01	S_GL01: Beach Spinfex Grassland			00: Not assessed	00: Not assessed	0: Not assessed	S.sericea/C.glaucescens	453m	South
S_FoW12	S_FoW12: Coastal Swamp Paperbark-Swamp Oak Scrub	Swamp Oak Floodplain Forest		18: Swampy sedges, shrubs, ferns and herbs	13: Weeds	3: High	C.glauca/M.ericifolia	455m	East

Native Vegetation of the Sydney Metropolitan Area : NSW Office of Environment and Heritage
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Ramsar Wetlands

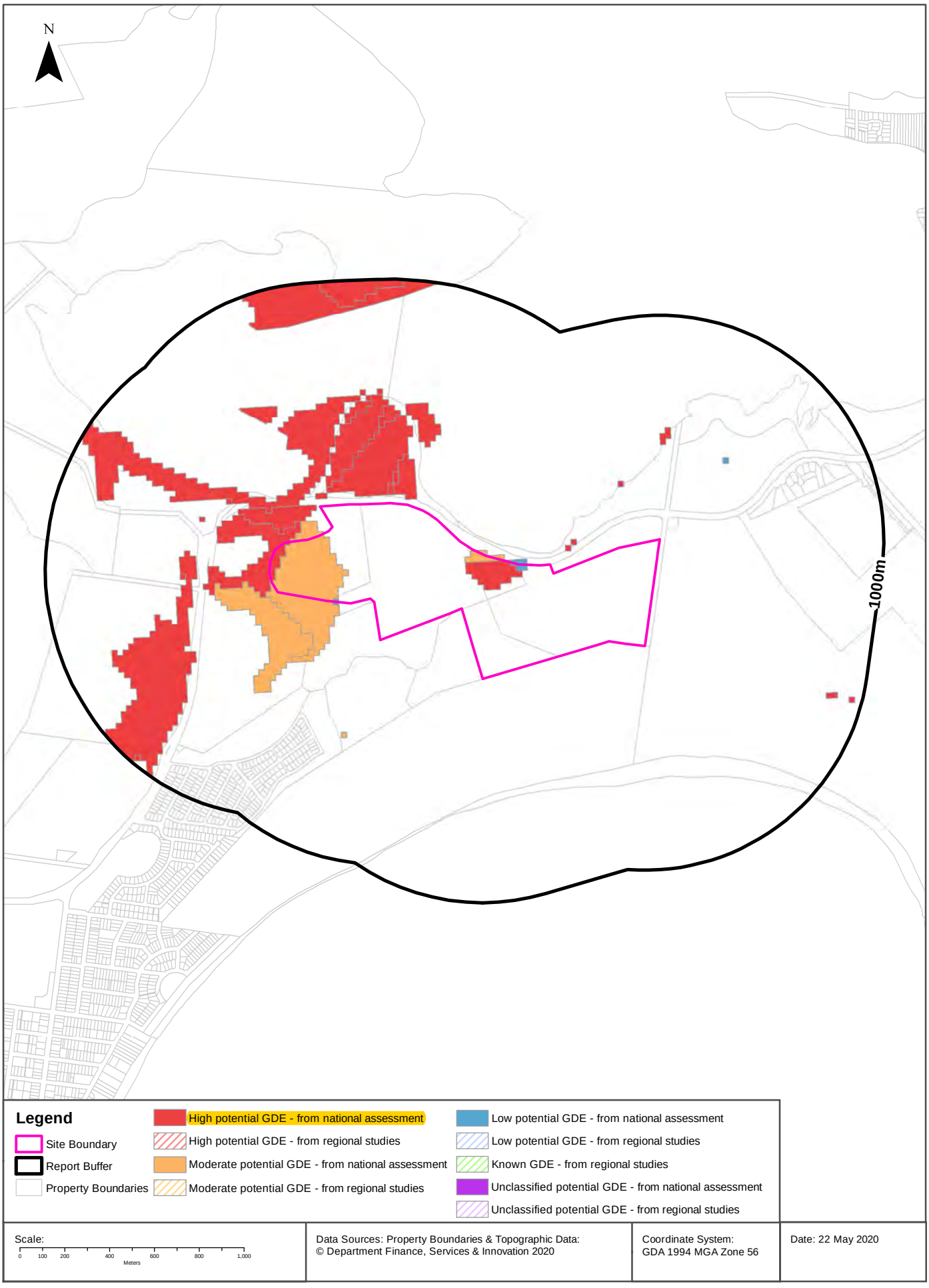
What Ramsar Wetland areas exist within the dataset buffer?

Map Id	Ramsar Name	Wetland Name	Designation Date	Source	Distance	Direction
23	Towra Point Nature Reserve	Towra Point Nature Reserve	21/02/1984	DECC 11/12/2009 Towra Point NR boundary (as gazetted 29 Mar 1996)	30m	North East
23	Towra Point Nature Reserve	Towra Point Nature Reserve	21/02/1984	DECC 11/12/2009 Towra Point NR boundary (as gazetted 29 Mar 1996)	67m	North West
23	Towra Point Nature Reserve	Towra Point Nature Reserve	21/02/1984	DECC 11/12/2009 Towra Point NR boundary (as gazetted 29 Mar 1996)	916m	North East

Ramsar Wetlands Data Source: © Commonwealth of Australia - Department of Environment

Ecological Constraints - Groundwater Dependent Ecosystems Atlas

330 Captain Cook Drive, Kurnell, NSW 2231



Ecological Constraints

330 Captain Cook Drive, Kurnell, NSW 2231

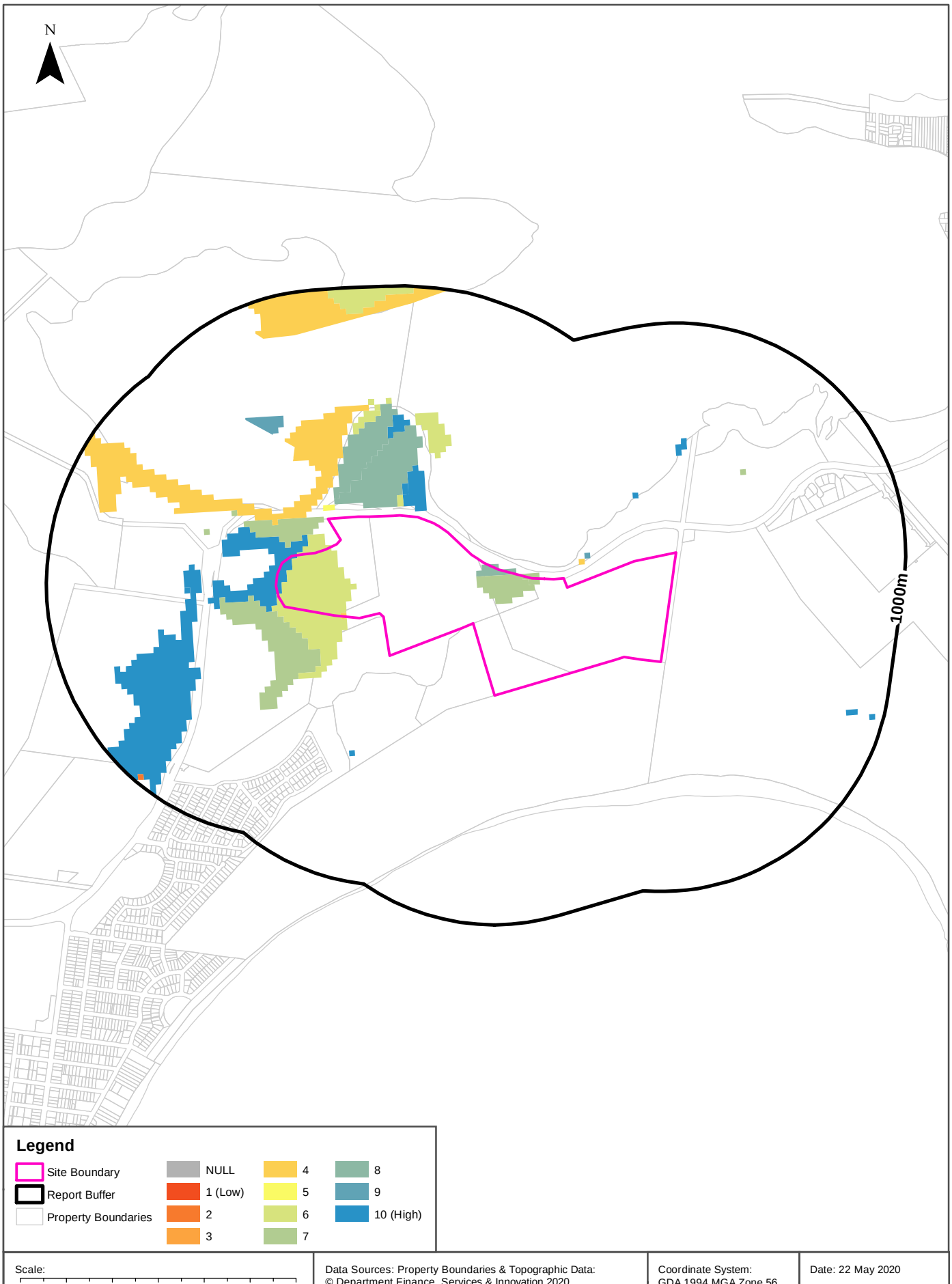
Groundwater Dependent Ecosystems Atlas

Type	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Terrestrial	High potential GDE - from national assessment	Deeply dissected sandstone plateaus.	Vegetation	Unconsolidated sedimentary	0m
Terrestrial	Low potential GDE - from national assessment	Deeply dissected sandstone plateaus.	Vegetation	Unconsolidated sedimentary	0m
Terrestrial	Moderate potential GDE - from national assessment	Deeply dissected sandstone plateaus.	Vegetation	Unconsolidated sedimentary	0m

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology
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Ecological Constraints - Inflow Dependent Ecosystems Likelihood

330 Captain Cook Drive, Kurnell, NSW 2231



Ecological Constraints

330 Captain Cook Drive, Kurnell, NSW 2231

Inflow Dependent Ecosystems Likelihood

Type	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Terrestrial	4	Deeply dissected sandstone plateaus.	Vegetation	Unconsolidated sedimentary	0m
Terrestrial	6	Deeply dissected sandstone plateaus.	Vegetation	Unconsolidated sedimentary	0m
Terrestrial	7	Deeply dissected sandstone plateaus.	Vegetation	Unconsolidated sedimentary	0m
Terrestrial	8	Deeply dissected sandstone plateaus.	Vegetation	Unconsolidated sedimentary	0m
Terrestrial	10	Deeply dissected sandstone plateaus.	Vegetation	Unconsolidated sedimentary	0m
Terrestrial	5	Deeply dissected sandstone plateaus.	Vegetation	Unconsolidated sedimentary	35m
Terrestrial	9	Deeply dissected sandstone plateaus.	Vegetation	Unconsolidated sedimentary	80m
Terrestrial	2	Deeply dissected sandstone plateaus.	Vegetation	Unconsolidated sedimentary	952m

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology
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Ecological Constraints

330 Captain Cook Drive, Kurnell, NSW 2231

NSW BioNet Atlas

Species on the NSW BioNet Atlas that have a NSW or federal conservation status, a NSW sensitivity status, or are listed under a migratory species agreement, and are within 10km of the site?

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Amphibia	Crinia tinnula	Wallum Froglet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Amphibia	Heleioporus australiacus	Giant Burrowing Frog	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Amphibia	Litoria aurea	Green and Golden Bell Frog	Endangered	Not Sensitive	Vulnerable	
Animalia	Amphibia	Pseudophryne australis	Red-crowned Toadlet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Actitis hypoleucos	Common Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Anous stolidus	Common Noddy	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Anseranas semipalmata	Magpie Goose	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Anthochaera phrygia	Regent Honeyeater	Critically Endangered	Not Sensitive	Critically Endangered	
Animalia	Aves	Apus pacificus	Fork-tailed Swift	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Ardea ibis	Cattle Egret	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Ardenna carneipes	Flesh-footed Shearwater	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Ardenna grisea	Sooty Shearwater	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Ardenna pacificus	Wedge-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Ardenna tenuirostris	Short-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Arenaria interpres	Ruddy Turnstone	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Artamus cyanopterus cyanopterus	Dusky Woodswallow	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Botaurus poiciloptilus	Australasian Bittern	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Burhinus grallarius	Bush Stone-curlew	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Calamanthus fuliginosus	Striated Fieldwren	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Calidris acuminata	Sharp-tailed Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris alba	Sanderling	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris bairdii	Baird's Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Calidris canutus	Red Knot	Not Listed	Not Sensitive	Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris ferruginea	Curlew Sandpiper	Endangered	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris melanotos	Pectoral Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Calidris ruficollis	Red-necked Stint	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris subminuta	Long-toed Stint	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Calidris tenuirostris	Great Knot	Vulnerable	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Callocephalon fimbriatum	Gang-gang Cockatoo	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Calyptorhynchus banksii banksii	Red-tailed Black-Cockatoo (coastal subspecies)	Critically Endangered	Category 2	Not Listed	
Animalia	Aves	Calyptorhynchus banksii samueli	Red-tailed Black-Cockatoo (inland subspecies)	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Calyptorhynchus lathami	Glossy Black-Cockatoo	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Certhionyx variegatus	Pied Honeyeater	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Charadrius leschenaultii	Greater Sand-plover	Vulnerable	Not Sensitive	Vulnerable	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Charadrius mongolus	Lesser Sand-plover	Vulnerable	Not Sensitive	Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Charadrius veredus	Oriental Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Chlidonias leucopterus	White-winged Black Tern	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Chlidonias niger	Black Tern	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Circus assimilis	Spotted Harrier	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Daphoenositta chrysoptera	Varied Sittella	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Dasyornis brachypterus	Eastern Bristlebird	Endangered	Category 2	Endangered	
Animalia	Aves	Diomedea exulans	Wandering Albatross	Endangered	Not Sensitive	Endangered	JAMBA
Animalia	Aves	Egretta sacra	Eastern Reef Egret	Not Listed	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Epthianura albifrons	White-fronted Chat	Endangered Population, Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Esacus magnirostris	Beach Stone-curlew	Critically Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Falco subniger	Black Falcon	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Fregata ariel	Lesser Frigatebird	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Gallinago hardwickii	Latham's Snipe	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Gelochelidon nilotica	Gull-billed Tern	Not Listed	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Glossopsitta porphyrocephala	Purple-crowned Lorikeet	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Glossopsitta pusilla	Little Lorikeet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Gygis alba	White Tern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Haematopus fuliginosus	Sooty Oystercatcher	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Haematopus longirostris	Pied Oystercatcher	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Haliaeetus leucogaster	White-bellied Sea-Eagle	Vulnerable	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Halobaena caerulea	Blue Petrel	Not Listed	Not Sensitive	Vulnerable	
Animalia	Aves	Hieraaetus morphnoides	Little Eagle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Hirundapus caudacutus	White-throated Needletail	Not Listed	Not Sensitive	Vulnerable	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Hydroprogne caspia	Caspian Tern	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Ixobrychus flavicollis	Black Bittern	Vulnerable	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Lathamus discolor	Swift Parrot	Endangered	Category 3	Critically Endangered	
Animalia	Aves	Limicola falcinellus	Broad-billed Sandpiper	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa lapponica	Bar-tailed Godwit	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa limosa	Black-tailed Godwit	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Lophochroa leadbeateri	Major Mitchell's Cockatoo	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Lophoictinia isura	Square-tailed Kite	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Macronectes giganteus	Southern Giant Petrel	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Macronectes halli	Northern Giant-Petrel	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Motacilla citreola	Citrine Wagtail	Not Listed	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Neochmia ruficauda	Star Finch	Presumed Extinct	Not Sensitive	Endangered	
Animalia	Aves	Ninox connivens	Barking Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox strenua	Powerful Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Numenius madagascariensis	Eastern Curlew	Not Listed	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Numenius minutus	Little Curlew	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Numenius phaeopus	Whimbrel	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Oceanites oceanicus	Wilson's Storm-Petrel	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Onychoprion fuscata	Sooty Tern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Oxyura australis	Blue-billed Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Pandion cristatus	Eastern Osprey	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Petroica boodang	Scarlet Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Petroica phoenicea	Flame Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Pezoporus wallicus wallicus	Eastern Ground Parrot	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Phaethon lepturus	White-tailed Tropicbird	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Philomachus pugnax	Ruff	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Plegadis falcinellus	Glossy Ibis	Not Listed	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Pluvialis fulva	Pacific Golden Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Pluvialis squatarola	Grey Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Polytelis swainsonii	Superb Parrot	Vulnerable	Category 3	Vulnerable	
Animalia	Aves	Procelsterna cerulea	Grey Ternlet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Pterodroma leucoptera leucoptera	Gould's Petrel	Vulnerable	Not Sensitive	Endangered	
Animalia	Aves	Pterodroma neglecta neglecta	Kermadec Petrel (west Pacific subspecies)	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Pterodroma nigripennis	Black-winged Petrel	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Pterodroma solandri	Providence Petrel	Vulnerable	Not Sensitive	Not Listed	JAMBA

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Ptilinopus superbus	Superb Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Puffinus assimilis	Little Shearwater	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Rostratula australis	Australian Painted Snipe	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Stagonopleura guttata	Diamond Firetail	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Stercorarius parasiticus	Arctic Jaeger	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Stercorarius pomarinus	Pomarine Jaeger	Not Listed	Not Sensitive	Not Listed	CAMBA;JAMBA
Animalia	Aves	Sterna hirundo	Common Tern	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Sternula albifrons	Little Tern	Endangered	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Sternula nereis nereis	Fairy Tern	Not Listed	Not Sensitive	Vulnerable	
Animalia	Aves	Sula leucogaster	Brown Booby	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Thalassarche cauta	Shy Albatross	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Thalassarche melanophris	Black-browed Albatross	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Thinornis rubricollis	Hooded Plover	Critically Endangered	Not Sensitive	Vulnerable	
Animalia	Aves	Tringa brevipes	Grey-tailed Tattler	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa glareola	Wood Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa incana	Wandering Tattler	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Tringa nebularia	Common Greenshank	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa stagnatilis	Marsh Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tryngites subruficollis	Buff-breasted Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Tyto longimembris	Eastern Grass Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Tyto novaehollandiae	Masked Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Tyto tenebricosa	Sooty Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Xenus cinereus	Terek Sandpiper	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Insecta	Menippus darcyi		Endangered Population	Not Sensitive	Not Listed	
Animalia	Mammalia	Arctocephalus forsteri	New Zealand Fur-seal	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Arctocephalus pusillus doriferus	Australian Fur-seal	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Cercartetus nanus	Eastern Pygmy-possum	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Dugong dugon	Dugong	Endangered	Not Sensitive	Not Listed	
Animalia	Mammalia	Eubalaena australis	Southern Right Whale	Endangered	Not Sensitive	Endangered	
Animalia	Mammalia	Macrotis lagotis	Bilby	Presumed Extinct	Not Sensitive	Vulnerable	
Animalia	Mammalia	Megaptera novaeangliae	Humpback Whale	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Miniopterus australis	Little Bent-winged Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Miniopterus orianae oceanensis	Large Bent-winged Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Myotis macropus	Southern Myotis	Vulnerable	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Mammalia	Phascolarctos cinereus	Koala	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Pseudomys novaehollandiae	New Holland Mouse	Not Listed	Not Sensitive	Vulnerable	
Animalia	Mammalia	Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Scoteanax rueppellii	Greater Broad-nosed Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Antaresia stimsoni	Stimson's Python	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Caretta caretta	Loggerhead Turtle	Endangered	Not Sensitive	Endangered	
Animalia	Reptilia	Chelonia mydas	Green Turtle	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Reptilia	Eretmochelys imbricata	Hawksbill Turtle	Not Listed	Not Sensitive	Vulnerable	
Animalia	Reptilia	Hoplocephalus bungaroides	Broad-headed Snake	Endangered	Category 2	Vulnerable	
Animalia	Reptilia	Hoplocephalus stephensii	Stephens' Banded Snake	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Suta flagellum	Little Whip Snake	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Tiliqua occipitalis	Western Blue-tongued Lizard	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Varanus rosenbergi	Rosenberg's Goanna	Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Acacia baueri subsp. aspera		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Acacia bynoeana	Bynoe's Wattle	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Acacia prominens	Gosford Wattle	Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Acacia terminalis subsp. terminalis	Sunshine Wattle	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Allocasuarina diminuta subsp. mimica		Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Caladenia tessellata	Thick Lip Spider Orchid	Endangered	Category 2	Vulnerable	
Plantae	Flora	Callistemon linearifolius	Netted Bottle Brush	Vulnerable	Category 3	Not Listed	
Plantae	Flora	Chamaesyce psammogeton	Sand Spurge	Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Epacris purpurascens var. purpurascens		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Eucalyptus camfieldii	Camfield's Stringybark	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Eucalyptus nicholii	Narrow-leaved Black Peppermint	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Eucalyptus scoparia	Wallangarra White Gum	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Genoplesium baueri	Bauer's Midge Orchid	Endangered	Category 2	Endangered	
Plantae	Flora	Hibbertia puberula		Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Leucopogon exolasius	Woronora Beard-heath	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Macadamia tetraphylla	Rough-shelled Bush Nut	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Maundia triglochinoides		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Melaleuca deanei	Deane's Paperbark	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Persoonia hirsuta	Hairy Geebung	Endangered	Category 3	Endangered	
Plantae	Flora	Prostanthera densa	Villous Mint-bush	Vulnerable	Not Sensitive	Vulnerable	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Plantae	Flora	Pterostylis sp. Botany Bay	Botany Bay Bearded Orchid	Endangered	Category 2	Endangered	
Plantae	Flora	Pultenaea aristata	Prickly Bush-pea	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Senecio spathulatus	Coast Groundsel	Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Senna acclinis	Rainforest Cassia	Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Syzygium paniculatum	Magenta Lilly Pilly	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Tetratheca juncea	Black-eyed Susan	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Thelymitra atronitida	Black-hooded Sun Orchid	Critically Endangered	Category 2	Not Listed	
Plantae	Flora	Tinospora tinosporoides	Arrow-head Vine	Vulnerable	Not Sensitive	Not Listed	

Data does not include NSW category 1 sensitive species.

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Location Confidences

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a code is given under the field heading “LC” or “LocConf”. These codes lookup to the following location confidences:

LC Code	Location Confidence
Premise match	Georeferenced to the site location / premise or part of site
General area or suburb match	Georeferenced with the confidence of the general/approximate area
Road match	Georeferenced to the road or rail
Road intersection	Georeferenced to the road intersection
Feature is a buffered point	Feature is a buffered point
Land adjacent to geocoded site	Land adjacent to Georeferenced Site
Network of features	Georeferenced to a network of features

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Appendix C – Methodologies

Methodology

Methodologies utilised during the fieldworks are discussed in Table 1. It includes methodologies used for the groundwater assessment.

Table 1 Field methodology summary

Item	Description
Environment, health and safety	Preparation of job safety and environmental analysis (JSEA) including daily pre-work assessment and hazard identification
Site walkover	A site walkover was carried out on 4 August 2020 by André-Karl Smit and Stefan Charteris, GHD Technical Directors in contamination assessment and remediation. During the walkover, site's conditions were visually assessed to identify potential sources of contamination that could impact land and the surrounding environment.
Survey of groundwater monitoring wells	GHD engaged a registered surveyor to survey selected groundwater monitoring wells and leachate wells. At each surveyed well, geographical coordinates and top of casing elevations, measured in metres relative to Australian Height Datum (AHD), were recorded.
Groundwater gauging	Monitoring wells and leachate wells were gauged using an oil/water interface probe to measure static water levels (SWL) and assess for the potential presence of non-aqueous phase liquids (NAPLs). The oil/water interface probe was decontaminated between each well. Decontamination comprised: • Washing of the interface probe with phosphate-free detergent (Decon90™). • Rinsing with town water. • Rinsing with laboratory supplied deionised water. Disposable nitrile gloves were utilised and replaced for each location.
Hydraulic testing	Hydraulic testing was conducted on three monitoring wells on 11 June 2020. Hydraulic testing was performed in general accordance with GHD's standard operation procedure (SOP 12 – *Groundwater Well Pumping Test*). A submersible pump was lowered into the wells and operated for approximately 10 minutes. Ground level changes were monitored using submerged automatic data loggers as well as manually using an oil/water interface probe. Groundwater level data were downloaded from the data loggers and analysed using the Theis (recovery) analytical method using the AQTESOLV software. Theis recovery method applies a straight line solution for calculating transmissivity and storativity from residual drawdown data.
Surface water sampling	Surface water samples were collected directly from the water basins using dedicated, unpreserved laboratory bottles (grab method). Samples were decanted into laboratory bottles containing preservatives. A pair of dedicated nitrile gloves were used during collection of each sample. Samples were collected approximately 100 mm below the water surface. Care was taken to reduce disturbance to sediments during sampling of surface waters. Water quality parameters, comprising pH, electrical conductivity, redox potential, dissolved oxygen and temperature were monitored during sampling. Following collection, samples were immediately placed on ice and stored in an esky prior to being forwarded to the analytical laboratory within the specified

Item	Description
	holding times along with a chain-of-custody (COC) form. Laboratory documents including COCs are provided in the Appendix H.

Calibration certificates for the interface probe and water quality meter are supplied in Appendix F.

1.1 Groundwater analysis

The analytical schedule for surface water is summary as follows:

- Surface water samples were submitted for laboratory analysis of Total recoverable hydrocarbons (TRH); benzene, toluene, ethylbenzene and xylenes (BTEX); polycyclic aromatic hydrocarbons (PAH); organochloride pesticides (OCP); polychlorinated biphenyls (PCB); 12 heavy metals and alkali metals; and nutrients.
- Field intra and inter-laboratory duplicate samples were collected and submitted for laboratory analysis including eight (8) heavy metals, TRH, BTEX and PAH for each of the monitoring events.
- Trip blanks and trip spike samples were submitted with each batch of samples, and were analysed for BTEX and volatile TRH.
- Rinsate samples were collected one per sampling round with reusable equipment and were analysed for eight (8) heavy metals.
- Analysis of groundwater samples were undertaken by NATA accredited laboratories for the required analysis.

Appendix D – Data quality objectives

Data quality objectives

The amount, nature and quality of the data are informed by establishing data quality objectives (DQOs). The major advantage of the DQOs approach is that the investigation planning is carried out in a structured way with the questions of environmental significance identified and posed at an early stage and timely, necessary and purpose driven data are collected to resolve the identified uncertainties.

The DQOs provide the framework for the investigation design and are intended to ensure that representative data are collected to address project objectives.

In accordance with AS 4482.1 2005 and the ASC NEPM for the assessment of site contamination, the DQOs for these works are qualitative and quantitative criteria that:

- Clarify study objectives.
- Define appropriate types of data to collect.
- Specify the tolerable levels of potential decision-making errors.

The DQO process, as defined in AS 4482.1 (Standards Australia, 2005) and ASC NEPM, consists of seven distinct steps, as shown below:

1. State the problem.
2. Identify the decision/goal of the study.
3. Identify the information inputs.
4. Define the boundaries of the study.
5. Develop the analytical approach.
6. Specify performance or acceptance criteria.
7. Develop the plan for obtaining data.

The DQOs for these works are outlined in Table 1.

Table 1 Data quality objectives

Step	Data quality objective
Step 1: State the problem	• The contamination status has not been characterised at the site prior to its proposed development.
Step 2: Identify the decision / goal of the study	• Are potentially unacceptable human health and ecological risks present at the site and in the vicinity of the site? • Are available data sufficient to characterise baseline contamination status and to assess potential impacts related to the proposed development?
Step 3: Identify the decision inputs	• Understanding of the site's setting, such as geology and hydrogeology, and history to evaluate how potential contamination may affect the site's environment. • Surface water sampling and laboratory analysis to assess whether surface water contamination poses an unacceptable risk to human health or the environment. • Review of existing groundwater, soil gas and leachate data to assess whether potential contamination poses an unacceptable risk to human health or the environment. • Appropriate guideline values for the nominated COPC. • Hydraulic testing and groundwater gauging to qualitatively assess groundwater related impacts. • Confirmation that data generated during the investigation are of a suitable quality to allow reliable comparison to assessment criteria as per the evaluation of the data quality indicators.
Step 4: Define the boundaries of the study	The study area consists of the site's footprint. The vertical extent is limited to the surface as no analytical or visual assessment was undertaken below ground surface.
Step 5: Develop the analytical approach	Current surface water analytical results and existing groundwater and leachate analytical results would be compared against assessment criteria outlined in the report. Available information related to site's history and environmental settings (e.g. groundwater gauging data and hydraulic testing results) would be analysed to assess risks associated with the site's contamination status.
Step 6: Specify performance or acceptance criteria	The potential for significant decision errors was reduced by completing a quality assurance/quality control (QA/QC) program in accordance with ASC NEPM guidelines. Data quality indicators were applied to assess the usability of the data prior to making decisions, based on precision, accuracy, representativeness, comparability and completeness.
Step 7: Develop the plan for obtaining data	The sampling design was reviewed and adjusted where necessary during fieldworks implementation to ensure that the relevant DQOs were met to adequately address the requirements of the program.

Appendix E – Calibration certificates

Multi Parameter Water Meter

airmet

Air-Met Scientific Pty Ltd
1300 137 067

Instrument YSI Quatro Pro Plus
Serial No. 17K101079

Item	Test	Pass	Comments
Battery	Charge Condition	✓	
	Fuses	✓	
	Capacity	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	
	Seal	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	1. pH	✓	
	2. mV	✓	
	3. EC	✓	
	4. D.O	✓	
	5. Temp	✓	
Alarms	Beeper		
	Settings		
Software	Version		
Data logger	Operation		
Download	Operation		
Other tests:			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Standard Solutions	Certified	Solution Bottle Number	Instrument Reading
1. pH 10.00		pH 10.00		330738	pH 9.58
2. pH 7.00		pH 7.00		330737	pH 6.91
3. pH 4.00		pH 4.00		330734	pH 4.00
4. mV		229.6mV		346052/342074	229.6mV
5. EC		2.76mS		333787	2.77mS
6. D.O		0.00ppm		1904288592	0.00ppm
7. Temp		22.5°C		MultiTherm	22.1°C

Calibrated by: Michelle Wagner

Calibration date: 10/06/2020

Next calibration due: 10/07/2020

Oil / Water Interface Meter

airmet
Air-Met Scientific Pty Ltd
1300 137 067

Instrument **Interface Meter (30M)**
Serial No. **288043**

Item	Test	Pass	Comments
Battery	Compartment	✓	
	Capacity	✓	
	above 7.9V	✓	
Probe	Cleaned/Decon.	✓	
	Operation	✓	
Connectors	Condition	✓	
		✓	
Tape Check	Cleaned	✓	
Connectors	Checked for cuts	✓	
Instrument Test	At surface level	✓	

Certificate of Calibration

This is to certify that the above instrument has been cleaned and tested.

Tested by: **Eloise Carroll**

Test date: **1/06/2020**

Next Test due: **28/11/2020**

15/7/20

Oil / Water Interface Meter

airmet

Air-Met Scientific Pty Ltd
1300 137 067

Instrument Geotech Interface Meter (30M)
Serial No. 4000

Item	Test	Pass	Comments
Battery	Compartment	✓	
	Capacity	✓	
Probe	Cleaned/Decon.	✓	
	Operation	✓	
Connectors	Condition	✓	
		✓	
Tape Check	Cleaned	✓	
Connectors	Checked for cuts	✓	
Instrument Test	At surface level	✓	

Certificate of Calibration

This is to certify that the above instrument has been cleaned and tested.

Calibrated by: Elyce Ireland

Calibration date: 15/07/2020

Next calibration due: 11/01/2021

Multi Parameter Water Meter

airmet
Air-Met Scientific Pty Ltd
1300 137 067

Instrument **YSI Quatro Pro Plus**
Serial No. **18L101819**

Item	Test	Pass	Comments
Battery	Charge Condition	✓	
	Fuses	✓	
	Capacity	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	
	Seal	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	1. pH	✓	
	2. mV	✓	
	3. EC	✓	
	4. D.O	✓	
	5. Temp	✓	
Alarms	Beeper		
	Settings		
Software	Version		
Data logger	Operation		
Download	Operation		
Other tests:			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Standard Solutions	Certified	Solution Bottle Number	Instrument Reading
1. pH 10.00		pH 10.00		352607	pH 9.84
2. pH 7.00		pH 7.00		330737	pH 7.03
3. pH 4.00		pH 4.00		347027	pH 4.06
4. mV		231.8mV		357172/357173	231.9mV
5. EC		2.76mS		343511	2.75mS
6. D.O		0.00ppm		1904288592	0.00ppm
7. Temp		21.0°C		MultiTherm	20.8°C

Calibrated by: **Lauren Tompkins**

Calibration date: **3/09/2020**

Next calibration due: **3/10/2020**

Appendix F – Surface water results – June-September 2020

Appendix F Table F1 -Surface water results compared against ecological criteria - June 2020

				Inorganics				Cyanide	Acidity & Alkalinity					Major Ions								Nutrients				
				pH (Lab)	Total Dissolved Solids	Total Suspended Solids	COD	Cyanide (Total)	Alkalinity (Carbonate as CaCO3)	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Hydroxide as CaCO3)	Alkalinity (total as CaCO3)	Hardness as CaCO3	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Nitrogen (Total Oxidised) (as N)	Nitrogen (Total)	Kjeldahl Nitrogen Total	Phosphorus (Total)
				pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
LOR				0.1	10	1	25	0.005	10	20	20	20	5	0.5	0.5	0.5	0.5	1	5	0.5	0.01	0.02	0.02	0.05	0.2	0.2	0.01
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine				*7-8.5*		*0.5*															*0.015* [#1]			*0.015*	*0.3*		*0.03*
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs				**6.5-8**		**5**															**0.01** [#1]			**0.01**	**0.35**		**0.01**
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.007 [#2]													0.9 [#3]						
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																											
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)								0.004 [#2]													0.91 [#6]						
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																											
Sample ID	**Location Code**	**Date**	**Sample Type**	**Matrix Type**																							
FD01	SW1	11/06/2020	Field_D	water	7.9	150	***10***	<25	<0.005	-	-	-	-	79	22	6	1.3	22	21	35	<0.5	***0.06***	2.1	0.03	***2.1***	***2.4***	0.3	<0.01
SW1	SW1	11/06/2020	Normal	water	**8**	170	***14***	<25	<0.005	-	-	-	-	77	22	5.7	1.3	22	20	36	<0.5	***0.05***	2.1	0.03	***2.2***	***2.6***	0.4	***0.03***
SW2	SW2	11/06/2020	Normal	water	7.9	320	***41***	<25	<0.005	-	-	-	-	180	58	8.4	4.1	33	47	98	<0.5	***0.05***	0.12	<0.02	***0.14***	***0.74***	0.6	<0.01
SW3	SW3	11/06/2020	Normal	water	7.9	380	***26***	<25	<0.005	-	-	-	-	200	65	8.8	5.2	34	51	99	<0.5	***0.16***	0.23	0.03	***0.26***	***1.16***	0.9	**0.01**
SW4	SW4	11/06/2020	Normal	water	**8.2**	1400	***50***	270	0.007	-	-	-	-	410	95	42	60	230	340	230	<0.5	***87***	<1	<1	***<2.5***	***96***	96	**0.02**
SW5	SW5	11/06/2020	Normal	water	7.9	270	***42***	<25	<0.005	-	-	-	-	170	58	4.6	3.1	20	28	120	<0.5	***0.04***	0.14	<0.02	***0.14***	***0.74***	0.6	**0.01**
QC01	SW6	26/08/2020	Field_D	water	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
SW6	SW6	26/08/2020	Normal	water	**8**	270	*<1*	<25	<0.005	<10	220	<20	220	140	30	16	<5	28	57	13	<0.5	<0.01	<0.02	<0.02	***<0.05***	***0.5***	0.5	**0.01**

Env Stds Comments

#1:assumed same as NH4
#2:Cyanide as un-ionised HCN, measured as [CN].
#3:Measured as NH3-N at pH 8
#4:In absence of total As guideline, As (V) guideline has been adopted.
#5:Guideline for Cr (VI) adopted
#6:Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#7:In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#8:Freshwater DGV adopted (insufficient marine toxicity data)

Appendix F Table F1 -Surface water results compared against ecological criteria - June 2020

	rganic Indicato	Metals									Metals														BTEXN						
	BOD	Arsenic	Arsenic (Filtered)	Cadmium	Cadmium (Filtered)	Chromium (III+VI)	Chromium (III+VI) (Filtered)	Copper	Copper (Filtered)	Lead	Lead (Filtered)	Mercury	Mercury (Filtered)	Molybdenum	Molybdenum (Filtered)	Nickel	Nickel (Filtered)	Selenium	Selenium (Filtered)	Silver	Silver (Filtered)	Tin	Tin (Filtered)	Zinc	Zinc (Filtered)	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Naphthalene (BTEXN suite)
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
LOR	5	0.001	0.001	0.0002	0.0002	0.001	0.001	0.001	0.001	0.001	0.001	0.0001	0.0001	0.005	0.005	0.001	0.001	0.001	0.001	0.005	0.005	0.005	0.005	0.005	0.005	1	1	1	1	2	3	10
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																															
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																															
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)		0.013[#4]	0.013[#4]	0.0002	0.0002	0.001[#5]	0.001[#5]	0.0014	0.0014	0.0034	0.0034	0.0006	0.0006			0.011	0.011	0.011	0.011	0.00005	0.00005			0.008	0.008	950	180	80	350			16
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)														0.034	0.034																
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)				0.0055	0.0055	0.0044[#7]	0.0044[#7]	0.0013	0.0013	0.0044	0.0044	0.0004	0.0004			0.07	0.07			0.0014	0.0014			0.015	0.015	700	180	80				70
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																													350			
Sample ID	**Location Code**	**Date**	**Sample Type**	**Matrix Type**																												
FD01	SW1	11/06/2020	Field_D	water	<5	<0.001	-	<0.0002	-	0.002	-	0.008	-	<0.001	-	<0.0001	-	<0.005	-	0.001	-	<0.001	-	<0.005	-	<0.005	-	<0.005	-	<1	<1	<1	<1	<2	<3	<10
SW1	SW1	11/06/2020	Normal	water	<5	<0.001	-	<0.0002	-	0.002	-	0.007	-	<0.001	-	<0.0001	-	<0.005	-	0.001	-	<0.001	-	<0.005	-	<0.005	-	<0.005	-	<1	<1	<1	<1	<2	<3	<10
SW2	SW2	11/06/2020	Normal	water	<5	0.002	-	<0.0002	-	0.003	-	0.003	-	0.003	-	<0.0001	-	<0.005	-	0.002	-	<0.001	-	<0.005	-	<0.005	-	0.006	-	<1	<1	<1	<1	<2	<3	<10
SW3	SW3	11/06/2020	Normal	water	<5	0.004	-	<0.0002	-	0.003	-	0.003	-	0.003	-	<0.0001	-	0.007	-	0.002	-	<0.001	-	<0.005	-	<0.005	-	0.005	-	<1	<1	<1	<1	<2	<3	<10
SW4	SW4	11/06/2020	Normal	water	<5	0.004	-	<0.0002	-	0.012	-	0.009	-	0.004	-	<0.0001	-	<0.005	-	0.008	-	<0.001	-	<0.005	-	<0.005	-	0.015	-	<1	<1	<1	<1	<2	<3	<10
SW5	SW5	11/06/2020	Normal	water	<5	0.001	-	<0.0002	-	0.003	-	0.005	-	0.005	-	<0.0001	-	<0.005	-	0.002	-	<0.001	-	<0.005	-	<0.005	-	0.01	-	<1	<1	<1	<1	<2	<3	<10
QC01	SW6	26/08/2020	Field_D	water	-	-	0.007	-	<0.0002	-	<0.001	-	0.013	-	<0.001	-	<0.0001	-	<0.005	-	<0.001	-	<0.001	-	<0.005	-	<0.005	-	0.007	<1	<1	<1	<1	<2	<3	-
SW6	SW6	26/08/2020	Normal	water	<5	0.008	-	<0.0002	-	<0.001	-	<0.001	-	<0.001	-	<0.0001	-	<0.005	-	<0.001	-	<0.001	-	<0.005	-	<0.005	-	<0.005	-	<1	<1	<1	<1	<2	<3	-

Env Stds Comments

#1:assumed same as NH4
#2:Cyanide as un-ionised HCN, measured as [CN].
#3:Measured as NH3-N at pH 8
#4:In absence of total As guideline, As (V) guideline has been adopted.
#5:Guideline for Cr (VI) adopted
#6:Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#7:In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#8:Freshwater DGV adopted (insufficient marine toxicity data)

Appendix F Table F1 -Surface water results compared against ecological criteria - June 2020

	TRH - NEPM 2013							TRH - NEPM 1999					PAHs - standard 16																				Phenols - Halogenated									Phenols - Non-Halogenated									
	F1 (C6-C10 minus BTEX)	C6-C10 Fraction	F2 (>C10-C16 minus Naphthalene)	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	>C10-C40 (Sum of Total)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 (Sum of Total)	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo[b+j]fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Naphthalene-PAH	Phenanthrene	Pyrene	PAHs (Sum of total) - Lab calc	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-Chloro-3-methylphenol	Pentachlorophenol	tetrachlorophenols	Phenols (Total Halogenated)	Phenol	2-Nitrophenol	2-Methylphenol (o-Cresol)	3,4-Methylphenol (m,p-cresol)	2,4-Dimethylphenol	2,4-Dinitrophenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-Nitrophenol	Phenols (Total Non Halogenated)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
LOR	20	20	50	50	100	100	100	20	50	100	100	100	1	1	1	1	1	1	1	1	1	1	1	1	1	10	1	1	1	1	3	3	10	10	3	10	10	30	10	3	10	3	6	3	30	30	100	30	100
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																																
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																																
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)															0.4		0.2						1.4			16	16	2			490	160		20			10			320					45				
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																			34								2				58		
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																	0.2						1.4			70	70	2									22			400									
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																															340	120		3	34									2	45			58		

| Sample ID | Location Code | Date | Sample Type | Matrix Type | | | | | | | | | | | | | | | | | | |

Appendix F Table F1 -Surface water results compared against ecological criteria - June 2020

	OC Pesticides																									Herbicides	PCBs							
	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4'-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	4,4 DDD	4,4 DDT	DDT+DDE+DDD - Lab Calc	Dieldrin	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene	Dinoseb	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Total)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
LOR	1	1	0.1	0.1	0.1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	10	100	1	1	1	1	1	1	1	1
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																		
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																		
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.08			0.01						0.02			0.2	0.09		0.1		0.2					0.6		0.03		
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)					0.001								0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																	0.008						0.1											
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)					0.003			0.001			0.0004		0.01[#8]							0.007	0.0004			0.004	0.0006					0.3		0.01		
FD01	SW1	11/06/2020	Field_D	water	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	-	<1	<1	<1	<1	<1	<1	<1	<1
SW1	SW1	11/06/2020	Normal	water	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	-	<1	<1	<1	<1	<1	<1	<1	<1
SW2	SW2	11/06/2020	Normal	water	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	-	<1	<1	<1	<1	<1	<1	<1	<1
SW3	SW3	11/06/2020	Normal	water	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	-	<1	<1	<1	<1	<1	<1	<1	<1
SW4	SW4	11/06/2020	Normal	water	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	-	<1	<1	<1	<1	<1	<1	<1	<1
SW5	SW5	11/06/2020	Normal	water	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	-	<1	<1	<1	<1	<1	<1	<1	<1
QC01	SW6	26/08/2020	Field_D	water	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<100	<1	<1	<1	<1	<1	<1	<1	<1
SW6	SW6	26/08/2020	Normal	water	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<100	<1	<1	<1	<1	<1	<1	<1	<1

Env Stds Comments

#1:assumed same as NH4
#2:Cyanide as un-ionised HCN, measured as [CN].
#3:Measured as NH3-N at pH 8
#4:In absence of total As guideline, As (V) guideline has been adopted.
#5:Guideline for Cr (VI) adopted
#6:Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#7:In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#8:Freshwater DGV adopted (insufficient marine toxicity data)

					Inorganics					Acidity & Alkalinity					Major Ions								Nutrients							Organic Indicators				
					pH (Lab)	Total Dissolved Solids	Total Suspended Solids	COD	Cyanide (Total)	Alkalinity (Carbonate as CaCO3)	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Hydroxide as CaCO3)	Alkalinity (total as CaCO3)	Hardness as CaCO3	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Nitrogen (Total Oxidised) (as N)	Nitrogen (Total)	Kjeldahl Nitrogen Total	Phosphorus (Total)	BOD	Arsenic	Arsenic (filtered)	Cadmium	Cadmium (filtered)
					pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL					0.1	10	1	25	0.005	10	20	20	20	5	0.5	0.5	0.5	0.5	1	5	0.5	0.01	0.02	0.02	0.05	0.2	0.2	0.01	5	0.001	0.001	0.0002	0.0002
ADWG 2011 Aesthetic (v3.5 updated 2018)					6.5-8.5	600								200				180	250	250												
ADWG 2011 Health (v3.5 updated 2018)									0.08											500	1.5		11.3	0.91						0.01	0.01	0.002	0.002
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Silt 2-4m																																
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand 2-4m																																
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand 2-4m																																
NHMRC Recreational Guidelines 2008 - Health									0.8											5,000	15									0.1	0.1	0.02	0.02
Field ID	**Location Code**	**Date**	**Sample Type**	**Matrix Type**																												
FD01	SW1	11/06/2020	Field_D	water	7.9	150	10	<25	<0.005					79	22	6.0	1.3	22	21	35	<0.5	0.06	2.1	0.03	2.1	2.4	0.3	<0.01	<5	<0.001		<0.0002	
SW1	SW1	11/06/2020	Normal	water	8.0	170	14	<25	<0.005					77	22	5.7	1.3	22	20	36	<0.5	0.05	2.1	0.03	2.2	2.6	0.4	0.03	<5	<0.001		<0.0002	
SW2	SW2	11/06/2020	Normal	water	7.9	320	41	<25	<0.005					180	58	8.4	4.1	33	47	98	<0.5	0.05	0.12	<0.02	0.14	0.74	0.6	<0.01	<5	0.002		<0.0002	
SW3	SW3	11/06/2020	Normal	water	7.9	380	26	<25	<0.005					200	65	8.8	5.2	34	51	99	<0.5	0.16	0.23	0.03	0.26	1.16	0.9	0.01	<5	0.004		<0.0002	
SW4	SW4	11/06/2020	Normal	water	8.2	1,400	50	270	0.007					410	95	42	60	230	340	230	<0.5	87	<1	<1	<2.5	96	96	0.02	<5	0.004		<0.0002	
SW5	SW5	11/06/2020	Normal	water	7.9	270	42	<25	<0.005					170	58	4.6	3.1	20	28	120	<0.5	0.04	0.14	<0.02	0.14	0.74	0.6	0.01	<5	0.001		<0.0002	
SW6	SW6	26/08/2020	Normal	water	8.0	270	<1	<25	<0.005	<10	220	<20	220	140	30	16	<5	28	57	13	<0.5	<0.01	<0.02	<0.02	<0.05	0.5	0.5	0.01	<5	0.008		<0.0002	
QC01	SW6	26/08/2020	Field_D	water					<0.005												<0.5	<0.01	<0.02	<0.02	<0.05	0.5	0.5	0.01			0.007		<0.0002

Environmental Standards
National Health and Medical Research Council, August 2018, ADWG 2011 Aesthetic (v3.5 updated 2018)
National Health and Medical Research Council, August 2018, ADWG 2011 Health (v3.5 updated 2018)

						Metals																BTEXN						
						Chromium (III+VI)	Chromium (III+VI) (filtered)	Copper	Copper (filtered)	Lead	Lead (filtered)	Mercury	Mercury (filtered)	Molybdenum	Molybdenum (filtered)	Nickel	Nickel (filtered)	Selenium	Selenium (filtered)	Silver	Silver (filtered)	Tin	Tin (filtered)	Zinc	Zinc (filtered)	Naphthalene (BTEXN suite)	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total
						mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL						0.001	0.001	0.001	0.001	0.001	0.001	0.0001	0.0001	0.005	0.005	0.001	0.001	0.001	0.001	0.005	0.005	0.005	0.005	0.005	0.005	10	1	1	1	1	2	3
ADWG 2011 Aesthetic (v3.5 updated 2018)								1	1															3	3			25	3			20
ADWG 2011 Health (v3.5 updated 2018)								2	2	0.01	0.01	0.001	0.001	0.05	0.05	0.02	0.02	0.01	0.01	0.1	0.1						1	800	300			600
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Silt 2-4m																										NL	NL	NL	NL			NL
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand 2-4m																										NL	NL	NL	NL			NL
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand 2-4m																										NL	5,000	NL	NL			NL
NHMRC Recreational Guidelines 2008 - Health								20	20	0.1	0.1	0.01	0.01	0.5	0.5	0.2	0.2	0.1	0.1	1	1						10	8,000	3,000			6,000
Field ID	**Location Code**	**Date**	**Sample Type**	**Matrix Type**																												
FD01	SW1	11/06/2020	Field_D	water	0.002		0.008		<0.001		<0.0001		<0.005		0.001		<0.001		<0.005		<0.005		<0.005		<10	<1	<1	<1	<1	<2	<3
SW1	SW1	11/06/2020	Normal	water	0.002		0.007		<0.001		<0.0001		<0.005		0.001		<0.001		<0.005		<0.005		<0.005		<10	<1	<1	<1	<1	<2	<3
SW2	SW2	11/06/2020	Normal	water	0.003		0.003		0.003		<0.0001		<0.005		0.002		<0.001		<0.005		<0.005		0.006		<10	<1	<1	<1	<1	<2	<3
SW3	SW3	11/06/2020	Normal	water	0.003		0.003		0.003		<0.0001		0.007		0.002		<0.001		<0.005		<0.005		0.005		<10	<1	<1	<1	<1	<2	<3
SW4	SW4	11/06/2020	Normal	water	0.012		0.009		0.004		<0.0001		<0.005		0.008		<0.001		<0.005		<0.005		0.015		<10	<1	<1	<1	<1	<2	<3
SW5	SW5	11/06/2020	Normal	water	0.003		0.005		0.005		<0.0001		<0.005		0.002		<0.001		<0.005		<0.005		0.010		<10	<1	<1	<1	<1	<2	<3
SW6	SW6	26/08/2020	Normal	water	<0.001		<0.001		<0.001		<0.0001		<0.005		<0.001		<0.001		<0.005		<0.005		<0.005			<1	<1	<1	<1	<2	<3
QC01	SW6	26/08/2020	Field_D	water		<0.001		0.013		<0.001		<0.0001		<0.005		<0.001		<0.001		<0.005		<0.005		0.007		<1	<1	<1	<1	<2	<3

Environmental Standards
National Health and Medical Research Council, August 2018, ADWG 2
National Health and Medical Research Council, August 2018, ADWG 2

| | | | | | TRH - NEPM 2013 | | | | | | | TRH - NEPM 1999 | | | | | | PAHs - standard 16 | | | | | | |

						Phenols - Halogenated									Phenols - Non-Halogenated															
					Naphthalene-PAH	Phenanthrene	Pyrene	PAHs (Sum of total) - Lab calc	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-Chloro-3-methylphenol	Pentachlorophenol	Tetrachlorophenols	Phenols (Total Halogenated)	Phenol	2-Nitrophenol	2-Methylphenol (o-Cresol)	3,4-Methylphenol (m,p-cresol)	2,4-Dimethylphenol	2,4-Dinitrophenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-Nitrophenol	Phenols (Total Non Halogenated)	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4'-DDE	a-BHC	Aldrin	Aldrin + Dieldrin
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					1	1	1	1	3	3	10	10	3	10	10	30	10	3	10	3	6	3	30	30	100	30	100	1	1	0.1	0.1	0.1	0.1
ADWG 2011 Aesthetic (v3.5 updated 2018)									0.1	0.3		2																				
ADWG 2011 Health (v3.5 updated 2018)								0.01	300	200		20			10																	0.3
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Silt 2-4m					*NL*																											
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand 2-4m					*NL*																											
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand 2-4m					NL																											
NHMRC Recreational Guidelines 2008 - Health									3,000	2,000		200			100																	3
Field ID	**Location Code**	**Date**	**Sample Type**	**Matrix Type**																												
FD01	SW1	11/06/2020	Field_D	water	<1	<1	<1	<1																		<1	<1	<0.1	<0.1	<0.1	<0.1
SW1	SW1	11/06/2020	Normal	water	<1	<1	<1	<1																		<1	<1	<0.1	<0.1	<0.1	<0.1
SW2	SW2	11/06/2020	Normal	water	<1	<1	<1	<1																		<1	<1	<0.1	<0.1	<0.1	<0.1
SW3	SW3	11/06/2020	Normal	water	<1	<1	<1	<1																		<1	<1	<0.1	<0.1	<0.1	<0.1
SW4	SW4	11/06/2020	Normal	water	<1	<1	<1	<1																		<1	<1	<0.1	<0.1	<0.1	<0.1
SW5	SW5	11/06/2020	Normal	water	<1	<1	<1	<1																		<1	<1	<0.1	<0.1	<0.1	<0.1
SW6	SW6	26/08/2020	Normal	water	<1	<1	<1	<1	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.1
QC01	SW6	26/08/2020	Field_D	water	<1	<1	<1	<1	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.1

Environmental Standards
National Health and Medical Research Council, August 2018, ADWG 2
National Health and Medical Research Council, August 2018, ADWG 2

	OC Pesticides																		PCBs								Herbicides
	b-BHC	Chlordane	d-BHC	4,4 DDD	4,4 DDT	DDT+DDE+DDD - Lab Calc	Dieldrin	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Total)	Dinoseb
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	10	1	1	1	1	1	1	1	1	100
ADWG 2011 Aesthetic (v3.5 updated 2018)																												
ADWG 2011 Health (v3.5 updated 2018)		2			9									10	0.3			300										
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Silt 2-4m																												
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand 2-4m																												
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand 2-4m																												
NHMRC Recreational Guidelines 2008 - Health					90									100	3			3,000										
Field ID	**Location Code**	**Date**	**Sample Type**	**Matrix Type**																								
FD01	SW1	11/06/2020	Field_D	water	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1	
SW1	SW1	11/06/2020	Normal	water	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1	
SW2	SW2	11/06/2020	Normal	water	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1	
SW3	SW3	11/06/2020	Normal	water	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1	
SW4	SW4	11/06/2020	Normal	water	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1	
SW5	SW5	11/06/2020	Normal	water	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1	
SW6	SW6	26/08/2020	Normal	water	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<100
QC01	SW6	26/08/2020	Field_D	water	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<100

Environmental Standards
National Health and Medical Research Council, August 2018, ADWG 2
National Health and Medical Research Council, August 2018, ADWG 2

Appendix F Table 3 - Pore water and surface water samples collected in September 2020 - ecological assessment criteria

	Inorganics				Cyanide	Acidity & Alkalinity					Major Ions							Nutrients							Organic Indicator	Metals								
	pH (Lab)	Total Dissolved Solids	Total Suspended Solids	COD	Cyanide (Total)	Alkalinity (Carbonate as CaCO3)	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Hydroxide as CaCO3)	Alkalinity (total as CaCO3)	Hardness as CaCO3	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Nitrogen (Total Oxidised) (as N)	Nitrogen (Total)	Kjeldahl Nitrogen Total	Phosphorus (Total)	BOD	Aluminium (Filtered)	Arsenic	Arsenic (Filtered)	Cadmium	Cadmium (Filtered)	Chromium (III+VI)	Chromium (III+VI) (Filtered)	Copper	Copper (Filtered)
	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
LOR	0.1	5	5	25	0.005	10	20	20	20	1	0.5	0.5	0.5	0.5	1	2	0.5	0.01	0.02	0.02	0.05	0.2	0.2	0.01	5	0.05	0.001	0.001	0.0002	0.0001	0.001	0.001	0.001	0.001
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine	*7-8.5*		*0.5*															*0.015* [#1]			*0.015*	*0.3*		*0.03*									
ANZECC 2000 Marine Aquaculture Guideline			10		*0.005*																	*1*				0.01	*0.03*	*0.03*	*0.0005*	*0.0005*	*0.02*	*0.02*	*0.005*	*0.005*
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)					0.004 [#2]													0.91 [#7]											0.0055	0.0055	0.0044 [#8]	0.0044 [#8]	0.0013	0.0013
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																		
Sample ID	**Location Code**	**Date**	**Sample Type**	**Matrix Type**																														
PW01	PW01	11/09/2020	Normal	water	7.2	47,000	*49*	450	<0.005	<10	180	<20	180	7000	490	1400	420	12,000	25,000	3500	1.7	*0.06*	<0.02	<0.02	*<0.05*	*1*	1	*0.25*	<5	<0.05	0.003	-	<0.0002	-	<0.001	-	<0.001	-
PW02	PW02	11/09/2020	Normal	water	*6.6*	50,000	*2400*	4000	<0.005	<10	360	<20	360	5700	420	1100	360	9600	24,000	3600	2.1	<0.01	<0.02	<0.02	*<0.05*	*72*	72	*1.5*	42	<0.05	*0.339*	-	*0.0029*	-	*0.13*	-	*0.087*	-
PW03	PW03	11/09/2020	Normal	water	7	25,000	*590*	200	<0.005	<10	970	<20	970	2800	290	510	200	4000	9000	1500	2.9	*14*	<0.02	<0.02	*<0.05*	*15*	15	*0.03*	<5	<0.05	0.013	-	*0.0005*	-	*0.02*	-	*0.012*	-
PW04	PW04	11/09/2020	Normal	water	*6.6*	31,000	*380*	620	<0.005	<10	200	<20	200	4300	300	870	290	7500	16,000	2400	2.1	<0.01	<0.02	<0.02	*<0.05*	*16*	16	*0.33*	<10	*0.05*	*0.01*	-	*0.0007*	-	*0.022*	-	*0.011*	-
QC02	PW04	11/09/2020	Interlab_D	water	-	-	-	-	<0.004	-	-	-	-	-	-	-	-	-	-	-	1.3	*0.07*	0.02	<0.01	*0.02*	*7.9*	7.9	*0.55*	-	<0.1 [#1]	-	<0.1 [#1]	-	<0.001 [#1]	-	<0.1 [#1]	-	*0.015*
PW07	PW07	11/09/2020	Normal	water	*6.9*	23,000	*440*	340	<0.005	<10	360	<20	360	2900	210	570	190	4900	11,000	1400	2.1	*0.23*	<0.02	<0.02	*<0.05*	*5.1*	5.1	*0.11*	<5	*0.06*	0.016	-	*0.0008*	-	0.019	-	*0.013*	-
SW7	SW7	11/09/2020	Normal	water	7.4	50,000	*460*	350	<0.005	<10	190	<20	190	6500	450	1300	400	11,000	23,000	3200	1.9	*0.76*	0.4	0.29	*0.69*	*5.89*	5.2	*0.14*	8.5	<0.05	0.011	-	0.0004	-	*0.07*	-	*0.016*	-
QC04	SW8	11/09/2020	Field_D	water	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-	1.9	*0.05*	<0.02	<0.02	*<0.05*	<0.2	<0.2	0.02	-	<0.05	0.003	-	<0.0002	-	<0.001	-	0.001	-
SW8	SW8	11/09/2020	Normal	water	7.8	48,000	*68*	400	<0.005	<10	140	<20	140	7600	500	1500	460	13,000	26,000	3600	1.9	*0.05*	<0.02	<0.02	*<0.05*	*0.3*	0.3	0.02	<5	<0.05	0.003	-	<0.0002	-	0.002	-	*0.006*	-

Env Stds Comments
#1:assumed same as NH4
#2:Cyanide as un-ionised HCN, measured as [CN].
#3:Measured as NH3-N at pH 8
#4:(pH >6.5)
#5:In absence of total As guideline, As (V) guideline has been adopted.
#6:Guideline for Cr (VI) adopted
#7:Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#8:In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#9:Freshwater DGV adopted (insufficient marine toxicity data)

Data Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR

Appendix F Table 3 - Pore water and surface water samples collected in September 2020 - ecological assessment criteria

	Metals																			BTEXN								TRH - NEPM 2013						
	Iron (Filtered)	Lead	Lead (Filtered)	Manganese (Filtered)	Mercury	Mercury (Filtered)	Molybdenum	Molybdenum (Filtered)	Nickel	Nickel (Filtered)	Selenium	Selenium (Filtered)	Silver	Silver (Filtered)	Tin	Tin (Filtered)	Zinc	Zinc (Filtered)	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	BTEX (Sum of Total) - Lab Calc	F1 (C6-C10 minus BTEX)	C6-C10 Fraction	F2 (>C10-C16 minus Naphthalene)	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	>C10-C40 (Sum of Total)
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
LOR	0.05	0.001	0.001	0.005	0.0001	0.0001	0.005	0.001	0.001	0.001	0.001	0.01	0.005	0.001	0.005	0.001	0.005	0.005	1	1	1	1	2	3	1	20	20	50	50	100	100	100
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																
ANZECC 2000 Marine Aquaculture Guideline	*0.01*	*0.001*	*0.001*	*0.01*	*0.001*	*0.001*			*0.1*	*0.1*	*0.01*	*0.01*	*0.003*	*0.003*			*0.005*	*0.005*														
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)		0.0044	0.0044		0.0004	0.0004			0.07	0.07			0.0014	0.0014			0.015	0.015	700	180	80											
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)				0.08																		350										
Sample ID	**Location Code**	**Date**	**Sample Type**	**Matrix Type**																														
PW01	PW01	11/09/2020	Normal	water	0.27	<0.001	-	0.024	<0.0001	-	0.012	-	<0.001	-	<0.001	-	<0.005	-	<0.005	-	<0.005	-	<1	<1	<1	<1	<2	<3	-	<20	<20	60	60	200	<100	260
PW02	PW02	11/09/2020	Normal	water	0.11	0.14	-	0.057	0.0013	-	0.087	-	0.032	-	0.004	-	<0.005	-	0.015	-	0.45	-	<1	<1	<1	<1	<2	<3	-	<20	<20	<50	<50	700	300	1000
PW03	PW03	11/09/2020	Normal	water	<0.05	0.03	-	0.063	0.0002	-	0.033	-	0.009	-	0.001	-	<0.005	-	0.034	-	0.056	-	<1	<1	<1	<1	<2	<3	-	<20	<20	80	80	800	200	1080
PW04	PW04	11/09/2020	Normal	water	1.37	0.02	-	0.016	0.0002	-	0.047	-	0.011	-	0.001	-	<0.005	-	<0.005	-	0.051	-	<1	<1	<1	<1	<2	<3	-	<20	<20	170	170	3000	1000	4170
QC02	PW04	11/09/2020	Interlab_D	water	0.21	-	<0.01[#1]	0.01	-	<0.0001	-	0.016	-	<0.01[#1]	-	<0.1[#1]	-	<0.01[#1]	-	<0.05[#1]	-	<1	<2	<2	<2	<2	<1	<20	<20	<100	<100	1320	410	1730
PW07	PW07	11/09/2020	Normal	water	0.68	0.023	-	0.027	0.0002	-	0.017	-	0.008	-	0.001	-	<0.005	-	<0.005	-	0.046	-	<1	<1	<1	<1	<2	<3	-	<20	<20	60	60	600	200	860
SW7	SW7	11/09/2020	Normal	water	0.68	0.025	-	0.024	0.0002	-	0.019	-	0.005	-	<0.001	-	<0.005	-	<0.005	-	0.057	-	<1	<1	<1	<1	<2	<3	-	<20	<20	<50	<50	400	200	600
QC04	SW8	11/09/2020	Field_D	water	<0.05	0.001	-	0.006	<0.0001	-	0.014	-	<0.001	-	<0.001	-	<0.005	-	<0.005	-	0.005	-	<1	<1	<1	<1	<2	<3	-	<20	<20	<50	<50	200	100	300
SW8	SW8	11/09/2020	Normal	water	0.005	0.003	-	0.01	<0.0001	-	0.013	-	<0.001	-	<0.001	-	<0.005	-	<0.005	-	0.009	-	<1	<1	<1	<1	<2	<3	-	<20	<20	<50	<50	100	<100	100

Env Stds Comments
#1:assumed same as NH4
#2:Cyanide as un-ionised HCN, measured as [CN].
#3:Measured as NH3-N at pH 8
#4:(pH >6.5)
#5:In absence of total As guideline, As (V) guideline has been adopted.
#6:Guideline for Cr (VI) adopted
#7:Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#8:In absence of total Cr guideline, Cr (VI) guideline has been adopted.
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Data Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR

Appendix F Table 3 - Pore water and surface water samples collected in September 2020 - ecological assessment criteria

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Appendix F Table 3 - Pore water and surface water samples collected in September 2020 - ecological assessment criteria

	Phenols - Halogenated									Phenols - Non-Halogenated										OC Pesticides														
	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-Chloro-3-methylphenol	Pentachlorophenol	tetrachlorophenols	Phenols (Total Halogenated)	Phenol	2-Nitrophenol	2-Methylphenol (o-Cresol)	3,4-Methylphenol (m,p-cresol)	2,4-Dimethylphenol	2,4-Dinitrophenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-Nitrophenol	Phenols (Total Non Halogenated)	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4'-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	DDT+DDE+DDD - Lab Calc
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
LOR	3	3	10	10	3	10	10	30	10	3	10	3	6	3	30	30	100	30	100	1	1	0.1	0.1	0.1	0.1	0.1	1	0.5	0.5	0.1	0.1	0.1	0.1
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																	
ANZECC 2000 Marine Aquaculture Guideline																											*0.004*						
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)							22			400																							
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)	340	120		3	34									2	45			58					0.003				0.001				0.0004	

Sample ID	Location Code	Date	Sample Type	Matrix Type																														
PW01	PW01	11/09/2020	Normal	water	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1
PW02	PW02	11/09/2020	Normal	water	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1
PW03	PW03	11/09/2020	Normal	water	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.2	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1
PW04	PW04	11/09/2020	Normal	water	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1
QC02	PW04	11/09/2020	Interlab_D	water	<1	<1	<1	<1	<1	<2	-	-		<1	<1	<1	<2	<1	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PW07	PW07	11/09/2020	Normal	water	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1
SW7	SW7	11/09/2020	Normal	water	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1
QC04	SW8	11/09/2020	Field_D	water	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1
SW8	SW8	11/09/2020	Normal	water	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1

Env Stds Comments
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#3:Measured as NH3-N at pH 8
#4:(pH >6.5)
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Data Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR

	OC Pesticides													Herbicides	PCBs							
	Dieldrin	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	Endrin ketone	g BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene	Dinoseb	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Total)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
LOR	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	10	100	5	1	5	5	5	5	5	1
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																						
ANZECC 2000 Marine Aquaculture Guideline								*0.004*														
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)					0.008						0.1											
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)	0.01[#9]							0.007	0.0004			0.004	0.0006					0.3		0.01		

Sample ID	Location Code	Date	Sample Type	Matrix Type																			
PW01	PW01	11/09/2020	Normal	water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<100	<5	<1	<5	<5	<5	<5	<5	<1
PW02	PW02	11/09/2020	Normal	water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<100	<5	<1	<5	<5	<5	<5	<5	<1
PW03	PW03	11/09/2020	Normal	water	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<100	<5	<1	<5	<5	<5	<5	<5	<1
PW04	PW04	11/09/2020	Normal	water	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<100	<5	<1	<5	<5	<5	<5	<5	<1
QC02	PW04	11/09/2020	Interlab_D	water	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	-	-	-	-	-	-	-	-	-	<1
PW07	PW07	11/09/2020	Normal	water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<100	<5	<1	<5	<5	<5	<5	<5	<1
SW7	SW7	11/09/2020	Normal	water	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<100	<5	<1	<5	<5	<5	<5	<5	<1
QC04	SW8	11/09/2020	Field_D	water	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<100	<5	<1	<5	<5	<5	<5	<5	<1
SW8	SW8	11/09/2020	Normal	water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<100	<5	<1	<5	<5	<5	<5	<5	<1

Env Stds Comments
#1:assumed same as NH4
#2:Cyanide as un-ionised HCN, measured as [CN].
#3:Measured as NH3-N at pH 8
#4:(pH >6.5)
#5:In absence of total As guideline, As (V) guideline has been adopted.
#6:Guideline for Cr (VI) adopted
#7:Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#8:In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#9:Freshwater DGV adopted (insufficient marine toxicity data)

Data Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR

Appendix F Table F4 - Pore water and surface water samples collected in September 2020 - human health assessment criteria - September 2020

				Inorganics					Acidity & Alkalinity					Major Ions							Nutrients											
	pH (Lab)	Total Dissolved Solids	Total Suspended Solids	COD	Cyanide (Total)	Alkalinity (Carbonate as CaCO3)	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Hydroxide as CaCO3)	Alkalinity (total as CaCO3)	Hardness as CaCO3	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Nitrogen (Total Oxidised) (as N)	Nitrogen (Total)	Kjeldahl Nitrogen Total	Phosphorus (Total)	Aluminium (filtered)	Arsenic	Arsenic (filtered)	Cadmium	Cadmium (filtered)
	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL	0.1	5	5	25	0.004	10	20	20	20	1	0.5	0.5	0.5	0.5	1	2	0.1	0.01	0.01	0.01	0.01	0.1	0.1	0.01	0.01	0.001	0.001	0.0002	0.0001
ADWG 2011 Aesthetic (v3.5 updated 2018)	6.5-8.5	600																							0.2				
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand										200				180	250	250													
2-4m																													
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																													
2-4m																													
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																													
2-4m																													
NHMRC Recreational Guidelines 2008 - Health					0.8											5,000	15									0.1	0.1	0.02	0.02
Field ID	**Location Code**	**Date**	**Sample Type**	**Matrix Type**																											
PW01	PW01	11/09/2020	Normal	water	7.2	47,000	40	450	<0.005	<10	180	<20	180	7,000	490	1,400	420	12,000	25,000	3,500	1.7	0.06	<0.02	<0.02	<0.05	1	1.0	0.25	<0.05	0.003	-	<0.0002	-
PW02	PW02	11/09/2020	Normal	water	6.6	50,000	2,400	4,000	<0.005	<10	360	<20	360	5,700	420	1,100	360	9,600	24,000	3,600	2.1	<0.01	<0.02	<0.02	<0.05	72	72	1.5	<0.05	0.082	-	0.0029	-
PW03	PW03	11/09/2020	Normal	water	7.0	25,000	590	200	<0.005	<10	970	<20	970	2,800	290	510	200	4,000	9,000	1,500	2.9	14	<0.02	<0.02	<0.05	15	15	0.03	<0.05	0.013	-	0.0005	-
PW04	PW04	11/09/2020	Normal	water	6.6	31,000	380	620	<0.005	<10	200	<20	200	4,300	300	870	290	7,500	16,000	2,400	2.1	<0.01	<0.02	<0.02	<0.05	16	16	0.33	0.05	0.030	-	0.0007	-
PW07	PW07	11/09/2020	Normal	water	6.9	23,000	440	340	<0.005	<10	360	<20	360	2,900	210	570	190	4,900	11,000	1,400	2.1	0.23	<0.02	<0.02	<0.05	5.1	5.1	0.11	0.06	0.016	-	0.0005	-
QC02	PW04	11/09/2020	Normal	water	-	-	-	-	<0.004	-	-	-	-	-	-	-	-	-	-	-	1.3	0.07	0.02	<0.01	0.02	7.9	7.9	0.55	<0.10	-	<0.010	-	<0.0010
QC04	SW8	11/09/2020	Normal	water	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-	1.9	0.05	<0.02	<0.02	<0.05	<0.2	<0.2	0.02	<0.05	0.003	-	<0.0002	-
SW7	SW7	11/09/2020	Normal	water	7.4	50,000	460	350	<0.005	<10	190	<20	190	6,500	450	1,300	400	11,000	23,000	3,200	1.9	0.76	0.40	0.29	0.69	5.89	5.2	0.14	<0.05	0.011	-	0.0004	-
SW8	SW8	11/09/2020	Normal	water	7.8	48,000	68	400	<0.005	<10	140	<20	140	7,600	500	1,500	460	13,000	26,000	3,600	1.9	0.05	<0.02	<0.02	<0.05	0.3	0.3	0.02	<0.05	0.003	-	<0.0002	-

Comments
#1 Natural concentrations generally <0.01 mg/L
#2 Not specifically guideline value: >500mg/L can have purgative effects
#3 Guideline value calculated by dividing Nitrate (as Nitrate) value (50 mg/L) by 4.427
#4 Guideline value calculated by dividing Nitrite (as Nitrite) value (0.3 mg/L) by molecular weight (3.2967033).
#5 Not limiting: Derived water HSL exceeds water solubility limit
#6 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.

Environmental Standards
National Health and Medical Research Council, August 2018, ADWG 2011 Aesthetic (v3.5 updated 2018)
National Health and Medical Research Council, August 2018, ADWG 2011 Health (v3.5 updated 2018)

Appendix F Table F4 - Pore water and surface water samples collected in September 2020 - human health assessment criteria - September 2020

						Metals																		BTEXN				
						Chromium (III+VI)	Chromium (III+VI) (filtered)	Copper	Copper (filtered)	Iron (filtered)	Lead	Lead (filtered)	Manganese (filtered)	Mercury	Mercury (filtered)	Molybdenum	Molybdenum (filtered)	Nickel	Nickel (filtered)	Selenium	Selenium (filtered)	Silver	Silver (filtered)	Tin	Tin (filtered)	Zinc	Zinc (filtered)	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)
						mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL						0.001	0.001	0.001	0.001	0.05	0.001	0.001	0.001	0.0001	0.0001	0.005	0.001	0.001	0.001	0.001	0.01	0.005	0.001	0.005	0.001	0.005	0.005	1	1	1	1	2
ADWG 2011 Aesthetic (v3.5 updated 2018)								1	1	0.3			0.1												3[#1]	3[#1]		25	3		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																															
2-4m																										NL	**NL**	**NL**		
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																															
2-4m																										*NL*	*NL*	*NL*		
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																															
2-4m																										5,000	NL	NL		
NHMRC Recreational Guidelines 2008 - Health								20	20		0.1	0.1	5	0.01	0.01	0.5	0.5	0.2	0.2	0.1	0.1	1	1					10	8,000	3,000		
Field ID	**Location Code**	**Date**	**Sample Type**	**Matrix Type**																											
PW01	PW01	11/09/2020	Normal	water		<0.001	-	<0.001	-	0.22	<0.001	-	0.024	<0.0001	-	0.012	-	<0.001	-	<0.001	-	<0.005	-	<0.005	-	<0.005	-	<1	<1	<1	<1	<2
PW02	PW02	11/09/2020	Normal	water		0.12	-	0.087	-	0.11	0.19	-	0.057	0.0012	-	0.087	-	0.032	-	0.004	-	<0.005	-	0.015	-	0.48	-	<1	<1	<1	<1	<2
PW03	PW03	11/09/2020	Normal	water		0.020	-	0.012	-	<0.05	0.030	-	0.063	0.0002	-	0.033	-	0.009	-	0.001	-	<0.005	-	0.034	-	0.056	-	<1	<1	<1	<1	<2
PW04	PW04	11/09/2020	Normal	water		0.022	-	0.011	-	0.32	0.020	-	0.016	0.0002	-	0.047	-	0.011	-	0.001	-	<0.005	-	<0.005	-	0.061	-	<1	<1	<1	<1	<2
PW07	PW07	11/09/2020	Normal	water		0.019	-	0.011	-	0.68	0.023	-	0.027	0.0002	-	0.017	-	0.008	-	0.001	-	<0.005	-	<0.005	-	0.046	-	<1	<1	<1	<1	<2
QC02	PW04	11/09/2020	Normal	water		-	<0.010	-	0.015	0.21	-	<0.010	0.010	-	<0.0001	-	0.016	-	<0.010	-	<0.10	-	<0.010	-	<0.010	-	<0.050	<1	<2	<2	<2	<2
QC04	SW8	11/09/2020	Normal	water		<0.001	-	0.001	-	<0.05	0.001	-	0.006	<0.0001	-	0.014	-	<0.001	-	<0.001	-	<0.005	-	<0.005	-	0.005	-	<1	<1	<1	<1	<2
SW7	SW7	11/09/2020	Normal	water		0.020	-	0.016	-	0.06	0.025	-	0.024	0.0002	-	0.019	-	0.005	-	<0.001	-	<0.005	-	<0.005	-	0.057	-	<1	<1	<1	<1	<2
SW8	SW8	11/09/2020	Normal	water		0.002	-	0.005	-	0.06	0.003	-	0.010	<0.0001	-	0.013	-	<0.001	-	<0.001	-	<0.005	-	<0.005	-	0.009	-	<1	<1	<1	<1	<2

Comments
#1 Natural concentrations generally <0.01 mg/L
#2 Not specifically guideline value: >500mg/L can have purgative effects
#3 Guideline value calculated by dividing Nitrate (as Nitrate) value (50 mg/L) by
#4 Guideline value calculated by dividing Nitrite (as Nitrite) value (0.3 mg/L) by
#5 Not limiting: Derived water HSL exceeds water solubility limit
#6 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fr

Environmental Standards
National Health and Medical Research Council, August 2018, ADWG 2011 Aesth
National Health and Medical Research Council, August 2018, ADWG 2011 Healt

Appendix F Table F4 - Pore water and surface water samples collected in September 2020 - human health assessment criteria - September 2020

				TRH - NEPM 2013							TRH - NEPM 1999						TRH - NEPM 1999 - SG Cleanup											
				Xylene Total	BTEX (Sum of Total) - Lab Calc	F1 (C6-C10 minus BTEX)	C6-C10 Fraction	F2 (>C10-C16 minus Naphthalene)	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	>C10-C40 (Sum of Total)	C6-C9 Fraction		C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 (Sum of Total)	C10-C14 SG Cleanup	C15-C28 SG Cleanup	C29-C36 SG Cleanup	C10-C36 (sum) SG Cleanup	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo[b+j]fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	%	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				2	1	20	20	50	50	100	100	100	20		50	100	50	50	50	100	100	400	1	1	1	1	0.5	1	1	1
ADWG 2011 Aesthetic (v3.5 updated 2018)				20																									
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																													
2-4m				**NL**		**NL**		**NL**																					
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																													
2-4m				*NL*		*NL*		*NL*																					
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																													
2-4m				NL		6,000[#6]		NL																					
NHMRC Recreational Guidelines 2008 - Health				6,000																							0.1		
Field ID	**Location Code**	**Date**	**Sample Type**	**Matrix Type**																									
PW01	PW01	11/09/2020	Normal	water	<3	-	<20	<20	60	60	200	<100	260	<20	-	70	<100	<100	<100					<1	<1	<1	<1	<1	<1	<1	<1
PW02	PW02	11/09/2020	Normal	water	<3	-	<20	<20	<50	<50	700	300	1,000	<20	-	<50	400	400	800	<50	<100	<100	<100	<1	<1	<1	1	1	1	1	<1
PW03	PW03	11/09/2020	Normal	water	<3	-	<20	<20	80	80	800	200	1,080	<20	-	<50	500	400	900	<50	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1
PW04	PW04	11/09/2020	Normal	water	<3	-	<20	<20	170	170	3,000	1,000	4,170	<20	-	50	2,100	1,500	3,650	<50	1,400	600	2,000	<1	<1	<1	<1	<1	<1	<1	<1
PW07	PW07	11/09/2020	Normal	water	<3	-	<20	<20	60	60	600	200	860	<20	-	<50	300	400	700					<1	<1	<1	<1	<1	<1	<1	<1
QC02	PW04	11/09/2020	Normal	water	<2	<1	<20	<20	<100	<100	1,320	410	1,730	<20	-	<50	900	670	1,570					<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0
QC04	SW8	11/09/2020	Normal	water	<3	-	<20	<20	<50	<50	200	100	300	<20	-	<50	<100	200	200					<1	<1	<1	<1	<1	<1	<1	<1
SW7	SW7	11/09/2020	Normal	water	<3	-	<20	<20	<50	<50	400	200	600	<20	-	<50	100	300	400					<1	<1	<1	<1	<1	<1	<1	<1
SW8	SW8	11/09/2020	Normal	water	<3	-	<20	<20	<50	<50	100	<100	100	<20	-	<50	<100	100	100					<1	<1	<1	<1	<1	<1	<1	<1

Comments
#1 Natural concentrations generally <0.01 mg/L
#2 Not specifically guideline value: >500mg/L can have purgative effects
#3 Guideline value calculated by dividing Nitrate (as Nitrate) value (50 mg/L) by
#4 Guideline value calculated by dividing Nitrite (as Nitrite) value (0.3 mg/L) by
#5 Not limiting: Derived water HSL exceeds water solubility limit
#6 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fr

Environmental Standards
National Health and Medical Research Council, August 2018, ADWG 2011 Aest
National Health and Medical Research Council, August 2018, ADWG 2011 Healt

Appendix F Table F4 - Pore water and surface water samples collected in September 2020 - human health assessment criteria - September 2020

							PAHs - standard 16																Phenols - Halogenated									Phenols - Non-Halogenated							
							Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Naphthalene-PAH	Phenanthrene	Pyrene	PAHs (Sum of total) - Lab calc	Total 8 PAHs (as BaP TEQ)(zero LOR) - Lab Calc	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-Chloro-3-methylphenol	Pentachlorophenol	tetrachlorophenols	Phenols (Total Halogenated)	Phenol	2-Nitrophenol	2-Methylphenol (o-Cresol)	3,4-Methylphenol (m,p-cresol)	2,4-Dimethylphenol	2,4-Dinitrophenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol
							µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL							1	1	1	1	1	1	1	1	1	0.5	0.5	1	1	1	1	1	1	2	30	10	1	1	1	2	1	30	30	100
ADWG 2011 Aesthetic (v3.5 updated 2018)																		0.1	0.3		2													
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																	
2-4m													**NL**																				
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																	
2-4m												*NL*	*NL*																				
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																	
2-4m												NL	NL																				
NHMRC Recreational Guidelines 2008 - Health																		3,000	2,000		200			100									
Field ID	**Location Code**	**Date**	**Sample Type**	**Matrix Type**																													
PW01	PW01	11/09/2020	Normal	water		<1	<1	1	<1	<1	<10	<1	<1	1	2	-	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100
PW02	PW02	11/09/2020	Normal	water		1	<1	2	<1	<1	<10	<1	<1	2	9	-	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100
PW03	PW03	11/09/2020	Normal	water		<1	<1	1	<1	<1	<10	<1	<1	1	2	-	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100
PW04	PW04	11/09/2020	Normal	water		<1	<1	1	<1	<1	<10	<1	<1	1	2	-	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100
PW07	PW07	11/09/2020	Normal	water		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	-	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100
QC02	PW04	11/09/2020	Normal	water		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	-	-	<1.0	<1.0	<1.0	<2.0	<1.0	-	-	-
QC04	SW8	11/09/2020	Normal	water		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	-	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100
SW7	SW7	11/09/2020	Normal	water		<1	<1	1	<1	<1	<10	<1	<1	1	2	-	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100
SW8	SW8	11/09/2020	Normal	water		<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	-	<3	<3	<10	<10	<3	<10	<10	<30	<10	<3	<10	<3	<6	<3	<30	<30	<100

Comments
#1 Natural concentrations generally <0.01 mg/L
#2 Not specifically guideline value: >500mg/L can have purgative effects
#3 Guideline value calculated by dividing Nitrate (as Nitrate) value (50 mg/L) by
#4 Guideline value calculated by dividing Nitrite (as Nitrite) value (0.3 mg/L) by
#5 Not limiting: Derived water HSL exceeds water solubility limit
#6 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fr

Environmental Standards
National Health and Medical Research Council, August 2018, ADWG 2011 Aest
National Health and Medical Research Council, August 2018, ADWG 2011 Healt

Appendix F Table F4 - Pore water and surface water samples collected in September 2020 - human health assessment criteria - September 2020

			OC Pesticides																											
	4-Nitrophenol	Phenols (Total Non Halogenated)	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4'-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	DDT+DDE+DDD - Lab Calc	Dieldrin	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	30	100	1	1	0.1	0.1	0.1	0.1	0.1	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	10
ADWG 2011 Aesthetic (v3.5 updated 2018)																														
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																														
2-4m																														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																														
2-4m																														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																														
2-4m																														
NHMRC Recreational Guidelines 2008 - Health								3							90										100	3			3,000	
Field ID	**Location Code**	**Date**	**Sample Type**	**Matrix Type**																											
PW01	PW01	11/09/2020	Normal	water	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10
PW02	PW02	11/09/2020	Normal	water	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10
PW03	PW03	11/09/2020	Normal	water	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.2	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10
PW04	PW04	11/09/2020	Normal	water	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10
PW07	PW07	11/09/2020	Normal	water	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10
QC02	PW04	11/09/2020	Normal	water	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	-
QC04	SW8	11/09/2020	Normal	water	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10
SW7	SW7	11/09/2020	Normal	water	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10
SW8	SW8	11/09/2020	Normal	water	<30	<100	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10

Comments
#1 Natural concentrations generally <0.01 mg/L
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#3 Guideline value calculated by dividing Nitrate (as Nitrate) value (50 mg/L) by
#4 Guideline value calculated by dividing Nitrite (as Nitrite) value (0.3 mg/L) by
#5 Not limiting: Derived water HSL exceeds water solubility limit
#6 To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fr

Environmental Standards
National Health and Medical Research Council, August 2018, ADWG 2011 Aesth
National Health and Medical Research Council, August 2018, ADWG 2011 Healt

Appendix F Table F4 - Pore water and surface water samples collected in September 2020 - human health assessment criteria - September 2020

						PCBs								Herbicides
						Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Total)	Dinoseb
						µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL						5	1	5	5	5	5	5	1	100
ADWG 2011 Aesthetic (v3.5 updated 2018)														
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
NHMRC Recreational Guidelines 2008 - Health														
Field ID	**Location Code**	**Date**	**Sample Type**	**Matrix Type**										
PW01	PW01	11/09/2020	Normal	water		<5	<1	<5	<5	<5	<5	<5	<1	<100
PW02	PW02	11/09/2020	Normal	water		<5	<1	<5	<5	<5	<5	<5	<1	<100
PW03	PW03	11/09/2020	Normal	water		<5	<1	<5	<5	<5	<5	<5	<1	<100
PW04	PW04	11/09/2020	Normal	water		<5	<1	<5	<5	<5	<5	<5	<1	<100
PW07	PW07	11/09/2020	Normal	water		<5	<1	<5	<5	<5	<5	<5	<1	<100
QC02	PW04	11/09/2020	Normal	water		-	-	-	-	-	-	-	<1	-
QC04	SW8	11/09/2020	Normal	water		<5	<1	<5	<5	<5	<5	<5	<1	<100
SW7	SW7	11/09/2020	Normal	water		<5	<1	<5	<5	<5	<5	<5	<1	<100
SW8	SW8	11/09/2020	Normal	water		<5	<1	<5	<5	<5	<5	<5	<1	<100

Comments
#1 Natural concentrations generally <0.01 mg/L
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Environmental Standards
National Health and Medical Research Council, August 2018, ADWG 2011 Aest
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Appendix G –Historical data for groundwater, surface water, leachate, soil and landfill gas

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]								0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
AB01_01 Jul 01_-	AB01	1/07/2001	water	-	7.4	**1000**	-	-	-	-	620	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.8***	-	-	3.8	<0.01	12	-	-	0.055	-	-	0.002
AB01_01 Oct 01_-	AB01	1/10/2001	water	-	7.5	**1000**	-	-	-	-	600	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.83***	-	-	3.4	<0.01	12	-	-	0.078	-	-	<0.001
AB01_01 Jan 02_-	AB01	1/01/2002	water	-	7.5	**1100**	-	-	-	-	620	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.55***	-	-	3	<0.01	12	-	-	0.059	-	-	<0.001
AB01_01 Apr 02_-	AB01	1/04/2002	water	-	7.8	**990**	-	-	-	-	610	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.38***	-	-	3.6	0.01	14	-	-	0.109	-	-	0.001
AB01_01 Jul 02_-	AB01	1/07/2002	water	-	7.9	**900**	-	-	-	-	570	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.6***	-	-	2	<0.01	9	-	-	0.064	-	-	<0.001
AB01_01 Apr 03_-	AB01	1/04/2003	water	-	7.93	**1070**	-	-	-	-	670	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.9***	-	-	3	0.02	21	-	-	0.097	-	-	<0.001
AB01_01 Jul 04_-	AB01	1/07/2004	water	-	7.67	-	-	-	-	-	744	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.89***	-	-	-	<0.01	19	-	-	0.132	-	-	-
AB01_01 Jan 05_-	AB01	1/01/2005	water	-	7.89	-	-	-	-	-	930	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.68***	-	-	-	0.117	9	-	-	0.066	-	-	<0.001
BH10_01 Jun 94_-	BH10	1/06/1994	water	-	7.8	**1077**	-	-	-	-	390	-	-	-	-	-	-	-	-	-	-	-	-	-	***1***	-	-	-	-	11	-	-	0.0172	-	-	0.008
BH10_01 Sep 94_-	BH10	1/09/1994	water	-	7.4	**885**	-	-	-	-	576	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.8***	-	-	-	-	29	-	-	0.018	-	-	0.003
BH10_01 Dec 94_-	BH10	1/12/1994	water	-	7.6	**899**	-	-	-	-	616	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.6***	-	-	-	-	29	-	-	0.01	-	-	0.0005
BH10_01 Mar 95_-	BH10	1/03/1995	water	-	7.6	**1047**	-	-	-	-	606	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.7***	-	-	-	-	19	-	-	0.013	-	-	0.003
BH10_01 Jun 95_-	BH10	1/06/1995	water	-	7.44	**834**	-	-	-	-	408	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.3***	-	-	-	-	19	-	-	0.023	-	-	0.003
BH10_01 Sep 95_-	BH10	1/09/1995	water	-	***8.6***	**852**	-	-	-	-	656	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	1.6	0.17	21	-	-	0.011	-	-	0.0007
BH10_01 Jan 96_-	BH10	1/01/1996	water	-	7.7	**721**	-	-	-	-	548	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.63***	-	-	1.3	-	18	-	-	0.01	-	-	0.001
BH10_01 Apr 96_-	BH10	1/04/1996	water	-	7.76	**595**	-	-	-	-	616	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.31***	-	-	1.8	0.08	22	-	-	0.024	-	-	0.001
BH10_01 Jul 96_-	BH10	1/07/1996	water	-	***8.79***	**866**	-	-	-	-	628	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.81***	-	-	1.9	0.34	12	-	-	0.014	-	-	0.006
BH10_01 Oct 96_-	BH10	1/10/1996	water	-	7.58	**1066**	-	-	-	-	748	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.32***	-	-	2.2	0.79	21	-	-	0.03	-	-	0.001
BH10_01 Jan 97_-	BH10	1/01/1997	water	-	7.71	**1168**	-	-	-	-	698	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.82***	-	-	2.8	0.1	34	-	-	0.04	-	-	0.001
BH10_01 Apr 97_-	BH10	1/04/1997	water	-	7.72	**1097**	-	-	-	-	780	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.32***	-	-	3.8	0.01	27	-	-	0.029	-	-	0.007
BH10_01 Jul 97_-	BH10	1/07/1997	water	-	7.36	**1146**	-	-	-	-	660	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.58***	-	-	3.6	0.2	20	-	-	0.015	-	-	0.001
BH10_01 Oct 97_-	BH10	1/10/1997	water	-	7.54	**1155**	-	-	-	-	716	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.49***	-	-	4.6	0.03	14	-	-	0.022	-	-	0.001
BH10_01 Jan 98_-	BH10	1/01/1998	water	-	7.61	**1061**	-	-	-	-	686	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.77***	-	-	4.8	0.25	8	-	-	0.017	-	-	0.001
BH10_01 Apr 98_-	BH10	1/04/1998	water	-	7.66	**1142**	-	-	-	-	726	-	-	-	-	-	-	-	-	-	-	-	-	-	***4.14***	-	-	6.7	0.01	14	-	-	0.017	-	-	0.018
BH10_01 Jul 98_-	BH10	1/07/1998	water	-	7.6	**1110**	-	-	-	-	804	-	-	-	-	-	-	-	-	-	-	-	-	-	***4.17***	-	-	4.9	0.01	19	-	-	0.01	-	-	0.001
BH10_01 Oct 98_-	BH10	1/10/1998	water	-	***6.82***	**1020**	-	-	-	-	634	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.32***	-	-	4.2	0.01	16	-	-	0.01	-	-	0.002
BH10_01 Jan 99_-	BH10	1/01/1999	water	-	7.3	**1430**	-	-	-	-	870	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.89***	-	-	5.1	0.01	13	-	-	0.019	-	-	0.001
BH10_01 Mar 99_-	BH10	1/03/1999	water	-	7.2	**1500**	-	-	-	-	892	-	-	-	-	-	-	-	-	-	-	-	-	-	***4.6***	-	-	4.6	0.03	12	-	-	0.015	-	-	0.003
BH10_01 Jul 99_-	BH10	1/07/1999	water	-	7.1	**964**	-	-	-	-	599	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.32***	-	-	2	0.24	6	-	-	0.004	-	-	0.004
BH10_01 Oct 99_-	BH10	1/10/1999	water	-	7.2	**1468**	-	-	-	-	758	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.3***	-	-	7.3	0.08	20	-	-	0.011	-	-	0.002
BH10_01 Jan 00_-	BH10	1/01/2000	water	-	7.1	**1200**	-	-	-	-	790	-	-	-	-	-	-	-	-	-	-	-	-	-	***4.24***	-	-	4.4	0.04	14	-	-	0.015	-	-	0.002
BH10_01 Apr 00_-	BH10	1/04/2000	water	-	***7***	**890**	-	-	-	-	580	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.97***	-	-	3.2	0.11	9	-	-	0.01	-	-	0.011
BH10_01 Jul 00_-	BH10	1/07/2000	water	-	***6.9***	**1100**	-	-	-	-	700	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.87***	-	-	6	0.03	14	-	-	0.009	-	-	0.006
BH10_01 Oct 00_-	BH10	1/10/2000	water	-	***7***	**1000**	-	-	-	-	630	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.51***	-	-	4.4	0.08	14	-	-	0.004	-	-	0.002
BH10_01 Jan 01_-	BH10	1/01/2001	water	-	7.3	**860**	-	-	-	-	580	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.47***	-	-	4	0.04	16	-	-	0.01	-	-	0.014
BH10_01 Apr 01_-	BH10	1/04/2001	water	-	7.3	**780**	-	-	-	-	520	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.09***	-	-	3.8	0.18	10	-	-	0.008	-	-	0.002
BH10_01 Jul 01_-	BH10	1/07/2001	water	-	7.2	**1100**	-	-	-	-	660	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.73***	-	-	3.2	0.01	10	-	-	0.015	-	-	0.002
BH10_01 Oct 01_-	BH10	1/10/2001	water	-	***7***	**1200**	-	-	-	-	800	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.44***	-	-	2.4	0.24	10	-	-	0.009	-	-	0.001
BH10_01 Jan 02_-	BH10	1/01/2002	water	-	7.1	**1200**	-	-	-	-	680	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.74***	-	-	2.8	0.01	10	-	-	0.006	-	-	0.001
BH10_01 Apr 02_-	BH10	1/04/2002	water	-	7.5	**1300**	-	-	-	-	860	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.24***	-	-	2.8	0.19	14	-	-	0.009	-	-	0.002
BH10_01 Jul 02_-	BH10	1/07/2002	water	-	7.6	**1300**	-	-	-	-	910	-	-	-	-	-	-	-	-	-	-	-	-	-	***4.61***	-	-	6.6	0.06	15	-	-	0.017	-	-	<0.001
BH10_01 Oct 02_-	BH10	1/10/2002	water	-	7.6	**1300**	-	-	-	-	860	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	15	-	-	0.015	-	-	0.002
BH10_01 Jan 03_-	BH10	1/01/2003	water	-	7.83	**1200**	-	-	-	-	710	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.3***	-	-	6.9	0.97	17	-	-	0.012	-	-	0.005
BH10_01 Apr 03_-	BH10	1/04/2003	water	-	7.58	**1340**	-	-	-	-	850	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.2***	-	-	8	0.01	38	-	-	0.014	-	-	0.001
BH10_01 Jul 03_-	BH10	1/07/2003	water	-	7.83	**397**	-	-	-	-	330	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.11***	-	-	0.4	0.01	8	-	-	0.008	-	-	0.001
BH10_01 Oct 03_-	BH10	1/10/2003	water	-	7.91	**1000**	-	-	-	-	692	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.49***	-	-	6.3	0.01	20	-	-	0.007	-	-	0.001
BH10_01 Jan 04_-	BH10	1/01/2004	water	-	**8.08**	**1400**	-	-	-	-	996	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.39***	-	-	11.9	0.01	22	-	-	0.008	-	-	0.005
BH10_29 Jul 14_-	BH10	29/07/2014	water	3.45	***5.44***	**1126**	***1.46***	175	15.7	*6.7*	1400	-	460	<1	-	340	37	11	100	76	480	<0.1	-	-	***0.23***	-	-	-	-	-	130	-	-	-	-	-	-
BH10_15 Oct 14_-	BH10	15/10/2014	water	2.24	*7*	**912**	***0.66***	8	16.5	7.1	660	-	360	<1	-	180	19	9.2	81	45	140	<0.1	-	-	***0.32***	-	-	-	-	-	100	-	-	-	-	-	-
BH10_20 Jan 15_-	BH10	20/01/2015	water	2.83	***6.19***	**859**	***0.77***	-12	19.6	*6.8*	660	-	340	<1	-	190	21	14	51	58	88	0.1	-	-	***0.34***	0.018	0.013	-	-	-	200	<0.005	0.008	0.089	<0.0001	-	-
BH10_22 Apr 15_-	BH10	22/04/2015	water	2.18	*6.75*	**926**	***2.67***	87	17.9	*6.8*	850	-	410	<1	-	210	21	8.5	88	74	150	<0.1	-	-	***0.075***	-	-	-	-	-	120	-	-	-	-	-	-
BH10_21 Jul 15_-	BH10	21/07/2015	water	2.1	*6.88*	**336**	***2.36***	-5	16.6	*6.9*	750	-	430	<1	-	230	19	8.6	55	61	110	0.1	-	-	***0.29***	-	-	-	-	-	99	-	-	-	-	-	-
BH10_20 Oct 15_-	BH10	20/10/2015	water	2.9	*6.87*	**8300**	***1.84***	89	20.4	7.5	890	-	500	<1	-	220	18	9.2	56	70	130	0.2	-	-	***0.43***	-	-	-	-	-	33	-	-	-	-	-	-
BH10_20 Jan 16_-	BH10	20/01/2016	water	2.4	7.11	**1041**	***2.73***	-46	28.2	7.1	830	-	440	<1	-	220	20	11	81	55	160	0.3	-	-	***0.45***	0.079	0.05	-	-	-	61	<0.005	0.001	0.13	<0.0001	<0.001	
BH10_14 Apr 16_-	BH10	14/04/2016	water	3.21	7.38	**1219**	***1.3***	-68	21.1	7.2	860	-	550	<5	-	230	20	11	63	48	120	0.2	-	-	***0.53***	-	-	-	-	-	77	-	-	-	-	-	-
BH10_13 Jul 16_-	BH10	13/07/2016	water	2.55	7.04	**1090**	***2.36***	71	14.9	*7*	760	-	430	<5	-	220	19	5.7	53	44	200	0.1	-	-	***0.11***	-	-	-	-	-	130	-	-	-	-	-	-
BH10_18 Oct 16_-	BH10	18/10/2016	water	2.45	7.29	**841**	***1.41***	-42	18	7.3	570	-	360	<5	-	180	14	7.5	34	26	91	0.2	-	-	***0.16***	-	-	-	-	-	100	-	-	-	-	-	-
BH10A_01 Jul 01_-	BH10A	1/07/2001	water	-	*6.6*	**1700**	-	-	-	-	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.15***	-	-	4	0.01	21	-	-	0.019	-	-	0.004
BH10A_01 Oct 01_-	BH10A	1/10/2001	water	-	*6.9*	**1200**	-	-	-	-	680	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.2***	-	-	4	0.01	23	-	-	0.022	-	-	0.004
BH10A_01 Jan 02_-	BH10A	1/01/2002	water	-	*6.8*	**1700**	-	-	-	-	930	-	-	-	-	-	-	-	-	-	-	-	-	-	***4.4***	-	-	7.4	0.01	19	-	-	0.016	-	-	0.002
BH10A_01 Apr 02_-	BH10A	1/04/2002	water	-	7.4	**1000**	-	-	-	-	590	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.61***	-	-	6.2	<0.01	16	-	-	0.035	-	-	0.003
BH10A_01 Jul 02_-	BH10A	1/07/2002	water	-	7.4	**1200**	-	-	-	-	760	-	-	-	-	-	-	-	-	-	-	-	-	-	***10.5***	-	-	7.8	<0.01	16	-	-	0.002	-	-	0.003

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]							0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
BH10A_01 Oct 02_-	BH10A	1/10/2002	water	-	7.3	1400	-	-	-	-	850	-	-	-	-	-	-	-	-	-	-	-	-	-	***9.22***	-	-	12	<0.01	19	-	-	0.047	-	-	0.003
BH10A_01 Jan 03_-	BH10A	1/01/2003	water	-	7.59	950	-	-	-	-	560	-	-	-	-	-	-	-	-	-	-	-	-	-	***13.1***	-	-	14	0.03	21	-	-	0.04	-	-	0.006
BH10A_01 Apr 03_-	BH10A	1/04/2003	water	-	7.34	1330	-	-	-	-	858	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.21***	-	-	10.2	0.01	44	-	-	0.037	-	-	0.001
BH10A_01 Jul 03_-	BH10A	1/07/2003	water	-	7.54	1720	-	-	-	-	1260	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.27***	-	-	4	0.01	36	-	-	0.015	-	-	0.005
BH10A_01 Oct 03_-	BH10A	1/10/2003	water	-	7.58	1430	-	-	-	-	934	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.93***	-	-	6.4	0.01	28	-	-	0.024	-	-	0.001
BH10A_01 Jan 04_-	BH10A	1/01/2004	water	-	7.98	1610	-	-	-	-	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.95***	-	-	8.3	0.01	27	-	-	0.02	-	-	0.005
BH10A_01 Apr 04_-	BH10A	1/04/2004	water	-	7.43	-	-	-	-	-	956	-	-	-	-	-	-	-	-	-	-	-	-	-	***4.98***	-	-	-	0.01	42	-	-	0.025	-	-	-
BH10A_01 Jul 04_-	BH10A	1/07/2004	water	-	7.62	-	-	-	-	-	814	-	-	-	-	-	-	-	-	-	-	-	-	-	***4.27***	-	-	-	0.01	24	-	-	0.009	-	-	-
BH10A_01 Oct 04_-	BH10A	1/10/2004	water	-	7.5	-	-	-	-	-	1540	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.25***	-	-	-	0.01	24	-	-	0.016	-	-	-
BH10A_01 Jan 05_-	BH10A	1/01/2005	water	-	7.58	-	-	-	-	-	936	-	-	-	-	-	-	-	-	-	-	-	-	-	***8.38***	-	-	-	0.015	55	-	-	0.028	-	-	0.001
BH10A_01 Apr 05_-	BH10A	1/04/2005	water	-	7.09	-	-	-	-	-	822	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.97***	-	-	-	0.01	16	-	-	0.01	-	-	-
BH10A_01 Jul 05_-	BH10A	1/07/2005	water	-	7.84	-	-	-	-	-	2790	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.07***	-	-	-	0.012	23	-	-	0.006	-	-	-
BH10A_01 Oct 05_-	BH10A	1/10/2005	water	-	*6.95*	-	-	-	-	-	894	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.52***	-	-	-	0.038	18	-	-	0.008	-	-	-
BH10A_01 Jan 06_-	BH10A	1/01/2006	water	-	7.26	-	-	-	-	-	978	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.17***	-	-	-	0.014	19	-	-	0.018	-	-	<0.005
BH10A_01 Apr 06_-	BH10A	1/04/2006	water	-	7.01	-	-	-	-	-	806	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.67***	-	-	-	0.019	21	-	-	0.031	-	-	-
BH10A_01 Jul 06_-	BH10A	1/07/2006	water	-	7.3	-	-	-	-	-	1720	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.223***	-	-	-	<0.01	24	-	-	0.009	-	-	-
BH10A_01 Oct 06_-	BH10A	1/10/2006	water	-	7.24	-	-	-	-	-	1140	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.17***	-	-	-	<0.01	22	-	-	0.012	-	-	-
BH10A_01 Jan 07_-	BH10A	1/01/2007	water	-	7.08	-	-	-	-	-	910	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.69***	-	-	-	<0.01	22	-	-	0.113	-	-	<0.005
BH10A_01 Apr 07_-	BH10A	1/04/2007	water	-	*6.76*	-	-	-	-	-	848	-	-	-	686	193	31	12	71	118	2	-	15.6	17.1	***12.3***	0.031	<0.01	-	-	25	-	-	0.022	-	-	-
BH10B_12 Apr 17_-	BH10B	12/04/2017	water	2.61	*6.84*	1341	***0.5***	-36	20.3	*6.9*	880	-	450	<5	-	220	20	9	48	55	250	0.1	-	-	***0.52***	-	-	-	-	-	71	-	-	-	-	-	-
BH10B_05 Jul 17_-	BH10B	5/07/2017	water	3.8	7.1	1130	***1.73***	-42	18.3	7.4	710	-	370	<5	-	190	17	9.5	49	44	170	0.2	-	-	***0.66***	-	-	-	-	-	24	-	-	-	-	-	-
BH10B_09 Oct 17_-	BH10B	9/10/2017	water	2.89	7.06	1041	***1.35***	-98	20.7	7.2	710	-	350	<5	-	200	20	12	47	53	160	0.1	-	-	***0.71***	-	-	-	-	-	25	-	-	-	-	-	-
BH10B_15 Jan 18_-	BH10B	15/01/2018	water	3.01	***6.3***	1006	***0.53***	-1.2	20.8	***6.2***	700	-	370	<5	-	200	19	11	48	54	160	0.2	-	-	***0.76***	0.01	<0.005	-	-	-	34	<0.01	0.008	0.12	<0.0001	<0.001
BH10B_23 Apr 18_-	BH10B	23/04/2018	water	3.08	7.01	1068	***1.02***	-48	22.7	*6.8*	820	-	400	<5	-	220	22	14	43	50	130	0.1	-	-	***0.81***	-	-	-	-	-	26	-	-	-	-	-	-
BH10B_09 Jul 18_-	BH10B	9/07/2018	water	2.92	*6.95*	1486	***1.41***	-112	17.5	7.1	970	-	470	<5	-	280	26	14	69	76	270	0.1	-	-	***1.1***	-	-	-	-	-	33	-	-	-	-	-	-
BH10B_08 Oct 18_-	BH10B	8/10/2018	water	2.98	*6.92*	1306	***0.61***	-86.3	18.6	*7*	1000	-	530	<5	-	260	23	13	68	70	240	0.2	-	-	***0.83***	-	-	-	-	-	37	-	-	-	-	-	-
BH10B_22 Jan 19_-	BH10B	22/01/2019	water	3.3	7.03	1526	***2.3***	-100.6	24.2	7.3	1100	***1100***	550	<5	-	270	26	14	51	77	170	0.2	-	-	***0.96***	<0.005	0.006	-	-	-	35	0.01	0.009	0.16	<0.0001	<0.001
BH10B_09 Apr 19_-	BH10B	9/04/2019	water	2.89	7.13	1346	***0.13***	-137.6	22.4	7.2	940	-	560	<5	-	260	26	15	66	87	170	0.2	-	-	***1.4***	-	-	-	-	-	140	-	-	-	-	-	-
BH10B_02 Jul 19_-	BH10B	2/07/2019	water	2.88	7.13	1506	***3.18***	-98.8	18.1	7.1	1300	-	670	<5	-	320	32	15	62	99	250	0.2	-	-	***1.7***	-	-	-	-	-	120	-	-	-	-	-	-
BH10B_24 Oct 19_-	BH10B	24/10/2019	water	3	*6.95*	1730	***2.52***	-68.4	20.4	*7*	1400	-	730	<5	-	380	36	16	83	120	210	0.1	-	-	***1.7***	-	-	-	-	-	23	-	-	-	-	-	-
BH10B_15 Jan 20_-	BH10B	15/01/2020	water	3.1	7.09	2019	***1.37***	-23.1	22.2	7.1	1300	-	750	<5	-	290	27	19	140	98	200	0.2	-	-	***13***	0.02	<0.005	-	-	-	27	0.01	0.01	0.24	<0.0001	<0.001
BH10B_22 Apr 20_-	BH10B	22/04/2020	water	2.82	7.39	2037	***0.4***	-117.2	22.1	7.1	1300	-	760	<5	-	280	28	24	160	230	110	0.2	-	-	***18***	-	-	-	-	-	30	-	-	-	-	-	-
BH11_01 Jun 94_-	BH11	1/06/1994	water	-	7.9	940	-	-	-	-	480	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.5***	-	-	-	-	17	-	-	0.0659	-	-	0.005
BH11_01 Sep 94_-	BH11	1/09/1994	water	-	7.5	950	-	-	-	-	520	-	-	-	-	-	-	-	-	-	-	-	-	-	***4.3***	-	-	-	-	39	-	-	0.105	-	-	0.003
BH11_01 Dec 94_-	BH11	1/12/1994	water	-	*7*	895	-	-	-	-	698	-	-	-	-	-	-	-	-	-	-	-	-	-	***4***	-	-	-	-	55	-	-	0.129	-	-	0.001
BH11_01 Mar 95_-	BH11	1/03/1995	water	-	7.2	1264	-	-	-	-	528	-	-	-	-	-	-	-	-	-	-	-	-	-	***4.4***	-	-	-	-	31	-	-	0.153	-	-	0.001
BH11_01 Jun 95_-	BH11	1/06/1995	water	-	7.47	933	-	-	-	-	576	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.8***	-	-	-	-	27	-	-	0.162	-	-	0.001
BH11_01 Sep 95_-	BH11	1/09/1995	water	-	7.91	819	-	-	-	-	668	-	-	-	-	-	-	-	-	-	-	-	-	-	***4.8***	-	-	7.3	0.05	26	-	-	0.186	-	-	0.005
BH11_01 Jan 96_-	BH11	1/01/1996	water	-	7.53	979	-	-	-	-	505	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.92***	-	-	7.9	-	10	-	-	0.143	-	-	0.001
BH11_01 Apr 96_-	BH11	1/04/1996	water	-	7.16	970	-	-	-	-	656	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.63***	-	-	5.4	0.04	25	-	-	0.171	-	-	0.001
BH11_01 Jul 96_-	BH11	1/07/1996	water	-	***8.98***	1139	-	-	-	-	733	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.93***	-	-	9.7	0.03	37	-	-	0.18	-	-	0.003
BH11_01 Oct 96_-	BH11	1/10/1996	water	-	7.26	1219	-	-	-	-	828	-	-	-	-	-	-	-	-	-	-	-	-	-	***4.73***	-	-	7.2	0.38	42	-	-	0.15	-	-	0.008
BH11_01 Jan 97_-	BH11	1/01/1997	water	-	7.42	1436	-	-	-	-	792	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.99***	-	-	6.9	0.06	54	-	-	0.137	-	-	0.001
BH11_01 Apr 97_-	BH11	1/04/1997	water	-	7.62	1176	-	-	-	-	828	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.93***	-	-	12.5	0.01	32	-	-	0.165	-	-	0.006
BH11_01 Jul 97_-	BH11	1/07/1997	water	-	7.43	921	-	-	-	-	532	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.14***	-	-	4.4	0.05	14	-	-	0.158	-	-	0.001
BH11_01 Oct 97_-	BH11	1/10/1997	water	-	7.37	1133	-	-	-	-	722	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.31***	-	-	4.5	0.01	33	-	-	0.164	-	-	0.001
BH11_01 Jan 98_-	BH11	1/01/1998	water	-	7.35	1345	-	-	-	-	848	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.74***	-	-	9.9	0.06	21	-	-	0.169	-	-	0.001
BH11_01 Apr 98_-	BH11	1/04/1998	water	-	7.36	1167	-	-	-	-	706	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.43***	-	-	11.4	0.01	11	-	-	0.183	-	-	0.018
BH11_01 Jul 98_-	BH11	1/07/1998	water	-	7.5	963	-	-	-	-	648	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.48***	-	-	8.4	0.01	33	-	-	0.13	-	-	0.005
BH11_01 Oct 98_-	BH11	1/10/1998	water	-	7.24	1400	-	-	-	-	864	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.41***	-	-	11	0.09	62	-	-	0.06	-	-	0.005
BH11_01 Nov 98_-	BH11	1/11/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 99_-	BH11	1/01/1999	water	-	7.2	1440	-	-	-	-	876	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.57***	-	-	6.5	0.01	32	-	-	0.138	-	-	0.001
BH11_01 Mar 99_-	BH11	1/03/1999	water	-	7.2	1200	-	-	-	-	689	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.5***	-	-	7.5	0.03	26	-	-	0.12	-	-	0.002
BH11_01 Jul 99_-	BH11	1/07/1999	water	-	7.2	1040	-	-	-	-	573	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.25***	-	-	6.7	0.01	11	-	-	0.022	-	-	0.005
BH11_01 Oct 99_-	BH11	1/10/1999	water	-	7.3	1006	-	-	-	-	570	-	-	-	-	-	-	-	-	-	-	-	-	-	***10***	-	-	10.3	0.01	21	-	-	0.084	-	-	0.003
BH11_01 Jan 00_-	BH11	1/01/2000	water	-	7.2	1100	-	-	-	-	680	-	-	-	-	-	-	-	-	-	-	-	-	-	***8.97***	-	-	10	0.01	27	-	-	0.163	-	-	0.002
BH11_01 Apr 00_-	BH11	1/04/2000	water	-	7.2	1100	-	-	-	-	670	-	-	-	-	-	-	-	-	-	-	-	-	-	***8.63***	-	-	8.4	0.01	19	-	-	0.083	-	-	0.012
BH11_01 Jul 00_-	BH11	1/07/2000	water	-	*7*	1200	-	-	-	-	700	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.9***	-	-	11	0.01	22	-	-	0.144	-	-	0.006
BH11_01 Oct 00_-	BH11	1/10/2000	water	-	7.1	1100	-	-	-	-	620	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.09***	-	-	7.4	0.01	16	-	-	0.023	-	-	0.003
BH11_01 Jan 01_-	BH11	1/01/2001	water	-	7.4	1100	-	-	-	-	660	-	-	-	-	-	-	-	-	-	-	-	-	-	***6.48***	-	-	8	0.01	27	-	-	0.154	-	-	0.016
BH11_01 Apr 01_-	BH11	1/04/2001	water	-	7.2	1200	-	-	-	-	720	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.9***	-	-	8	0.02	24	-	-	0.163	-	-	0.004
BH11_01 Jul 01_-	BH11	1/07/2001	water	-	7.1	1100	-	-	-	-	660	-	-	-	-	-	-	-	-	-	-	-	-	-	***4.21***	-	-	8.4	0.03	20	-	-	0.112	-	-	0.003

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]								0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
BH11_01 Oct 01_-	BH11	1/10/2001	water	-	7.2	**1200**	-	-	-	-	710	-	-	-	-	-	-	-	-	-	-	-	-	-	***8.9***	-	-	9.6	0.01	30	-	-	0.108	-	-	0.002
BH11_01 Jan 02_-	BH11	1/01/2002	water	-	*7*	**1400**	-	-	-	-	830	-	-	-	-	-	-	-	-	-	-	-	-	-	***11.2***	-	-	13	0.01	38	-	-	0.102	-	-	0.003
BH11_01 Apr 02_-	BH11	1/04/2002	water	-	7.5	**1500**	-	-	-	-	910	-	-	-	-	-	-	-	-	-	-	-	-	-	***10.7***	-	-	0.6	<0.01	33	-	-	0.14	-	-	0.005
BH11_01 Jul 02_-	BH11	1/07/2002	water	-	7.5	**1200**	-	-	-	-	700	-	-	-	-	-	-	-	-	-	-	-	-	-	***10.4***	-	-	10	<0.01	20	-	-	0.144	-	-	0.004
BH11_01 Oct 02_-	BH11	1/10/2002	water	-	7.5	**1300**	-	-	-	-	730	-	-	-	-	-	-	-	-	-	-	-	-	-	***13.4***	-	-	17	<0.01	24	-	-	0.064	-	-	0.001
BH11_01 Jan 03_-	BH11	1/01/2003	water	-	7.61	**970**	-	-	-	-	710	-	-	-	-	-	-	-	-	-	-	-	-	-	***11.1***	-	-	11	0.02	22	-	-	0.134	-	-	0.004
BH11_01 Apr 03_-	BH11	1/04/2003	water	-	7.48	**1210**	-	-	-	-	742	-	-	-	-	-	-	-	-	-	-	-	-	-	***6.87***	-	-	14.2	0.01	37	-	-	0.154	-	-	0.001
BH11_01 Jul 03_-	BH11	1/07/2003	water	-	7.59	**1370**	-	-	-	-	824	-	-	-	-	-	-	-	-	-	-	-	-	-	***14.6***	-	-	13.9	0.01	38	-	-	0.067	-	-	0.005
BH11_01 Oct 03_-	BH11	1/10/2003	water	-	7.65	**1250**	-	-	-	-	750	-	-	-	-	-	-	-	-	-	-	-	-	-	***6.68***	-	-	15.7	0.02	29	-	-	0.083	-	-	0.001
BH11_01 Jan 04_-	BH11	1/01/2004	water	-	**8**	**1170**	-	-	-	-	792	-	-	-	-	-	-	-	-	-	-	-	-	-	***9.3***	-	-	14.1	0.01	30	-	-	0.099	-	-	0.005
BH11_01 Apr 04_-	BH11	1/04/2004	water	-	7.43	-	-	-	-	-	650	-	-	-	-	-	-	-	-	-	-	-	-	-	***9.99***	-	-	-	0.01	24	-	-	0.082	-	-	-
BH11_01 Jul 04_-	BH11	1/07/2004	water	-	7.43	-	-	-	-	-	596	-	-	-	-	-	-	-	-	-	-	-	-	-	***8.68***	-	-	-	0.01	19	-	-	0.087	-	-	-
BH11_01 Jan 05_-	BH11	1/01/2005	water	-	7.54	-	-	-	-	-	634	-	-	-	-	-	-	-	-	-	-	-	-	-	***9.82***	-	-	-	0.013	8	-	-	0.089	-	-	0.001
BH11_01 Apr 05_-	BH11	1/04/2005	water	-	*6.88*	-	-	-	-	-	682	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.8***	-	-	-	0.012	16	-	-	0.024	-	-	-
BH11_01 Jul 05_-	BH11	1/07/2005	water	-	**8.1**	-	-	-	-	-	1080	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.92***	-	-	-	0.024	21	-	-	0.119	-	-	<0.005
BH11_01 Apr 06_-	BH11	1/04/2006	water	-	7.32	-	-	-	-	-	764	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.01***	-	-	-	0.01	29	-	-	0.074	-	-	-
BH11_01 Jul 06_-	BH11	1/07/2006	water	-	7.34	-	-	-	-	-	700	-	-	-	-	-	-	-	-	-	-	-	-	-	***4.93***	-	-	-	<0.01	28	-	-	0.059	-	-	-
BH11_01 Oct 06_-	BH11	1/10/2006	water	-	7.27	-	-	-	-	-	1400	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.22***	-	-	-	<0.01	22	-	-	0.081	-	-	-
BH11_01 Jan 07_-	BH11	1/01/2007	water	-	7.04	-	-	-	-	-	760	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.36***	-	-	-	<0.01	18	-	-	<0.001	-	-	<0.001
BH11_01 Apr 07_-	BH11	1/04/2007	water	-	*6.94*	-	-	-	-	-	530	-	-	-	464	117	28	11	48	79.7	4	-	10.5	11.6	***7.65***	0.014	<0.01	-	-	15	-	-	0.093	-	-	-
BH11A_01 Jan 06_-	BH11A	1/01/2006	water	-	7.36	-	-	-	-	-	796	-	-	-	-	-	-	-	-	-	-	-	-	-	***4.01***	-	-	-	0.01	22	-	-	0.119	-	-	<0.005
BH11A_16 Apr 13_-	BH11A	16/04/2013	water	24.49	7.29	**698**	***0.83***	-95	18.7	**8.1**	490	-	400	<1	-	83	14	2.6	56	72	23	0.11	-	-	***0.76***	-	-	-	-	-	6	-	-	-	-	-	-
BH11A_09 Jul 13_-	BH11A	9/07/2013	water	22.94	7.05	**537**	***4.9***	-95	18.2	7.7	470	-	300	<1	-	98	17	3.3	61	59	16	-	-	-	***0.54***	-	-	-	-	-	4	-	-	-	-	-	-
BH11A_29 Oct 13_-	BH11A	29/10/2013	water	23.28	**8.26**	**640**	***1.78***	-134	20	7.3	540	-	340	<1	-	120	18	2.9	66	66	41	-	-	-	***0.96***	-	-	-	-	-	8	-	-	-	-	-	-
BH11A_28 Jan 14_-	BH11A	28/01/2014	water	23.72	7.12	**562**	***3.53***	-96	19.6	7.1	520	-	330	<1	-	120	22	2.9	53	64	57	0.1	-	-	***0.71***	0.009	<0.01	-	-	-	4	<0.005	0.025	0.013	<0.0001	<0.001	
BH11A_16 Apr 14_-	BH11A	16/04/2014	water	16.7	*6.99*	**596**	***1.61***	-63	21.3	*6.7*	620	-	350	<1	-	130	24	3.2	65	64	75	<0.1	-	-	***0.64***	-	-	-	-	-	5	-	-	-	-	-	-
BH11A_16 Apr 14_-2	BH11A	16/04/2014	water	16.7	*6.99*	**596**	***1.61***	-63	21.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_09 Jul 14_-	BH11A	9/07/2014	water	-	-	**891**	***7.37***	45	20	7.3	590	-	330	<1	-	130	27	3.5	64	81	53	<0.1	-	-	***0.6***	-	-	-	-	-	4	-	-	-	-	-	-
BH11A_16 Oct 14_-	BH11A	16/10/2014	water	23.01	7.13	**1042**	***1.74***	-103	19.5	7.3	650	-	310	<1	-	130	31	3	69	98	100	<0.1	-	-	***0.42***	-	-	-	-	-	4	-	-	-	-	-	-
BH11A_21 Jan 15_-	BH11A	21/01/2015	water	23.49	*6.56*	**1005**	***0.3***	-103	18.6	7.1	720	-	440	<1	-	150	29	4.5	76	99	32	0.12	-	-	***1.4***	<0.1	<0.01	-	-	-	6	<0.005	0.004	0.022	<0.0001	-	
BH11A_23 Apr 15_-	BH11A	23/04/2015	water	23.78	*6.8*	**622**	***1.43***	-69	21.1	7.1	860	-	460	<1	-	140	38	3.4	100	120	47	<0.1	-	-	***0.32***	-	-	-	-	-	7	-	-	-	-	-	-
BH11A_21 Jul 15_-	BH11A	21/07/2015	water	23.02	*6.9*	**969**	***2.54***	-97	17	*6.8*	770	-	360	<1	-	130	33	2.9	95	120	83	0.1	-	-	***0.36***	-	-	-	-	-	7	-	-	-	-	-	-
BH11A_21 Oct 15_-	BH11A	21/10/2015	water	23.4	*6.88*	**535**	***2.23***	-78	21	7.1	910	-	480	<1	-	170	39	3.9	100	140	77	0.1	-	-	***2***	-	-	-	-	-	10	-	-	-	-	-	-
BH11A_21 Jan 16_-	BH11A	21/01/2016	water	23.22	*6.95*	**1332**	***3.73***	-90	22.6	7.1	900	-	440	<1	-	180	36	5.3	110	130	100	0.1	-	-	***0.5***	<0.1	<0.01	-	-	-	13	<0.005	0.006	0.025	<0.0001	<0.001	
BH11A_19 Apr 16_-	BH11A	19/04/2016	water	23.34	7.88	**1309**	***1.27***	-91	20.1	7.2	870	-	440	<5	-	170	35	4.5	91	100	100	<0.1	-	-	***0.62***	-	-	-	-	-	5	-	-	-	-	-	-
BH11A_13 Jul 16_-	BH11A	13/07/2016	water	23.81	7.1	**1351**	***3.28***	-75	14.6	7.2	910	-	430	<5	-	180	32	3.9	110	130	140	0.1	-	-	***0.46***	-	-	-	-	-	5	-	-	-	-	-	-
BH11A_18 Oct 16_-	BH11A	18/10/2016	water	23.56	*6.7*	**1281**	***2.2***	-51	17	*6.9*	970	-	650	<5	-	210	43	5.9	110	130	60	0.1	-	-	***3.8***	-	-	-	-	-	13	-	-	-	-	-	-
BH11A_19 Jan 17_-	BH11A	19/01/2017	water	23.03	*6.81*	**1387**	***1.81***	-70	21.1	*7*	950	-	610	<5	-	190	35	5.5	110	140	88	0.1	-	-	***2.5***	<0.005	<0.005	-	-	-	22	<0.01	0.005	0.027	<0.0001	<0.001	
BH11A_25 Jan 17_-	BH11A	25/01/2017	water	2.94	***6.21***	**1249**	***0.38***	72	20.4	*6.9*	880	-	400	<5	-	220	19	9.3	55	45	230	0.2	-	-	***0.42***	0.01	0.022	-	-	-	12	<0.01	0.001	0.14	<0.0001	<0.001	
BH11A_02 Jul 19_-	BH11A	2/07/2019	water	23.74	*6.79*	**1263**	***3.78***	-132.7	18.3	*7*	1400	-	540	<5	-	240	36	25	120	130	300	0.2	-	-	***0.97***	-	-	-	-	-	28	-	-	-	-	-	-
BH11A_25 Oct 19_-	BH11A	25/10/2019	water	23.71	*6.84*	**1430**	***3.01***	-64.8	19.8	7.4	1000	-	540	<5	-	210	36	5.9	100	110	120	0.2	-	-	***1.4***	-	-	-	-	-	13	-	-	-	-	-	-
BH11A_14 Jan 20_-	BH11A	14/01/2020	water	23.86	7.16	**1564**	***2.4***	-110.8	20.2	*6.8*	970	-	560	<5	-	190	33	4.5	97	120	120	0.1	-	-	***0.87***	<0.05	<0.005	-	-	-	12	<0.01	0.2	0.029	<0.0001	<0.001	
BH11A_22 Apr 20_-	BH11A	22/04/2020	water	23.5	*6.95*	**1487**	***3.03***	-88.2	20	*6.9*	970	-	620	<5	-	200	34	5.8	92	130	110	0.1	-	-	***2.8***	-	-	-	-	-	15	-	-	-	-	-	-
BH12_01 Sep 94_-	BH12	1/09/1994	water	-	7.3	**990**	-	-	-	-	580	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.6***	-	-	-	-	35	-	-	0.002	-	-	0.003
BH12_01 Dec 94_-	BH12	1/12/1994	water	-	*6.8*	**1115**	-	-	-	-	502	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	-	-	19	-	-	0.003	-	-	0.001
BH12_01 Mar 95_-	BH12	1/03/1995	water	-	7.3	**982**	-	-	-	-	456	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	-	-	12	-	-	0.002	-	-	0.001
BH12_01 Jun 95_-	BH12	1/06/1995	water	-	7.15	**975**	-	-	-	-	500	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	-	-	13	-	-	0.002	-	-	0.001
BH12_01 Sep 95_-	BH12	1/09/1995	water	-	**8**	**958**	-	-	-	-	720	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	0.6	3.58	12	-	-	0.002	-	-	0.003
BH12_01 Jan 96_-	BH12	1/01/1996	water	-	7.37	**848**	-	-	-	-	580	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.3	-	23	-	-	0.002	-	-	0.001
BH12_01 Apr 96_-	BH12	1/04/1996	water	-	7.28	**920**	-	-	-	-	632	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.27***	-	-	0.7	7.68	13	-	-	0.003	-	-	0.001
BH12_01 Jul 96_-	BH12	1/07/1996	water	-	***8.52***	**1135**	-	-	-	-	784	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	12.2	1	-	-	0	-	-	0.001
BH12_01 Oct 96_-	BH12	1/10/1996	water	-	*6.89*	**1316**	-	-	-	-	870	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.23***	-	-	0.5	7.97	12	-	-	0.002	-	-	0.008
BH12_01 Jan 97_-	BH12	1/01/1997	water	-	7.18	**1193**	-	-	-	-	612	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.29***	-	-	2.6	0.19	34	-	-	0.003	-	-	0.001
BH12_01 Apr 97_-	BH12	1/04/1997	water	-	7.13	**1158**	-	-	-	-	852	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.25***	-	-	2.4	3.16	10	-	-	0.006	-	-	0.008
BH12_01 Jul 97_-	BH12	1/07/1997	water	-	*7*	**1245**	-	-	-	-	712	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.32***	-	-	2.2	2.8	13	-	-	0.002	-	-	0.002
BH12_01 Oct 97_-	BH12	1/10/1997	water	-	*6.99*	**1085**	-	-	-	-	646	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.92***	-	-	1.6	1.46	6	-	-	0.01	-	-	0.001
BH12_01 Jan 98_-	BH12	1/01/1998	water	-	*6.96*	**1370**	-	-	-	-	772	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.7***	-	-	1.3	4.15	7	-	-	0.001	-	-	0.001
BH12_01 Apr 98_-	BH12	1/04/1998	water	-	*6.97*	**1970**	-	-	-	-	1210	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.11***	-	-	1.6	3.1	12	-	-	0.002	-	-	0.002
BH12_01 Jul 98_-	BH12	1/07/1998	water	-	*7*	**1040**	-	-	-	-	718	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.06***	-	-	0.8	1.84	8	-	-	0.004	-	-	0.001
BH12_01 Oct 98_-	BH12	1/10/1998	water	-	*6.92*	**1160**	-	-	-	-	714	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	0.8	1.47	8	-	-	0.01	-	-	0.001
BH12_01 Jan 99_-	BH12	1/01/1999	water	-	*6.9*	**1580**	-	-	-	-	1008	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.5***	-	-	1.4	7.19	9	-	-	0.004	-	-	0.004
BH12_01 Mar 99_-	BH12	1/03/1999	water	-	*6.8*	**1600**	-	-	-	-	946	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.54***	-	-	1.2	0.67	12	-	-	0.004	-	-	0.003

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]							0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
BH12_01 Jul 99_-	BH12	1/07/1999	water	-	*6.9*	**1410**	-	-	-	-	769	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.72***	-	-	3.1	0.16	93	-	-	0.005	-	-	0.006
BH12_01 Oct 99_-	BH12	1/10/1999	water	-	*7*	**1203**	-	-	-	-	633	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.98***	-	-	2.6	0.01	2	-	-	0.005	-	-	0.003
BH12A_01 Apr 00_-	BH12A	1/04/2000	water	-	*6.9*	**1100**	-	-	-	-	700	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.2	7.7	4	-	-	0.003	-	-	0.01
BH12A_01 Jul 00_-	BH12A	1/07/2000	water	-	*6.9*	**1100**	-	-	-	-	660	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.3	4.77	4	-	-	0.003	-	-	0.006
BH12A_01 Oct 00_-	BH12A	1/10/2000	water	-	*6.9*	**1200**	-	-	-	-	690	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	5.81	3	-	-	0.003	-	-	0.003
BH12A_01 Jan 01_-	BH12A	1/01/2001	water	-	7.1	**1100**	-	-	-	-	660	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.5	4.82	10	-	-	0.003	-	-	0.014
BH12A_01 Apr 01_-	BH12A	1/04/2001	water	-	*7*	**1100**	-	-	-	-	660	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	0.2	4.87	4	-	-	0.003	-	-	0.003
BH12A_01 Jul 01_-	BH12A	1/07/2001	water	-	*7*	**1100**	-	-	-	-	750	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.3	3.73	5	-	-	0.003	-	-	0.003
BH12A_01 Oct 01_-	BH12A	1/10/2001	water	-	*7*	**1200**	-	-	-	-	710	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.01	14.6	4	-	-	0.002	-	-	0.001
BH12A_01 Jan 02_-	BH12A	1/01/2002	water	-	*6.8*	**1500**	-	-	-	-	820	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	23.8	4	-	-	0.001	-	-	0.001
BH12A_01 Apr 02_-	BH12A	1/04/2002	water	-	7.3	**1400**	-	-	-	-	960	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	<0.1	32	6	-	-	0.004	-	-	0.003
BH12A_01 Jul 02_-	BH12A	1/07/2002	water	-	7.4	**1100**	-	-	-	-	740	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	<0.1	20.7	3	-	-	0.003	-	-	0.002
BH12A_01 Oct 02_-	BH12A	1/10/2002	water	-	7.5	**1200**	-	-	-	-	700	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	<0.1	13.2	3	-	-	0.003	-	-	<0.001
BH12A_01 Jan 03_-	BH12A	1/01/2003	water	-	7.52	**810**	-	-	-	-	670	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	0.5	6.91	5	-	-	0.003	-	-	0.001
BH12A_01 Apr 03_-	BH12A	1/04/2003	water	-	7.37	**965**	-	-	-	-	684	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.7	7.28	11	-	-	0.002	-	-	0.001
BH12A_01 Jul 03_-	BH12A	1/07/2003	water	-	7.46	**1040**	-	-	-	-	634	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	1.1	7.76	8	-	-	0.014	-	-	0.001
BH12A_01 Oct 03_-	BH12A	1/10/2003	water	-	7.23	**1040**	-	-	-	-	558	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.4	13.8	4	-	-	0.002	-	-	0.001
BH12A_01 Jan 04_-	BH12A	1/01/2004	water	-	7.8	**1120**	-	-	-	-	910	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	0.4	19.6	10	-	-	0.002	-	-	0.005
BH12A_01 Apr 04_-	BH12A	1/04/2004	water	-	7.51	-	-	-	-	-	764	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.15***	-	-	-	11.9	5	-	-	0.003	-	-	-
BH12A_01 Jul 04_-	BH12A	1/07/2004	water	-	7.32	-	-	-	-	-	682	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	-	9.31	16	-	-	0.002	-	-	-
BH12A_01 Oct 04_-	BH12A	1/10/2004	water	-	7.43	-	-	-	-	-	796	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	-	9.49	6	-	-	0.002	-	-	-
BH12A_01 Jan 05_-	BH12A	1/01/2005	water	-	7.43	-	-	-	-	-	976	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.059***	-	-	-	12.4	3	-	-	0.03	-	-	0.01
BH12A_01 Apr 05_-	BH12A	1/04/2005	water	-	*6.95*	-	-	-	-	-	916	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	-	6.82	3	-	-	0.002	-	-	-
BH12A_01 Jul 05_-	BH12A	1/07/2005	water	-	7.96	-	-	-	-	-	756	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.032***	-	-	-	2.95	3	-	-	0.003	-	-	-
BH12A_01 Oct 05_-	BH12A	1/10/2005	water	-	7.08	-	-	-	-	-	764	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.105***	-	-	-	1.57	8	-	-	0.002	-	-	-
BH12A_01 Jan 06_-	BH12A	1/01/2006	water	-	7.19	-	-	-	-	-	866	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.053***	-	-	-	2.22	5	-	-	0.002	-	-	<0.005
BH12A_01 Apr 06_-	BH12A	1/04/2006	water	-	7.02	-	-	-	-	-	748	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	-	4.62	5	-	-	0.002	-	-	-
BH12A_01 Jul 06_-	BH12A	1/07/2006	water	-	7.12	-	-	-	-	-	744	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.033***	-	-	-	4.53	6	-	-	0.002	-	-	-
BH12A_01 Oct 06_-	BH12A	1/10/2006	water	-	*6.99*	-	-	-	-	-	732	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.155***	-	-	-	20.3	4	-	-	0.002	-	-	-
BH12A_01 Jan 07_-	BH12A	1/01/2007	water	-	7.06	-	-	-	-	-	686	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.137***	-	-	-	20.2	3	-	-	0.002	-	-	<0.001
BH12A_01 Apr 07_-	BH12A	1/04/2007	water	-	*6.89*	-	-	-	-	-	748	-	-	-	463	185	19	9	23	48.7	34	-	12	11.3	***0.418***	18.5	<0.01	-	-	7	-	-	0.002	-	-	-
BH12A_17 Apr 13_-	BH12A	17/04/2013	water	10.09	*6.88*	**5.1**	***0.44***	40	18.1	7.7	840	-	510	<1	-	190	20	11	98	100	67	<0.1	-	-	***0.38***	-	-	-	-	-	15	-	-	-	-	-
BH12A_09 Jul 13_-	BH12A	9/07/2013	water	9.16	7.04	**965**	***2.83***	19	18.8	7.9	610	-	390	<1	-	160	16	5.8	54	55	34	-	-	-	***0.1***	-	-	-	-	-	4	-	-	-	-	-
BH12A_29 Oct 13_-	BH12A	29/10/2013	water	10	7.96	**1218**	***4.34***	-18	18.4	7.4	860	-	460	<1	-	200	22	10	87	97	75	-	-	-	***1.1***	-	-	-	-	-	14	-	-	-	-	-
BH12A_28 Jan 14_-	BH12A	28/01/2014	water	10.2	*6.91*	**974**	***4.2***	39	21.1	7.2	790	-	460	<1	-	210	27	12	110	86	66	<0.1	-	-	***0.5***	13	0.025	-	-	-	11	<0.005	0.002	0.063	<0.0001	<0.001
BH12A_14 Apr 14_-	BH12A	14/04/2014	water	4.23	*6.97*	**1550**	***3.18***	117	21	7.3	910	-	530	<1	-	200	25	11	120	120	72	<0.1	-	-	***1.9***	-	-	-	-	-	11	-	-	-	-	-
BH12A_07 Jul 14_-	BH12A	7/07/2014	water	-	7.3	**1373**	***2.67***	52	20.2	*7*	960	-	560	<1	-	200	29	15	130	160	140	<0.1	-	-	***4.8***	-	-	-	-	-	15	-	-	-	-	-
BH12A_15 Oct 14_-	BH12A	15/10/2014	water	9.96	7.17	**1106**	***3.47***	56	17.5	*7*	970	-	550	<1	-	210	33	17	130	200	<5	<0.1	-	-	***5.9***	-	-	-	-	-	15	-	-	-	-	-
BH12A_21 Jan 15_-	BH12A	21/01/2015	water	10.07	*6.54*	**1538**	***1.26***	-53	22.3	7.2	1200	-	570	<1	-	220	34	20	160	190	130	<0.1	-	-	***5.7***	4.6	0.018	-	-	-	19	<0.005	0.003	0.13	<0.0001	-
BH12A_23 Apr 15_-	BH12A	23/04/2015	water	10.04	*6.9*	**1706**	***1.35***	63	20.2	7.1	1200	-	620	<1	-	200	35	19	180	180	120	<0.1	-	-	***8.3***	-	-	-	-	-	20	-	-	-	-	-
BH12A_21 Jul 15_-	BH12A	21/07/2015	water	9.8	*6.9*	**1236**	***2.73***	3	20	*6.9*	930	-	490	<1	-	170	21	11	110	120	73	0.2	-	-	***2***	-	-	-	-	-	10	-	-	-	-	-
BH12A_20 Oct 15_-	BH12A	20/10/2015	water	10.12	*6.83*	**529**	***2.69***	112	20.4	7.4	1000	-	510	<1	-	170	23	18	90	140	76	<0.1	-	-	***5.3***	-	-	-	-	-	10	-	-	-	-	-
BH12A_21 Jan 16_-	BH12A	21/01/2016	water	9.87	*6.99*	**1154**	***2.54***	41	24.6	7.2	970	-	530	<1	-	190	31	22	120	140	88	<0.1	-	-	***4.1***	5.4	0.18	-	-	-	12	<0.005	0.003	0.1	<0.0001	<0.001
BH12A_14 Apr 16_-	BH12A	14/04/2016	water	10.1	*6.91*	**1489**	***1.07***	-212	20.4	7.3	910	-	530	<5	-	180	26	16	100	130	78	0.1	-	-	***3.4***	-	-	-	-	-	15	-	-	-	-	-
BH12A_21 Jul 16_-	BH12A	21/07/2016	water	9.9	7.14	**1316**	***1.49***	-94	16.9	*7*	770	-	500	<5	-	160	27	16	90	85	63	0.4	-	-	***3.1***	-	-	-	-	-	10	-	-	-	-	-
BH12A_18 Oct 16_-	BH12A	18/10/2016	water	10.02	*6.97*	**1365**	***2.44***	57	21.3	7.3	910	-	560	<5	-	210	29	16	95	130	58	0.1	-	-	***1.9***	-	-	-	-	-	10	-	-	-	-	-
BH12A_19 Jan 17_-	BH12A	19/01/2017	water	10.18	*6.85*	**1535**	***1.81***	39	21	7.5	920	-	560	<5	-	200	31	18	150	150	74	<0.1	-	-	***1.5***	7	0.01	-	-	-	16	<0.01	0.003	0.074	<0.0001	<0.001
BH12A_03 Jul 19_-	BH12A	3/07/2019	water	10.13	*6.99*	**1713**	***1.3***	-82.2	19.8	7.3	1100	-	650	<5	-	220	41	23	140	200	92	<0.1	-	-	***5.1***	-	-	-	-	-	22	-	-	-	-	-
BH12A_25 Oct 19_-	BH12A	25/10/2019	water	10.2	*6.99*	**1860**	***4.13***	75.8	21.4	7.5	1300	-	590	<5	-	200	39	26	170	210	110	<0.1	-	-	***5.6***	-	-	-	-	-	22	-	-	-	-	-
BH12A_13 Jan 20_-	BH12A	13/01/2020	water	10.29	7.05	**1788**	***1.96***	-227.8	21.5	*7*	1200	-	650	<5	-	180	35	26	170	230	88	<0.1	-	-	***9.1***	0.58	<0.005	-	-	-	23	0.01	0.003	0.11	<0.0001	<0.001
BH12A_23 Apr 20_-	BH12A	23/04/2020	water	10.08	*6.95*	**1653**	***3.39***	11.2	21.2	7.2	1100	-	580	<5	-	180	30	28	130	180	110	<0.1	-	-	***8.7***	-	-	-	-	-	16	-	-	-	-	-
BH13_01 Dec 94_-	BH13	1/12/1994	water	-	*6.8*	**984**	-	-	-	-	726	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.8***	-	-	-	-	31	-	-	0.004	-	-	0.001
BH13_01 Mar 95_-	BH13	1/03/1995	water	-	7.1	**1093**	-	-	-	-	576	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.5***	-	-	-	-	12	-	-	0.0015	-	-	0.003
BH13_01 Jun 95_-	BH13	1/06/1995	water	-	7.24	**961**	-	-	-	-	572	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.3***	-	-	-	-	17	-	-	0.018	-	-	0.001
BH13_01 Sep 95_-	BH13	1/09/1995	water	-	7.51	**1004**	-	-	-	-	768	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	0.5	3.59	11	-	-	0.014	-	-	0.002
BH13_01 Jan 96_-	BH13	1/01/1996	water	-	7.04	**995**	-	-	-	-	652	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	0.9	-	18	-	-	0.003	-	-	0.001
BH13_01 Apr 96_-	BH13	1/04/1996	water	-	*6.99*	**1034**	-	-	-	-	628	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.51***	-	-	1.5	5.15	16	-	-	0.003	-	-	0.001
BH13_01 Jul 96_-	BH13	1/07/1996	water	-	*6.92*	**934**	-	-	-	-	684	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.19***	-	-	1.4	0.57	26	-	-	0.013	-	-	0.001
BH13_01 Oct 96_-	BH13	1/10/1996	water	-	*6.96*	**1127**	-	-	-	-	744	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	0.6	1.02	19	-	-	0.004	-	-	0.001
BH13_01 Jan 97_-	BH13	1/01/1997	water	-	*6.89*	**1284**	-	-	-	-	734	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.61***	-	-	2.8	1	25	-	-	0.008	-	-	0.001
BH13_01 Apr 97_-	BH13	1/04/1997	water	-	*6.93*	**905**	-	-	-	-	616	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.3***	-	-	2.3	0.63	15	-	-	0.008	-	-	0.004
BH13_01 Jul 97_-	BH13	1/07/1997	water	-	*6.99*	**1013**	-	-	-	-	600	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.9	0.55	15	-	-	0.008	-	-	0.002

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]								0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
BH13_01 Oct 97_-	BH13	1/10/1997	water	-	*6.83*	**1021**	-	-	-	-	608	-	-	-	-	-	-	-	-	-	-	-	***0.9***	-	-	1.7	0.55	13	-	-	0.01	-	-	0.001
BH13_01 Jan 98_-	BH13	1/01/1998	water	-	*6.69*	**1108**	-	-	-	-	722	-	-	-	-	-	-	-	-	-	-	-	***0.92***	-	-	1.8	0.27	7	-	-	0.02	-	-	0.001
BH13_01 Apr 98_-	BH13	1/04/1998	water	-	7.03	**1141**	-	-	-	-	580	-	-	-	-	-	-	-	-	-	-	-	***5.21***	-	-	6.8	0.23	17	-	-	0.019	-	-	0.001
BH13_01 Jul 98_-	BH13	1/07/1998	water	-	*6.97*	**1106**	-	-	-	-	640	-	-	-	-	-	-	-	-	-	-	-	***4.61***	-	-	4.6	0.29	22	-	-	0.007	-	-	0.001
BH13_01 Oct 98_-	BH13	1/10/1998	water	-	7.07	**925**	-	-	-	-	554	-	-	-	-	-	-	-	-	-	-	-	***0.19***	-	-	1.1	3.16	17	-	-	0.01	-	-	0.001
BH13_01 Jan 99_-	BH13	1/01/1999	water	-	*6.9*	**1211**	-	-	-	-	760	-	-	-	-	-	-	-	-	-	-	-	***3.3***	-	-	4.8	0.35	36	-	-	0.049	-	-	0.003
BH13_01 Mar 99_-	BH13	1/03/1999	water	-	*6.9*	**980**	-	-	-	-	630	-	-	-	-	-	-	-	-	-	-	-	***1.3***	-	-	2.3	0.37	12	-	-	0.02	-	-	0.011
BH13_01 Jul 99_-	BH13	1/07/1999	water	-	*7*	**917**	-	-	-	-	547	-	-	-	-	-	-	-	-	-	-	-	***0.93***	-	-	2.9	0.2	14	-	-	0.007	-	-	0.005
BH13_01 Oct 99_-	BH13	1/10/1999	water	-	*6.8*	-	-	-	-	-	551	-	-	-	-	-	-	-	-	-	-	-	***0.69***	-	-	1.4	3.41	2	-	-	0.064	-	-	0.002
BH13_01 Jan 00_-	BH13	1/01/2000	water	-	*7*	**1100**	-	-	-	-	660	-	-	-	-	-	-	-	-	-	-	-	***1.66***	-	-	3.2	0.47	12	-	-	0.103	-	-	0.002
BH13A_01 Apr 00_-	BH13A	1/04/2000	water	-	7.3	**820**	-	-	-	-	500	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	0.2	0.12	4	-	-	0.017	-	-	0.006
BH13A_01 Jul 00_-	BH13A	1/07/2000	water	-	7.1	**880**	-	-	-	-	520	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	0.5	0.21	3	-	-	0.011	-	-	0.005
BH13A_01 Oct 00_-	BH13A	1/10/2000	water	-	7.1	**910**	-	-	-	-	530	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.5	0.72	3	-	-	0.006	-	-	0.002
BH13A_01 Jan 01_-	BH13A	1/01/2001	water	-	7.3	**840**	-	-	-	-	500	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.3	2.03	8	-	-	0.004	-	-	0.011
BH13A_01 Apr 01_-	BH13A	1/04/2001	water	-	7.2	**890**	-	-	-	-	520	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	4.23	3	-	-	0.006	-	-	0.002
BH13A_01 Jul 01_-	BH13A	1/07/2001	water	-	7.2	**760**	-	-	-	-	420	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	6.4	2	-	-	0.009	-	-	0.003
BH13A_01 Oct 01_-	BH13A	1/10/2001	water	-	7.1	**1100**	-	-	-	-	630	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	0.7	1.53	5	-	-	0.006	-	-	0.001
BH13A_01 Jan 02_-	BH13A	1/01/2002	water	-	*7*	**1500**	-	-	-	-	890	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.5	1.79	5	-	-	0.001	-	-	0.001
BH13A_01 Apr 02_-	BH13A	1/04/2002	water	-	7.6	**690**	-	-	-	-	430	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.2	0.91	2	-	-	0.004	-	-	0.002
BH13A_01 Jul 02_-	BH13A	1/07/2002	water	-	7.6	**1100**	-	-	-	-	730	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.2	0.93	3	-	-	0.004	-	-	<0.001
BH13A_01 Oct 02_-	BH13A	1/10/2002	water	-	7.7	**1100**	-	-	-	-	720	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.2	1.25	4	-	-	0.005	-	-	0.025
BH13A_01 Jan 03_-	BH13A	1/01/2003	water	-	7.72	**890**	-	-	-	-	660	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	0.3	0.27	4	-	-	0.008	-	-	<0.001
BH13A_01 Apr 03_-	BH13A	1/04/2003	water	-	7.59	**955**	-	-	-	-	676	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.8	1.69	10	-	-	0.004	-	-	0.001
BH13A_01 Jul 03_-	BH13A	1/07/2003	water	-	7.69	**881**	-	-	-	-	560	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.9	1.51	12	-	-	0.014	-	-	0.001
BH13A_01 Oct 03_-	BH13A	1/10/2003	water	-	7.44	**1120**	-	-	-	-	770	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.6	3.02	8	-	-	0.005	-	-	0.001
BH13A_01 Jan 04_-	BH13A	1/01/2004	water	-	**8.15**	**955**	-	-	-	-	742	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.6	1.22	12	-	-	0.004	-	-	0.005
BH13A_01 Apr 04_-	BH13A	1/04/2004	water	-	7.75	-	-	-	-	-	480	-	-	-	-	-	-	-	-	-	-	-	***0.06***	-	-	-	1	5	-	-	0.003	-	-	-
BH13A_01 Jul 04_-	BH13A	1/07/2004	water	-	7.7	-	-	-	-	-	458	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	-	0.53	9	-	-	0.003	-	-	-
BH13A_01 Oct 04_-	BH13A	1/10/2004	water	-	7.78	-	-	-	-	-	518	-	-	-	-	-	-	-	-	-	-	-	***0.07***	-	-	-	1.28	5	-	-	0.003	-	-	-
BH13A_01 Jan 05_-	BH13A	1/01/2005	water	-	7.8	-	-	-	-	-	518	-	-	-	-	-	-	-	-	-	-	-	***0.057***	-	-	-	5.96	3	-	-	0.02	-	-	0.01
BH13A_01 Apr 05_-	BH13A	1/04/2005	water	-	7.23	-	-	-	-	-	440	-	-	-	-	-	-	-	-	-	-	-	***0.034***	-	-	-	3.7	1	-	-	0.003	-	-	-
BH13A_01 Jul 05_-	BH13A	1/07/2005	water	-	**8.17**	-	-	-	-	-	452	-	-	-	-	-	-	-	-	-	-	-	***0.198***	-	-	-	5.53	1	-	-	0.002	-	-	-
BH13A_01 Oct 05_-	BH13A	1/10/2005	water	-	7.38	-	-	-	-	-	494	-	-	-	-	-	-	-	-	-	-	-	***0.091***	-	-	-	2.82	2	-	-	0.002	-	-	-
BH13A_01 Jan 06_-	BH13A	1/01/2006	water	-	7.52	-	-	-	-	-	456	-	-	-	-	-	-	-	-	-	-	-	***0.062***	-	-	-	3.84	2	-	-	0.002	-	-	0.001
BH13A_01 Apr 06_-	BH13A	1/04/2006	water	-	7.34	-	-	-	-	-	474	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	-	2.91	3	-	-	0.002	-	-	-
BH13A_01 Jul 06_-	BH13A	1/07/2006	water	-	7.5	-	-	-	-	-	504	-	-	-	-	-	-	-	-	-	-	-	***0.052***	-	-	-	3.79	4	-	-	0.002	-	-	-
BH13A_01 Oct 06_-	BH13A	1/10/2006	water	-	7.38	-	-	-	-	-	456	-	-	-	-	-	-	-	-	-	-	-	**0.011**	-	-	-	1.16	4	-	-	0.002	-	-	-
BH13A_01 Jan 07_-	BH13A	1/01/2007	water	-	7.37	-	-	-	-	-	460	-	-	-	-	-	-	-	-	-	-	-	***0.024***	-	-	-	3.42	2	-	-	0.003	-	-	<0.001
BH13A_01 Apr 07_-	BH13A	1/04/2007	water	-	7.2	-	-	-	-	-	498	-	-	-	305	119	10	6	32	44.7	58	-	8.33	8.56	***0.118***	2.97	0.011	-	-	6	-	-	0.003	-	-	-
BH13A_17 Apr 13_-	BH13A	17/04/2013	water	3.8	*6.93*	**2.4**	***0.36***	18	18.2	7.8	800	-	390	<1	-	160	18	8.7	60	59	140	0.16	-	-	**0.01**	-	-	-	-	-	6	-	-	-	-	-
BH13A_09 Jul 13_-	BH13A	9/07/2013	water	3.48	7.13	**182**	***4.43***	6	16.7	7.7	660	-	270	<1	-	160	15	9.4	71	82	100	-	-	-		-	-	-	-	-	3	-	-	-	-	-
BH13A_29 Oct 13_-	BH13A	29/10/2013	water	3.72	**8.23**	**16.8**	***3.74***	-39	17.7	7.6	610	-	370	<1	-	160	13	5.8	55	41	83	-	-	-	**0.01**	-	-	-	-	-	4	-	-	-	-	-
BH13A_28 Jan 14_-	BH13A	28/01/2014	water	3.94	7.12	**907**	***5.81***	29	19.8	7.6	760	-	450	<1	-	200	23	4.9	60	58	140	0.14	-	-		1.4	<0.01	-	-	-	3	<0.005	0.003	0.018	<0.0001	<0.001
BH13A_14 Apr 14_-	BH13A	14/04/2014	water	3.68	7.01	**688**	***3.72***	183	20.1	7.6	760	-	440	<1	-	190	17	8.8	80	56	130	0.14	-	-		-	-	-	-	-	3	-	-	-	-	-
BH13A_07 Jul 14_-	BH13A	7/07/2014	water	-	7.54	**928**	***3.38***	75	19.4	7.2	650	-	400	<1	-	150	13	9.5	78	58	97	0.13	-	-		-	-	-	-	-	4	-	-	-	-	-
BH13A_15 Oct 14_-	BH13A	15/10/2014	water	3.17	7.22	**917**	***2.85***	70	17.2	7.3	620	-	410	<1	-	150	18	8.8	89	60	55	0.19	-	-	***0.079***	-	-	-	-	-	6	-	-	-	-	-
BH13A_27 Apr 15_-	BH13A	27/04/2015	water	3.25	7.13	**917**	***4.1***	58	18.4	7.3	880	-	570	<1	-	170	31	16	120	66	90	0.27	-	-	***1.8***	-	-	-	-	-	9	-	-	-	-	-
BH13A_21 Jul 15_-	BH13A	21/07/2015	water	3.7	***6.23***	**878**	***3.82***	57	17.6	7.1	620	-	330	<1	-	140	13	4.8	59	69	67	0.2	-	-		-	-	-	-	-	6	-	-	-	-	-
BH13A_20 Oct 15_-	BH13A	20/10/2015	water	3.9	*6.89*	**441**	***4.9***	85	24.4	7.6	840	-	380	<1	-	180	18	7.4	62	68	210	0.2	-	-		-	-	-	-	-	4	-	-	-	-	-
BH13A_21 Jan 16_-	BH13A	21/01/2016	water	3.47	7.12	**1102**	***2.27***	57	26.6	7.9	940	-	530	<1	-	210	21	13	120	90	120	0.1	-	-		0.4	<0.01	-	-	-	8	<0.005	0.004	0.025	<0.0001	<0.001
BH13A_19 Apr 16_-	BH13A	19/04/2016	water	3.43	*6.89*	**1081**	***1.75***	-49	20	7.5	820	-	470	<5	-	170	14	11	120	80	83	0.2	-	-		-	-	-	-	-	7	-	-	-	-	-
BH13A_21 Jul 16_-	BH13A	21/07/2016	water	3.61	7.8	**805**	***3.12***	120	17.5	7.4	480	-	320	<5	-	110	11	5.9	46	40	42	0.2	-	-	0.006	-	-	-	-	-	3	-	-	-	-	-
BH13A_18 Oct 16_-	BH13A	18/10/2016	water	3.81	7.36	**1145**	***2.12***	38	20.3	7.5	820	-	470	<5	-	190	17	7.1	97	80	110	0.2	-	-	0.006	-	-	-	-	-	8	-	-	-	-	-
BH13A_03 Jul 19_-	BH13A	3/07/2019	water	3.78	7.33	**1093**	***2.6***	63.4	18.6	7.6	1100	-	650	<5	-	220	46	17	130	120	200	0.2	-	-	***3.8***	-	-	-	-	-	13	-	-	-	-	-
BH13A_25 Oct 19_-	BH13A	25/10/2019	water	3.85	7.18	**1619**	***3.02***	59.8	20.1	7.8	1200	-	610	<5	-	240	42	16	140	120	180	0.2	-	-	***2.7***	-	-	-	-	-	13	-	-	-	-	-
BH13A_13 Jan 20_-	BH13A	13/01/2020	water	3.87	7.29	**1850**	***0.9***	-225.9	21.1	7.1	1200	-	710	<5	-	220	42	16	150	130	160	0.2	-	-	***3.6***	0.068	0.006	-	-	-	16	0.01	0.01	0.034	<0.0001	<0.001
BH13A_23 Apr 20_-	BH13A	23/04/2020	water	2.78	7.37	**1167**	***3.79***	115.3	20.2	7.4	1000	-	400	<5	-	180	29	9.7	74	100	260	0.2	-	-	***2***	-	-	-	-	-	6	-	-	-	-	-
BH14_01 Jan 97_-	BH14	1/01/1997	water	-	*6.7*	**758**	-	-	-	-	520	-	-	-	-	-	-	-	-	-	-	-	***0.45***	-	-	3.2	0.45	27	-	-	0.013	-	-	0.001
BH14_01 Apr 97_-	BH14	1/04/1997	water	-	*6.76*	**750**	-	-	-	-	664	-	-	-	-	-	-	-	-	-	-	-	***0.16***	-	-	1.4	2.8	33	-	-	0.003	-	-	0.005
BH14_01 Jul 97_-	BH14	1/07/1997	water	-	*6.72*	**987**	-	-	-	-	630	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	1.1	3.48	32	-	-	0.001	-	-	0.003
BH14_01 Oct 97_-	BH14	1/10/1997	water	-	*6.8*	**1080**	-	-	-	-	688	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	1.6	3.28	16	-	-	0.002	-	-	0.002
BH14_01 Jan 98_-	BH14	1/01/1998	water	-	*6.74*	**757**	-	-	-	-	484	-	-	-	-	-	-	-	-	-	-	-	***0.61***	-	-	1.1	0.02	27	-	-	0.001	-	-	0.001

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]							0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
BH14_01 Apr 98_-	BH14	1/04/1998	water	-	*6.58*	**778**	-	-	-	-	430	-	-	-	-	-	-	-	-	-	-	-	***0.99***	-	-	1.5	0.01	26	-	-	0.01	-	-	0.001
BH14_01 Jul 98_-	BH14	1/07/1998	water	-	*6.82*	**1076**	-	-	-	-	722	-	-	-	-	-	-	-	-	-	-	-	***0.13***	-	-	2.8	4.95	32	-	-	0.003	-	-	0.001
BH14_01 Oct 98_-	BH14	1/10/1998	water	-	7.02	-	-	-	-	-	772	-	-	-	-	-	-	-	-	-	-	-	***0.05***	-	-	3.2	18.4	21	-	-	0.01	-	-	0.001
BH14_01 Jan 99_-	BH14	1/01/1999	water	-	*6.9*	**941**	-	-	-	-	646	-	-	-	-	-	-	-	-	-	-	-	***0.2***	-	-	1.2	0.21	86	-	-	0.005	-	-	0.003
BH14_01 Mar 99_-	BH14	1/03/1999	water	-	*6.9*	**612**	-	-	-	-	525	-	-	-	-	-	-	-	-	-	-	-	***0.26***	-	-	1.5	2.6	26	-	-	0.005	-	-	0.008
BH14_01 Jul 99_-	BH14	1/07/1999	water	-	7.1	**894**	-	-	-	-	510	-	-	-	-	-	-	-	-	-	-	-	***0.19***	-	-	2	3.24	18	-	-	0.003	-	-	0.006
BH14_01 Oct 99_-	BH14	1/10/1999	water	-	*7*	-	-	-	-	-	414	-	-	-	-	-	-	-	-	-	-	-	***0.18***	-	-	1.5	0.15	5	-	-	0.003	-	-	0.002
BH14_01 Jan 00_-	BH14	1/01/2000	water	-	7.1	**730**	-	-	-	-	480	-	-	-	-	-	-	-	-	-	-	-	***0.25***	-	-	1.6	0.1	26	-	-	0.005	-	-	0.002
BH14_01 Apr 00_-	BH14	1/04/2000	water	-	*6.9*	**840**	-	-	-	-	560	-	-	-	-	-	-	-	-	-	-	-	***0.05***	-	-	1.8	7.33	22	-	-	0.003	-	-	0.008
BH14_01 Jul 00_-	BH14	1/07/2000	water	-	*6.8*	**650**	-	-	-	-	390	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	1.6	0.09	26	-	-	0.004	-	-	0.005
BH14_01 Oct 00_-	BH14	1/10/2000	water	-	*6.7*	**870**	-	-	-	-	590	-	-	-	-	-	-	-	-	-	-	-	***0.12***	-	-	1.6	0.62	19	-	-	0.002	-	-	0.002
BH14_01 Jan 01_-	BH14	1/01/2001	water	-	*6.9*	**1200**	-	-	-	-	850	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	2	8.2	30	-	-	0.003	-	-	0.009
BH14_01 Apr 01_-	BH14	1/04/2001	water	-	*6.7*	**1200**	-	-	-	-	790	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	1.8	7.44	22	-	-	0.004	-	-	0.003
BH14_01 Jul 01_-	BH14	1/07/2001	water	-	*6.8*	**2500**	-	-	-	-	1500	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	2.6	18.9	27	-	-	0.005	-	-	0.005
BH14_01 Oct 01_-	BH14	1/10/2001	water	-	*6.9*	**1500**	-	-	-	-	850	-	-	-	-	-	-	-	-	-	-	-	***0.06***	-	-	1.4	3.79	16	-	-	0.005	-	-	0.001
BH14_01 Jan 02_-	BH14	1/01/2002	water	-	*6.6*	**1000**	-	-	-	-	630	-	-	-	-	-	-	-	-	-	-	-	***0.05***	-	-	1.2	0.21	18	-	-	0.01	-	-	0.001
BH14_01 Apr 02_-	BH14	1/04/2002	water	-	7.2	**1700**	-	-	-	-	1200	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	1.8	8	17	-	-	0.005	-	-	0.003
BH14_01 Jul 02_-	BH14	1/07/2002	water	-	7.3	**950**	-	-	-	-	590	-	-	-	-	-	-	-	-	-	-	-	***0.11***	-	-	1	2.07	11	-	-	0.004	-	-	<0.001
BH14_01 Oct 02_-	BH14	1/10/2002	water	-	7.3	**750**	-	-	-	-	480	-	-	-	-	-	-	-	-	-	-	-	***0.11***	-	-	0.7	0.1	11	-	-	0.005	-	-	0.002
BH14_01 Jan 03_-	BH14	1/01/2003	water	-	7.72	**850**	-	-	-	-	530	-	-	-	-	-	-	-	-	-	-	-	***0.08***	-	-	0.6	0.14	13	-	-	0.005	-	-	0.001
BH14_01 Apr 03_-	BH14	1/04/2003	water	-	7.22	**1110**	-	-	-	-	750	-	-	-	-	-	-	-	-	-	-	-	***0.16***	-	-	0.8	0.11	22	-	-	0.002	-	-	0.001
BH14_01 Jul 03_-	BH14	1/07/2003	water	-	7.43	**1200**	-	-	-	-	830	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	1.1	7.08	18	-	-	0.004	-	-	0.001
BH14_01 Oct 03_-	BH14	1/10/2003	water	-	7.23	**945**	-	-	-	-	842	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	1.7	0.21	14	-	-	0.004	-	-	0.001
BH14_01 Jan 04_-	BH14	1/01/2004	water	-	7.98	**690**	-	-	-	-	690	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	0.6	0.05	16	-	-	0.003	-	-	0.005
BH14_01 Apr 04_-	BH14	1/04/2004	water	-	7.35	-	-	-	-	-	638	-	-	-	-	-	-	-	-	-	-	-	***0.22***	-	-	-	1.25	17	-	-	0.003	-	-	-
BH14_01 Jul 04_-	BH14	1/07/2004	water	-	7.21	-	-	-	-	-	520	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	-	0.01	23	-	-	0.003	-	-	-
BH14_01 Oct 04_-	BH14	1/10/2004	water	-	7.31	-	-	-	-	-	664	-	-	-	-	-	-	-	-	-	-	-	***0.22***	-	-	-	3.89	24	-	-	0.003	-	-	-
BH14_01 Jan 05_-	BH14	1/01/2005	water	-	7.22	-	-	-	-	-	498	-	-	-	-	-	-	-	-	-	-	-	***3.37***	-	-	-	0.172	20	-	-	0.008	-	-	0.001
BH14_01 Apr 05_-	BH14	1/04/2005	water	-	***6.5***	-	-	-	-	-	512	-	-	-	-	-	-	-	-	-	-	-	***0.731***	-	-	-	0.01	25	-	-	0.014	-	-	-
BH14_01 Jun 05_-	BH14	1/06/2005	water	-	**8.1**	-	-	-	-	-	456	-	-	-	-	-	-	-	-	-	-	-	***0.397***	-	-	-	0.031	17	-	-	0.004	-	-	-
BH14_01 Oct 05_-	BH14	1/10/2005	water	-	*6.52*	-	-	-	-	-	436	-	-	-	-	-	-	-	-	-	-	-	***0.533***	-	-	-	0.025	21	-	-	0.016	-	-	-
BH14_01 Jan 06_-	BH14	1/01/2006	water	-	*6.55*	-	-	-	-	-	500	-	-	-	-	-	-	-	-	-	-	-	***0.266***	-	-	-	0.055	25	-	-	0.032	-	-	0.002
BH14_01 Apr 06_-	BH14	1/04/2006	water	-	***6.29***	-	-	-	-	-	470	-	-	-	-	-	-	-	-	-	-	-	***0.166***	-	-	-	0.036	25	-	-	0.032	-	-	-
BH14_01 Jul 06_-	BH14	1/07/2006	water	-	*6.67*	-	-	-	-	-	622	-	-	-	-	-	-	-	-	-	-	-	***0.338***	-	-	-	0.01	26	-	-	0.016	-	-	-
BH14_01 Oct 06_-	BH14	1/10/2006	water	-	*6.57*	-	-	-	-	-	1600	-	-	-	-	-	-	-	-	-	-	-	***0.384***	-	-	-	0.039	33	-	-	0.009	-	-	-
BH14_01 Jan 07_-	BH14	1/01/2007	water	-	*6.64*	-	-	-	-	-	666	-	-	-	-	-	-	-	-	-	-	-	***0.398***	-	-	-	0.023	23	-	-	0.022	-	-	<0.001
BH14_01 Apr 07_-	BH14	1/04/2007	water	-	*6.52*	-	-	-	-	-	846	-	-	-	232	133	25	7	47	83.8	224	-	10.9	11.6	***0.594***	0.02	0.012	-	-	34	-	-	0.036	-	-
BH14_16 Apr 13_-	BH14	16/04/2013	water	2.84	***10.4***	36,800	***1.1***	-939	25	7.4	640	-	300	<1	-	-	14	20	64	120	55	<0.1	-	-	***0.1***	-	-	-	-	-	21	-	-	-	-
BH14_22 Apr 15_-	BH14	22/04/2015	water	1.95	7.28	**842**	***2.28***	-1	18.9	7.2	660	-	300	<1	-	160	23	10	110	86	140	0.18	-	-	***0.13***	-	-	-	-	-	82	-	-	-	-
BH14_22 Jul 15_-	BH14	22/07/2015	water	2.2	***6.15***	**1182**	***4.2***	33	15.4	*6.8*	1000	-	400	<1	-	210	38	7.6	120	110	250	0.2	-	-	***0.018***	-	-	-	-	-	28	-	-	-	-
BH14_20 Oct 15_-	BH14	20/10/2015	water	3	*6.52*	**5100**	***1.54***	17	23.3	7.2	1200	-	410	<1	-	210	40	6.9	160	170	370	0.1	-	-	***0.19***	-	-	-	-	-	28	-	-	-	-
BH14_20 Jan 16_-	BH14	20/01/2016	water	2.12	*6.85*	**1078**	***3.5***	-14	23.8	*6.9*	940	-	360	<1	-	180	32	8.7	120	91	170	0.1	-	-	***0.027***	6.5	0.017	-	-	-	31	<0.005	<0.001	0.08	<0.0001	<0.001
BH14A_29 Jul 14_-	BH14A	29/07/2014	water	2.24	***5.86***	**995**	***2.39***	201	16	7.5	670	-	700	<1	-	280	35	15	88	70	12	0.24	-	-	***1.5***	-	-	-	-	-	170	-	-	-	-	-
BH14A_29 Oct 14_-	BH14A	29/10/2014	water	2.1	*6.98*	**1996**	***0.92***	115	17.9	*6.9*	1400	-	500	<1	-	230	44	10	260	140	400	0.16	-	-	***0.91***	-	-	-	-	-	39	-	-	-	-	-
BH14A_20 Jan 15_-	BH14A	20/01/2015	water	2.1	*6.81*	**1301**	***0.22***	-134	21	7.3	1000	-	590	<1	-	330	48	17	160	110	150	0.14	-	-	***1.4***	<0.1	<0.01	-	-	-	230	0.01	0.006	0.14	<0.0001	-
BH14A_14 Apr 16_-	BH14A	14/04/2016	water	3.01	**8.09**	**1094**	***2.51***	-7	21.2	*6.9*	860	-	360	<5	-	170	28	8	96	67	140	0.2	-	-	***0.039***	-	-	-	-	-	41	-	-	-	-	-
BH14A_13 Jul 16_-	BH14A	13/07/2016	water	2.61	***6.17***	**1273**	***4.82***	105	13.6	*7*	1000	-	400	<5	-	220	37	7.2	94	100	250	0.1	-	-	**0.012**	-	-	-	-	-	68	-	-	-	-	-
BH14A_19 Jan 17_-	BH14A	19/01/2017	water	3.83	7.18	**1105**	***2.95***	19	21	*7*	830	-	290	<5	-	180	17	6.4	82	75	200	0.1	-	-	0.008	2	<0.005	-	-	-	6	<0.01	0.003	0.02	<0.0001	<0.001
BH14A_02 Jul 19_-	BH14A	2/07/2019	water	3.88	*6.88*	**486.9**	***3.95***	-78.6	17.4	*7*	700	-	430	<5	-	150	27	9.3	68	82	59	0.2	-	-	***0.98***	-	-	-	-	-	26	-	-	-	-	-
BH14A_24 Oct 19_-	BH14A	24/10/2019	water	3.22	*6.87*	**976**	***3.52***	-33.2	19.5	7.1	640	-	390	<5	-	190	34	12	62	70	44	0.2	-	-	***1.3***	-	-	-	-	-	21	-	-	-	-	-
BH14A_27 Apr 20_-	BH14A	27/04/2020	water	3.98	7.01	**1128**	***0.31***	-110.9	20.9	*6.8*	790	-	390	<5	-	200	37	11	85	110	88	0.2	-	-	***2.2***	-	-	-	-	-	25	-	-	-	-	-
BH15_01 Jan 97_-	BH15	1/01/1997	water	-	7.45	**493**	-	-	-	-	270	-	-	-	-	-	-	-	-	-	-	-	***1.1***	-	-	0.4	1.1	7	-	-	0.002	-	-	0.001
BH15_01 Apr 97_-	BH15	1/04/1997	water	-	***6.16***	**490**	-	-	-	-	320	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	0.23	6	-	-	0.002	-	-	0.002
BH15_01 Jul 97_-	BH15	1/07/1997	water	-	7.43	**609**	-	-	-	-	336	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.2	0.25	6	-	-	0.006	-	-	0.001
BH15_01 Oct 97_-	BH15	1/10/1997	water	-	7.51	**530**	-	-	-	-	314	-	-	-	-	-	-	-	-	-	-	-	***0.19***	-	-	0.6	0.01	3	-	-	0.01	-	-	0.001
BH15_01 Jan 98_-	BH15	1/01/1998	water	-	7.54	**576**	-	-	-	-	306	-	-	-	-	-	-	-	-	-	-	-	***0.05***	-	-	0.3	0.01	1	-	-	0.001	-	-	0.001
BH15_01 Apr 98_-	BH15	1/04/1998	water	-	7.48	**636**	-	-	-	-	310	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.3	0.02	3	-	-	0.004	-	-	0.001
BH15_01 Jul 98_-	BH15	1/07/1998	water	-	7.4	**675**	-	-	-	-	448	-	-	-	-	-	-	-	-	-	-	-	***0.08***	-	-	0.6	0.11	10	-	-	0.014	-	-	0.001
BH15_01 Oct 98_-	BH15	1/10/1998	water	-	7.45	-	-	-	-	-	578	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.3	0.19	6	-	-	0.02	-	-	0.001
BH15_01 Jan 99_-	BH15	1/01/1999	water	-	7.6	**518**	-	-	-	-	286	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	0.02	11	-	-	0.009	-	-	0.002
BH15_01 Mar 99_-	BH15	1/03/1999	water	-	7.6	**449**	-	-	-	-	293	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.3	0.01	1	-	-	0.009	-	-	0.004
BH15_01 Jul 99_-	BH15	1/07/1999	water	-	7.7	**584**	-	-	-	-	290	-	-	-	-	-	-	-	-	-	-	-	***0.54***	-	-	0.6	0.01	3	-	-	0.003	-	-	0.004

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]							0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
BH15_01 Oct 99_-	BH15	1/04/1999	water	-	7.5	-	-	-	-	-	296	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.13***	-	-	0.5	0.01	2	-	-	0.01	-	-	0.001
BH15_01 Jan 00_-	BH15	1/01/2000	water	-	7.4	**540**	-	-	-	-	320	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.09***	-	-	0.2	0.02	2	-	-	0.005	-	-	0.001
BH15_01 Apr 00_-	BH15	1/04/2000	water	-	7.2	**650**	-	-	-	-	380	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.05***	-	-	0.1	0.01	2	-	-	0.009	-	-	0.006
BH15_01 Jul 00_-	BH15	1/07/2000	water	-	7.2	**630**	-	-	-	-	350	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.14***	-	-	0.4	0.01	1	-	-	0.003	-	-	0.004
BH15_01 Oct 00_-	BH15	1/10/2000	water	-	7.3	**650**	-	-	-	-	370	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.09***	-	-	0.7	0.01	2	-	-	0.001	-	-	0.001
BH15_01 Jan 01_-	BH15	1/01/2001	water	-	7.7	**660**	-	-	-	-	400	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.32***	-	-	0.3	0.01	4	-	-	0.004	-	-	0.009
BH15_01 Apr 01_-	BH15	1/04/2001	water	-	7.4	**660**	-	-	-	-	390	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.19***	-	-	0.3	0.01	2	-	-	0.005	-	-	0.002
BH15_01 Jun 01_-	BH15	1/06/2001	water	-	7.3	**1300**	-	-	-	-	770	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	0.3	0.03	4	-	-	0.022	-	-	0.004
BH15_01 Oct 01_-	BH15	1/10/2001	water	-	7.4	**730**	-	-	-	-	420	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	0.3	0.02	2	-	-	0.013	-	-	0.001
BH15_01 Jan 02_-	BH15	1/01/2002	water	-	7.3	**740**	-	-	-	-	430	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	0.4	0.01	3	-	-	0.001	-	-	0.001
BH15_01 Apr 02_-	BH15	1/04/2002	water	-	7.7	**940**	-	-	-	-	620	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.07***	-	-	0.3	0.08	3	-	-	0.012	-	-	0.002
BH15_01 Jul 02_-	BH15	1/07/2002	water	-	7.8	**770**	-	-	-	-	440	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.05***	-	-	0.3	0.02	1	-	-	0.004	-	-	<0.001
BH15_01 Oct 02_-	BH15	1/10/2002	water	-	7.8	**640**	-	-	-	-	350	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.07***	-	-	0.3	0.1	1	-	-	0.004	-	-	0.002
BH15_01 Jan 03_-	BH15	1/01/2003	water	-	**8.07**	**580**	-	-	-	-	340	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.25***	-	-	0.2	0.02	2	-	-	0.003	-	-	0.004
BH15_01 Apr 03_-	BH15	1/04/2003	water	-	7.7	**758**	-	-	-	-	420	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.15***	-	-	0.5	0.01	7	-	-	0.001	-	-	0.001
BH15_01 Jul 03_-	BH15	1/07/2003	water	-	7.66	**1340**	-	-	-	-	744	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.2	0.02	7	-	-	0.021	-	-	0.001
BH15_01 Oct 03_-	BH15	1/10/2003	water	-	7.62	**866**	-	-	-	-	542	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.2	0.01	4	-	-	0.003	-	-	0.001
BH15_01 Jan 04_-	BH15	1/01/2004	water	-	**8.28**	**886**	-	-	-	-	674	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.27***	-	-	0.5	0.01	8	-	-	0.003	-	-	0.005
BH15_01 Apr 04_-	BH15	1/04/2004	water	-	7.79	-	-	-	-	-	542	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.18***	-	-	-	0.06	2	-	-	0.003	-	-	-
BH15_01 Jul 04_-	BH15	1/07/2004	water	-	7.72	-	-	-	-	-	766	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	-	0.01	11	-	-	0.003	-	-	-
BH15_01 Oct 04_-	BH15	1/10/2004	water	-	7.78	-	-	-	-	-	484	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.11***	-	-	-	0.74	4	-	-	0.002	-	-	-
BH15_01 Jan 05_-	BH15	1/01/2005	water	-	7.86	-	-	-	-	-	416	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.36***	-	-	-	0.06	3	-	-	0.002	-	-	0.001
BH15_01 Apr 05_-	BH15	1/04/2005	water	-	7.31	-	-	-	-	-	498	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.221***	-	-	-	0.034	7	-	-	0.002	-	-	-
BH15_01 Jun 05_-	BH15	1/06/2005	water	-	**8.47**	-	-	-	-	-	388	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.33***	-	-	-	0.011	2	-	-	0.002	-	-	-
BH15_01 Oct 05_-	BH15	1/10/2005	water	-	7.29	-	-	-	-	-	470	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.813***	-	-	-	0.017	2	-	-	0.001	-	-	-
BH15_01 Feb 06_-	BH15	1/02/2006	water	-	7.45	-	-	-	-	-	478	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.55***	-	-	-	0.028	3	-	-	0.001	-	-	<0.001
BH15_01 Apr 06_-	BH15	1/04/2006	water	-	7.3	-	-	-	-	-	288	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.306***	-	-	-	0.01	16	-	-	<0.001	-	-	-
BH15_01 Jul 06_-	BH15	1/07/2006	water	-	7.4	-	-	-	-	-	834	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	-	0.947	3	-	-	0.001	-	-	-
BH15_01 Oct 06_-	BH15	1/10/2006	water	-	7.42	-	-	-	-	-	400	-	-	-	-	-	-	-	-	-	-	-	-	-	***5***	-	-	-	1.46	5	-	-	0.002	-	-	-
BH15_01 Jan 07_-	BH15	1/01/2007	water	-	7.41	-	-	-	-	-	598	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.542***	-	-	-	<0.01	5	-	-	0.004	-	-	<0.001
BH15_01 Apr 07_-	BH15	1/04/2007	water	-	7.23	-	-	-	-	-	486	-	-	-	249	99	19	3	46	77.7	84	-	8.6	8.92	***0.975***	<0.01	<0.01	-	-	8	-	-	0.005	-	-	-
BH15_16 Apr 13_-	BH15	16/04/2013	water	4.65	7.72	**910**	***1.41***	-67	20.2	7.8	700	-	420	<1	-	130	23	3.2	83	94	49	0.31	-	-	***0.035***	-	-	-	-	-	5	-	-	-	-	-
BH15_09 Jul 13_-	BH15	9/07/2013	water	3.94	7.42	**401**	***5.07***	-41	16.8	7.7	630	-	290	<1	-	135	22	5	63	65	86	-	-	-	***0.015***	-	-	-	-	-	3	-	-	-	-	-
BH15_29 Oct 13_-	BH15	29/10/2013	water	4.88	7.81	**846**	***4.98***	-78	17.8	7.5	490	-	370	<1	-	120	19	2.5	48	25	67	-	-	-	***0.037***	-	-	-	-	-	5	-	-	-	-	-
BH15_28 Jan 14_-	BH15	28/01/2014	water	4.96	7.41	**922**	***2.3***	-23	19.9	7.3	500	-	370	<1	-	130	25	3.6	54	63	48	0.36	-	-	***0.21***	0.22	<0.01	-	-	-	4	<0.005	0.003	0.006	<0.0001	<0.001
BH15_16 Apr 14_-	BH15	16/04/2014	water	2.86	7.4	**919**	***1.6***	-1	19.3	7.2	610	-	370	<1	-	150	27	3.4	44	74	46	0.35	-	-	***0.13***	-	-	-	-	-	4	-	-	-	-	-
BH15_07 Jul 14_-	BH15	7/07/2014	water	-	7.9	**548**	***4.8***	13	15.7	7.5	630	-	400	<1	-	140	28	4	63	53	63	0.32	-	-	0.009	-	-	-	-	-	4	-	-	-	-	-
BH15_07 Jul 14_-2	BH15	7/07/2014	water	-	7.9	**548**	***4.8***	13	15.7	7.3	500	-	420	<1	-	150	28	3.9	63	53	64	0.31	-	-		-	-	-	-	-	4	-	-	-	-	-
BH15_16 Oct 14_-	BH15	16/10/2014	water	4.26	7.38	**878**	***0.84***	77	18.3	7.4	470	-	380	<1	-	120	27	4.4	49	55	38	0.35	-	-	***0.66***	-	-	-	-	-	4	-	-	-	-	-
BH15_20 Jan 15_-	BH15	20/01/2015	water	4.96	*6.57*	**612**	***1.3***	59	24.9	*6.9*	450	-	420	<1	-	160	21	8.5	31	15	36	0.4	-	-		0.21	<0.01	-	-	-	14	<0.005	0.003	0.008	<0.0001	-
BH15_22 Apr 15_-	BH15	22/04/2015	water	4.53	7.26	**818**	***0.6***	-67	18.2	7.3	580	-	400	<1	-	130	26	4.2	56	63	62	0.3	-	-	***0.98***	-	-	-	-	-	7	-	-	-	-	-
BH15_22 Jul 15_-	BH15	22/07/2015	water	4.24	7.31	**749**	***2.38***	-47	15.9	7.2	450	-	330	<1	-	110	20	8.4	32	31	32	0.4	-	-	***0.029***	-	-	-	-	-	5	-	-	-	-	-
BH15_20 Oct 15_-	BH15	20/10/2015	water	4.07	7.07	**1403**	***3.31***	68	22.8	7.6	430	-	360	<1	-	160	20	12	31	27	26	0.4	-	-	***0.034***	-	-	-	-	-	21	-	-	-	-	-
BH15_20 Jan 16_-	BH15	20/01/2016	water	3.5	7.44	**739**	***2.29***	79	22.5	7.4	430	-	440	<1	-	190	25	13	120	29	20	0.4	-	-	0.009	0.79	0.01	-	-	-	24	<0.005	0.002	0.01	<0.0001	<0.001
BH15_14 Apr 16_-	BH15	14/04/2016	water	4.47	7.45	**620**	***2.26***	34	20.4	7.2	430	-	440	<5	-	180	21	10	30	16	15	0.4	-	-	0.009	-	-	-	-	-	27	-	-	-	-	-
BH15_13 Jul 16_-	BH15	13/07/2016	water	4.23	7.31	**774**	***4.35***	-67	15.1	7.5	340	-	340	<5	-	110	23	7.4	34	34	19	0.4	-	-	***0.096***	-	-	-	-	-	4	-	-	-	-	-
BH15_18 Oct 16_-	BH15	18/10/2016	water	2.95	*6.87*	**1522**	6.87	-28	17.2	*6.9*	1200	-	460	<5	-	230	41	6.6	140	130	240	0.1	-	-	***0.14***	-	-	-	-	-	42	-	-	-	-	-
BH15_25 Jan 17_-	BH15	25/01/2017	water	2.25	***6.06***	**1884**	***0.25***	14	21.4	*6.7*	1200	-	400	<5	-	220	41	8.1	160	130	320	0.2	-	-	***0.53***	0.02	<0.005	-	-	-	26	<0.01	0.003	0.008	<0.0001	<0.001
BH15_02 Jul 19_-	BH15	2/07/2019	water	4.5	7.33	**381.7**	***2.99***	-134.3	19.1	7.6	510	-	340	<5	-	110	20	7	28	67	12	0.4	-	-	***0.1***	-	-	-	-	-	3	-	-	-	-	-
BH15_24 Oct 19_-	BH15	24/10/2019	water	4.79	7.46	**774**	***4.26***	55.2	19.6	7.6	510	-	310	<5	-	120	20	7	29	65	19	0.4	-	-	***0.038***	-	-	-	-	-	4	-	-	-	-	-
BH15_14 Jan 20_-	BH15	14/01/2020	water	5.09	7.45	**742**	***2.65***	-6.5	20.2	7.5	480	-	350	<5	-	120	20	6.9	34	61	28	0.4	-	-	***0.19***	<0.005	<0.005	-	-	-	5	<0.01	0.003	0.006	<0.0001	<0.001
BH15_22 Apr 20_-	BH15	22/04/2020	water	4.7	**8.03**	**705**	***1.27***	-26.8	21.1	7.6	410	-	290	<5	-	130	15	5.8	38	49	71	0.4	-	-	***0.019***	-	-	-	-	-	11	-	-	-	-	-
BH16_01 Apr 00_-	BH16	1/04/2000	water	-	7.5	**370**	-	-	-	-	250	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	0.71	3	-	-	0.003	-	-	0.003
BH16_01 Jul 00_-	BH16	1/07/2000	water	-	7.3	**520**	-	-	-	-	290	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	1.2	0.16	2	-	-	0.002	-	-	0.002
BH16_01 Oct 00_-	BH16	1/10/2000	water	-	7.2	**560**	-	-	-	-	340	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.2	0.12	3	-	-	0.002	-	-	0.002
BH16_01 Jan 01_-	BH16	1/01/2001	water	-	7.4	**490**	-	-	-	-	280	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.4	0.06	5	-	-	0.002	-	-	0.005
BH16_01 Apr 01_-	BH16	1/04/2001	water	-	7.2	**400**	-	-	-	-	250	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.4	0.18	16	-	-	0.003	-	-	0.001
BH16_01 Jun 01_-	BH16	1/06/2001	water	-	7.2	**320**	-	-	-	-	180	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.6	0.1	4	-	-	0.004	-	-	0.001
BH16_01 Oct 01_-	BH16	1/10/2001	water	-	*6.7*	**320**	-	-	-	-	150	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.2	0.03	6	-	-	0.011	-	-	0.001
BH16_01 Jan 02_-	BH16	1/01/2002	water	-	*6.9*	**830**	-	-	-	-	470	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	0.6	0.12	6	-	-	0.018	-	-	0.001
BH16_01 Apr 02_-	BH16	1/04/2002	water	-	7.1	**330**	-	-	-	-	230	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.3	0.01	7	-	-	0.025	-	-	<0.001
BH16_01 Jul 02_-	BH16	1/07/2002	water	-	7.2	**340**	-	-	-	-	190	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.2	<0.01	2	-	-	0.021	-	-	<0.001

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]								0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
BH16_01 Oct 02_-	BH16	1/10/2002	water	-	7.4	340	-	-	-	-	190	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.1	0.01	26	-	-	0.017	-	-	0.007
BH16_01 Jan 03_-	BH16	1/01/2003	water	-	7.94	310	-	-	-	-	210	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.05***	-	-	0.2	0.08	3	-	-	0.02	-	-	<0.001
BH16_01 Apr 03_-	BH16	1/04/2003	water	-	7.41	414	-	-	-	-	228	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	0.01	11	-	-	0.03	-	-	0.001
BH16_01 Jun 03_-	BH16	1/06/2003	water	-	7.37	202	-	-	-	-	126	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.2	0.03	7	-	-	0.009	-	-	0.001
BH16_01 Oct 03_-	BH16	1/10/2003	water	-	7.27	232	-	-	-	-	182	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.2	0.03	10	-	-	0.009	-	-	0.001
BH16_01 Jan 04_-	BH16	1/01/2004	water	-	7.95	322	-	-	-	-	306	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	0.3	0.03	6	-	-	0.009	-	-	0.005
BH16_01 Apr 04_-	BH16	1/04/2004	water	-	7.49	-	-	-	-	-	156	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.07***	-	-	-	0.02	1	-	-	0.006	-	-	-
BH16_01 Jul 04_-	BH16	1/07/2004	water	-	7.25	-	-	-	-	-	170	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	-	0.01	6	-	-	0.006	-	-	-
BH16_01 Oct 04_-	BH16	1/10/2004	water	-	7.21	-	-	-	-	-	103	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.07***	-	-	-	0.01	5	-	-	0.008	-	-	-
BH16_01 Jan 05_-	BH16	1/01/2005	water	-	7.44	-	-	-	-	-	130	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.75***	-	-	-	0.017	2	-	-	0.01	-	-	0.001
BH16_01 Apr 05_-	BH16	1/04/2005	water	-	7.2	-	-	-	-	-	102	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.063***	-	-	-	0.01	1	-	-	0.012	-	-	-
BH16_01 Jul 05_-	BH16	1/07/2005	water	-	8.1	-	-	-	-	-	114	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.026***	-	-	-	0.019	3	-	-	0.009	-	-	-
BH16_01 Oct 05_-	BH16	1/10/2005	water	-	6.9	-	-	-	-	-	131	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.101***	-	-	-	0.01	1	-	-	0.005	-	-	-
BH16_01 Jan 06_-	BH16	1/01/2006	water	-	6.95	-	-	-	-	-	130	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.012**	-	-	-	0.017	3	-	-	0.008	-	-	<0.001
BH16_01 Apr 06_-	BH16	1/04/2006	water	-	7.02	-	-	-	-	-	94	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.012**	-	-	-	0.047	3	-	-	0.005	-	-	-
BH16_01 Jul 06_-	BH16	1/07/2006	water	-	7.61	-	-	-	-	-	170	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.148	2	-	-	0.001	-	-	-
BH16_01 Oct 06_-	BH16	1/10/2006	water	-	7.6	-	-	-	-	-	900	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	-	0.185	5	-	-	0.002	-	-	-
BH16_01 Jan 07_-	BH16	1/01/2007	water	-	7.51	-	-	-	-	-	232	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.323	3	-	-	0.002	-	-	<0.001
BH16_01 Apr 07_-	BH16	1/04/2007	water	-	7.25	-	-	-	-	-	232	-	-	-	106	39	5	2	19	31.4	16	-	3.25	3.34	***0.017***	0.465	0.036	-	-	7	-	-	0.002	-	-	-
BH16_16 Apr 13_-	BH16	16/04/2013	water	2.05	7.2	231	*1.08*	-1	13.3	*7*	150	-	110	<1	-	28	6.4	1.4	13	21	5	<0.1	-	-		-	-	-	-	-	4	-	-	-	-	-	-
BH16_22 Jul 13_-	BH16	22/07/2013	water	1.08	7.16	334	*1.79*	-9	15	*6.9*	110	-	70	<1	-	23	4.3	1.4	12	15	4	-	-	-	***0.016***	-	-	-	-	-	5	-	-	-	-	-	-
BH16_29 Oct 13_-	BH16	29/10/2013	water	1.02	8.47	245	*5.08*	55	18.9	7.3	150	-	92	<1	-	34	5	1.7	11	15	9	-	-	-	0.005	-	-	-	-	-	5	-	-	-	-	-	-
BH16_28 Jan 14_-	BH16	28/01/2014	water	1.2	7.67	257	*2.29*	-73	19.6	7.1	140	-	100	<1	-	36	4.8	2	12	18	7	<0.1	-	-	0.008	0.036	0.006	-	-	-	2	<0.005	0.003	0.005	<0.0001	<0.001
BH16_16 Apr 14_-	BH16	16/04/2014	water	1.18	7.14	135	*2.67*	-8	22.2	*6.8*	140	-	80	<1	-	24	4.6	1.5	12	15	5	<0.1	-	-	***0.021***	-	-	-	-	-	2	-	-	-	-	-	-
BH16_09 Jul 14_-	BH16	9/07/2014	water	-	8.05	142.3	*3.85*	-133	19.7	7.1	140	-	76	<1	-	26	5.1	1.8	12	14	5	<0.1	-	-		-	-	-	-	-	5	-	-	-	-	-	-
BH16_16 Oct 14_-	BH16	16/10/2014	water	0.6	7.97	303	*1.8*	44	16.8	*6.9*	130	-	74	<1	-	33	5.5	2.4	16	32	5	<0.1	-	-		-	-	-	-	-	3	-	-	-	-	-	-
BH16_20 Jan 15_-	BH16	20/01/2015	water	1.2	*6.85*	334	*0.93*	-5	20.4	7.3	210	-	110	<1	-	41	6.8	2.3	19	37	7	<0.1	-	-		0.062	<0.01	-	-	-	4	<0.005	0.002	0.008	<0.0001	-	-
BH16_22 Apr 15_-	BH16	22/04/2015	water	0.56	7.26	218	*3.49*	-18	17.7	*6.7*	210	-	100	<1	-	18	5.2	1.9	17	31	4	<0.1	-	-	0.007	-	-	-	-	-	4	-	-	-	-	-	-
BH16_22 Jul 15_-	BH16	22/07/2015	water	0.92	*6.82*	291	*5.93*	-61	14.5	***6.4***	170	-	47	<1	-	17	5.1	1.7	29	52	6	<0.1	-	-		-	-	-	-	-	9	-	-	-	-	-	-
BH16_20 Oct 15_-	BH16	20/10/2015	water	1.22	*6.75*	2130	*3.9*	29	19.1	*6.7*	230	-	75	<1	-	23	6	1.5	44	65	13	<0.1	-	-	***0.015***	-	-	-	-	-	7	-	-	-	-	-	-
BH16_20 Jan 16_-	BH16	20/01/2016	water	0.87	7.03	312	*3.21*	10	23.9	7.2	160	-	57	<1	-	15	4.3	2.3	36	44	8	<0.1	-	-	**0.013**	0.03	<0.01	-	-	-	8	<0.005	0.002	0.006	<0.0001	<0.001	-
BH16_14 Apr 16_-	BH16	14/04/2016	water	0.87	7.96	436	*2.12*	-5	20	***6.4***	230	-	89	<5	-	36	7.4	2.4	40	42	6	0.1	-	-		-	-	-	-	-	7	-	-	-	-	-	-
BH16_13 Jul 16_-	BH16	13/07/2016	water	0.43	7.77	249	*4.29*	-6	13.6	*6.7*	250	-	45	<5	-	18	4.7	2.6	28	40	13	<0.1	-	-		-	-	-	-	-	10	-	-	-	-	-	-
BH16_18 Oct 16_-	BH16	18/10/2016	water	0.92	7.82	256	*3.49*	2	19.3	*6.9*	210	-	60	<5	-	24	4.9	2.2	47	62	10	<0.1	-	-		-	-	-	-	-	5	-	-	-	-	-	-
BH16_25 Jan 17_-	BH16	25/01/2017	water	1.19	***6.27***	434	*0.28*	7	19	***6.5***	250	-	130	<5	-	40	4.6	2	55	57	12	0.1	-	-	<0.005	0.49	0.1	-	-	-	3	<0.01	0.002	0.008	<0.0001	<0.001	-
BH16_02 Jul 19_-	BH16	2/07/2019	water	1.05	7.12	378.1	*2.7*	-71.9	17	*6.6*	240	-	59	<5	-	25	6.6	2.9	47	84	16	<0.1	-	-	***0.03***	-	-	-	-	-	7	-	-	-	-	-	-
BH16_24 Oct 19_-	BH16	24/10/2019	water	1.17	*7*	467	*4.23*	-9.3	17.8	*6.9*	320	-	73	<5	-	30	6.1	2.6	47	89	14	<0.1	-	-	***0.026***	-	-	-	-	-	9	-	-	-	-	-	-
BH16_14 Jan 20_-	BH16	14/01/2020	water	1.41	***6.23***	667	*2.41*	-51.4	19.4	***6***	430	-	130	<5	-	63	6.4	3	69	120	21	0.1	-	-	***0.038***	0.14	0.086	-	-	-	6	0.01	0.004	0.023	<0.0001	<0.001	-
BH16_22 Apr 20_-	BH16	22/04/2020	water	1.05	7.7	462.5	*3.14*	-73.3	19.2	7.2	260	-	110	<5	-	43	5.2	2.7	45	77	18	0.1	-	-	0.009	-	-	-	-	-	4	-	-	-	-	-	-
BH17_01 Jul 00_-	BH17	1/07/2000	water	-	*7*	890	-	-	-	-	530	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	1.4	2.44	5	-	-	0.001	-	-	0.004
BH17_01 Oct 00_-	BH17	1/10/2000	water	-	7.1	900	-	-	-	-	550	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.5	1.25	4	-	-	0.001	-	-	0.002
BH17_01 Jan 01_-	BH17	1/01/2001	water	-	7.1	790	-	-	-	-	480	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.5	2.11	7	-	-	0.001	-	-	0.007
BH17_01 Apr 01_-	BH17	1/04/2001	water	-	7.1	720	-	-	-	-	470	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.7	2.26	7	-	-	0.001	-	-	0.002
BH17_01 Jun 01_-	BH17	1/06/2001	water	-	*6.9*	830	-	-	-	-	520	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	0.3	2.24	6	-	-	0.003	-	-	0.002
BH17_01 Oct 01_-	BH17	1/10/2001	water	-	*6.9*	930	-	-	-	-	540	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.5	4.51	5	-	-	0.001	-	-	0.001
BH17_01 Jan 02_-	BH17	1/01/2002	water	-	*6.8*	1100	-	-	-	-	650	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.17***	-	-	0.5	9.25	7	-	-	0.001	-	-	0.001
BH17_01 Apr 02_-	BH17	1/04/2002	water	-	7.4	880	-	-	-	-	560	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.4	5.27	7	-	-	0.001	-	-	0.001
BH17_01 Jul 02_-	BH17	1/07/2002	water	-	7.4	830	-	-	-	-	520	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.3	2.49	5	-	-	0.001	-	-	0.001
BH17_01 Oct 02_-	BH17	1/10/2002	water	-	7.4	870	-	-	-	-	520	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.2	5	5	-	-	<0.001	-	-	0.03
BH17_01 Jan 03_-	BH17	1/01/2003	water	-	7.65	770	-	-	-	-	560	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	0.2	4.34	4	-	-	0.001	-	-	0.004
BH17_01 Apr 03_-	BH17	1/04/2003	water	-	7.79	1000	-	-	-	-	694	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.5	3.12	7	-	-	0.001	-	-	0.001
BH17_01 Jul 03_-	BH17	1/07/2003	water	-	7.44	1120	-	-	-	-	750	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.6	3.7	10	-	-	0.003	-	-	0.001
BH17_01 Oct 03_-	BH17	1/10/2003	water	-	7.5	844	-	-	-	-	564	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.8	4.71	9	-	-	0.001	-	-	0.001
BH17_01 Jan 04_-	BH17	1/01/2004	water	-	8.15	858	-	-	-	-	636	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	0.8	6.7	9	-	-	0.001	-	-	0.005
BH17_01 Apr 04_-	BH17	1/04/2004	water	-	7.57	-	-	-	-	-	402	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.06***	-	-	-	6	4	-	-	0.001	-	-	-
BH17_01 Jul 04_-	BH17	1/07/2004	water	-	7.41	-	-	-	-	-	452	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	-	0.24	12	-	-	0.001	-	-	-
BH17_01 Oct 04_-	BH17	1/10/2004	water	-	7.48	-	-	-	-	-	432	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.08***	-	-	-	3.97	8	-	-	0.001	-	-	-
BH17_01 Jan 05_-	BH17	1/01/2005	water	-	7.6	-	-	-	-	-	546	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.077***	-	-	-	5.17	4	-	-	0.01	-	-	0.01
BH17_01 Apr 05_-	BH17	1/04/2005	water	-	*6.96*	-	-	-	-	-	578	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.055***	-	-	-	2.97	6	-	-	0.001	-	-	-
BH17_01 Jul 05_-	BH17	1/07/2005	water	-	8.4	-	-	-	-	-	454	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.525***	-	-	-	7.42	7	-	-	<0.001	-	-	-
BH17_01 Oct 05_-	BH17	1/10/2005	water	-	7.05	-	-	-	-	-	472	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.218***	-	-	-	6.02	5	-	-	<0.001	-	-	-
BH17_01 Jan 06_-	BH17	1/01/2006	water	-	7.26	-	-	-	-	-	588	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.557***	-	-	-	2.92	7	-	-	<0.001	-	-	0.001

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]							0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																														
BH17_01 Apr 06_-	BH17	1/04/2006	water	-	*6.99*	-	-	-	-	-	670	-	-	-	-	-	-	-	-	-	-	-	***0.13***	-	-	-	0.886	6	-	-	<0.001	-	-	-
BH17_01 Jul 06_-	BH17	1/07/2006	water	-	7.17	-	-	-	-	-	572	-	-	-	-	-	-	-	-	-	-	-	***0.39***	-	-	-	2.32	8	-	-	<0.001	-	-	-
BH17_01 Oct 06_-	BH17	1/10/2006	water	-	7.18	-	-	-	-	-	542	-	-	-	-	-	-	-	-	-	-	-	***0.241***	-	-	-	1.91	8	-	-	<0.001	-	-	-
BH17_01 Jan 07_-	BH17	1/01/2007	water	-	7.09	-	-	-	-	-	512	-	-	-	-	-	-	-	-	-	-	-	***0.129***	-	-	-	2.55	6	-	-	<0.001	-	-	<0.001
BH17_01 Apr 07_-	BH17	1/04/2007	water	-	*6.98*	-	-	-	-	-	596	-	-	-	301	128	15	16	38	60.7	111	-	9.67	10	***1.16***	1.1	0.023	-	-	10	-	-	<0.001	-	-	-
BH17_17 Apr 13_-	BH17	17/04/2013	water	5.31	7.03	**656**	***0.22***	4	15.6	7.9	510	-	240	<1	-	96	7.9	6	42	44	95	0.13	-	-	***0.036***	-	-	-	-	-	5	-	-	-	-	-
BH17_22 Jul 13_-	BH17	22/07/2013	water	5.3	7.01	**553**	***0.78***	27	15	7.2	470	-	300	<1	-	160	11	4.9	42	39	85	-	-	-		-	-	-	-	-	4	-	-	-	-	-
BH17_14 Apr 14_-	BH17	14/04/2014	water	5.87	7.15	**868**	***2.44***	82	19.3	7.5	560	-	310	<1	-	170	12	6.2	54	51	75	0.1	-	-		-	-	-	-	-	5	-	-	-	-	-
BH17_07 Jul 14_-	BH17	7/07/2014	water	5.19	***8.66***	**866**	***3.52***	109	16.5	7.2	530	-	270	<1	-	140	12	5	55	52	120	<0.1	-	-		-	-	-	-	-	5	-	-	-	-	-
BH17_22 Apr 15_-	BH17	22/04/2015	water	7.17	7.09	**918**	***0.93***	-25	17.9	7.3	680	-	400	<1	-	160	14	14	66	56	110	0.13	-	-		-	-	-	-	-	7	-	-	-	-	-
BH17_21 Jul 15_-	BH17	21/07/2015	water	5.48	*6.98*	**781**	***2.78***	-4	17.6	*7*	610	-	300	<1	-	120	12	10	57	49	100	0.1	-	-		-	-	-	-	-	5	-	-	-	-	-
BH17_20 Oct 15_-	BH17	20/10/2015	water	5.44	***6.17***	**1187**	***3.4***	24	24.7	7.4	740	-	430	<1	-	160	14	13	75	70	120	0.1	-	-	***0.044***	-	-	-	-	-	6	-	-	-	-	-
BH17_21 Jan 16_-	BH17	21/01/2016	water	5.21	7.21	**929**	***0.95***	16	23	7.3	800	-	490	<1	-	210	17	19	540	62	120	0.1	-	-	***0.021***	0.03	<0.01	-	-	-	10	<0.005	<0.001	0.088	<0.0001	<0.001
BH17_14 Apr 16_-	BH17	14/04/2016	water	6.41	**8.21**	**575**	***2.56***	103	19	7.1	700	-	420	<5	-	150	12	11	95	61	85	0.1	-	-	***0.033***	-	-	-	-	-	8	-	-	-	-	-
BH17_21 Jul 16_-	BH17	21/07/2016	water	5.22	7.73	**924**	***2.97***	144	17.2	*7*	670	-	370	<5	-	140	13	12	83	51	99	0.1	-	-	***0.019***	-	-	-	-	-	7	-	-	-	-	-
BH17_02 Jul 19_-	BH17	2/07/2019	water	5.4	7.08	**677**	***3.49***	-33.6	18.5	7.3	820	-	420	<5	-	190	19	21	43	54	180	<0.1	-	-	***0.54***	-	-	-	-	-	8	-	-	-	-	-
BH17_24 Oct 19_-	BH17	24/10/2019	water	5.45	7.08	**1220**	***2.13***	72.3	19.1	*7*	870	-	520	<5	-	230	22	19	40	59	120	0.1	-	-	***0.9***	-	-	-	-	-	9	-	-	-	-	-
BH17_15 Jan 20_-	BH17	15/01/2020	water	5.47	7.06	**1231**	***1.13***	-2.3	19.7	*7*	810	-	600	<5	-	220	20	20	56	83	66	0.1	-	-	***0.95***	0.03	<0.005	-	-	-	11	0.01	0.004	0.1	<0.0001	<0.001
BH17_23 Apr 20_-	BH17	23/04/2020	water	5.36	7.06	**1201**	***0.7***	-12.1	20.1	*7*	840	-	550	<5	-	190	17	15	60	80	63	0.1	-	-	***0.52***	-	-	-	-	-	11	-	-	-	-	-
BH18_01 Jun 01_-	BH18	1/06/2001	water	-	*6.9*	**830**	-	-	-	-	570	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	0.53	1	-	-	0.003	-	-	0.002
BH18_01 Oct 01_-	BH18	1/10/2001	water	-	*6.8*	**760**	-	-	-	-	410	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.5	0.96	3	-	-	0.002	-	-	0.001
BH18_01 Jan 02_-	BH18	1/01/2002	water	-	*6.7*	**820**	-	-	-	-	480	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.7	1.22	4	-	-	0.001	-	-	0.001
BH18_01 Apr 02_-	BH18	1/04/2002	water	-	7.2	**850**	-	-	-	-	510	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.2	1.1	3	-	-	0.002	-	-	0.001
BH18_01 Jun 02_-	BH18	1/06/2002	water	-	7.3	**750**	-	-	-	-	440	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.1	1.42	1	-	-	0.002	-	-	0.001
BH18_01 Oct 02_-	BH18	1/10/2002	water	-	7.4	**710**	-	-	-	-	410	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	<0.1	1.86	1	-	-	0.002	-	-	0.026
BH18_01 Jan 03_-	BH18	1/01/2003	water	-	7.67	**590**	-	-	-	-	420	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	<0.1	1.91	1	-	-	0.002	-	-	0.002
BH18_01 Apr 03_-	BH18	1/04/2003	water	-	7.39	**687**	-	-	-	-	452	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.3	2.14	12	-	-	0.002	-	-	<0.001
BH18_01 Jul 03_-	BH18	1/07/2003	water	-	7.43	**1470**	-	-	-	-	1010	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.11***	-	-	3.1	15.9	21	-	-	0.004	-	-	<0.005
BH18_01 Oct 03_-	BH18	1/10/2003	water	-	7.37	**947**	-	-	-	-	606	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	1.1	4.58	9	-	-	0.003	-	-	<0.001
BH18_01 Jan 04_-	BH18	1/01/2004	water	-	7.91	**895**	-	-	-	-	642	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.3	2.17	7	-	-	0.002	-	-	<0.005
BH18_01 Apr 04_-	BH18	1/04/2004	water	-	7.34	-	-	-	-	-	516	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.02**	-	-	-	1.01	6	-	-	0.002	-	-	-
BH18_01 Jul 04_-	BH18	1/07/2004	water	-	7.41	-	-	-	-	-	450	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	2.9	<1	-	-	0.002	-	-	-
BH18_01 Oct 04_-	BH18	1/10/2004	water	-	7.38	-	-	-	-	-	744	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.08***	-	-	-	5.92	6	-	-	0.003	-	-	-
BH18_01 Jan 05_-	BH18	1/01/2005	water	-	7.48	-	-	-	-	-	654	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.43***	-	-	-	3.35	3	-	-	0.002	-	-	<0.001
BH18_01 Apr 05_-	BH18	1/04/2005	water	-	*6.82*	-	-	-	-	-	634	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.053***	-	-	-	2.52	<1	-	-	0.002	-	-	-
BH18_01 Jul 05_-	BH18	1/07/2005	water	-	7.96	-	-	-	-	-	534	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.033***	-	-	-	3.78	<1	-	-	0.002	-	-	-
BH18_01 Oct 05_-	BH18	1/10/2005	water	-	*6.97*	-	-	-	-	-	540	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.062***	-	-	-	4.11	<1	-	-	0.002	-	-	-
BH18_01 Jan 06_-	BH18	1/01/2006	water	-	7.16	-	-	-	-	-	606	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.021***	-	-	-	4.38	1	-	-	0.002	-	-	0.002
BH18_01 Apr 06_-	BH18	1/04/2006	water	-	*6.9*	-	-	-	-	-	618	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	3.93	2	-	-	0.002	-	-	-
BH18_01 Jul 06_-	BH18	1/07/2006	water	-	7.02	-	-	-	-	-	602	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	4	2	-	-	0.002	-	-	-
BH18_01 Oct 06_-	BH18	1/10/2006	water	-	*6.88*	-	-	-	-	-	676	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	8.51	4	-	-	0.002	-	-	-
BH18_01 Jan 07_-	BH18	1/01/2007	water	-	*6.94*	-	-	-	-	-	664	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	6.85	1	-	-	0.002	-	-	<0.001
BH18_01 Apr 07_-	BH18	1/04/2007	water	-	*6.78*	-	-	-	-	-	730	-	-	-	458	166	19	2	44	106	37	-	11.8	12.9	***0.109***	2.99	0.021	-	-	6	-	-	0.002	-	-	-
BH18_16 Apr 13_-	BH18	16/04/2013	water	27.02	7.14	**4500**	***0.41***	-6	18.4	7.5	910	-	530	<1	-	190	21	2.7	66	97	72	<0.1	-	-	***0.031***	-	-	-	-	-	3	-	-	-	-	-
BH18_30 Oct 13_-	BH18	30/10/2013	water	5.36	7.96	**753**	***2.31***	-1	16.9	7.7	630	-	290	<1	-	140	12	5.7	47	40	120	-	-	-	***0.011***	-	-	-	-	-	5	-	-	-	-	-
BH18_28 Jan 14_-	BH18	28/01/2014	water	5.5	7.17	**907**	***2.01***	51	18	7.4	490	-	300	<1	-	170	13	6	47	53	100	<0.1	-	-	0.008	2.5	0.027	-	-	-	4	<0.005	<0.001	0.042	<0.0001	<0.001
BH18_16 Apr 14_-	BH18	16/04/2014	water	26.99	*6.93*	**52.5**	***2.25***	50	26.1	*6.8*	830	-	540	<1	-	200	31	3.1	87	100	72	0.11	-	-	0.006	-	-	-	-	-	2	-	-	-	-	-
BH18_29 Oct 14_-	BH18	29/10/2014	water	29.8	**8.15**	**831**	***3.79***	72	19.2	7.1	810	-	530	<1	-	220	33	9.2	52	51	42	0.11	-	-		-	-	-	-	-	5	-	-	-	-	-
BH18_21 Jan 15_-	BH18	21/01/2015	water	27.99	*6.87*	**1175**	***0.97***	64	21.8	*7*	880	-	500	<1	-	220	31	5	77	94	80	0.11	-	-	0.008	5.6	<0.01	-	-	-	3	<0.005	0.003	0.027	<0.0001	-
BH18_23 Apr 15_-	BH18	23/04/2015	water	27.96	*6.86*	**1126**	***1.76***	81	21.9	*7*	720	-	550	<1	-	190	33	3	96	100	74	0.14	-	-		-	-	-	-	-	4	-	-	-	-	-
BH18_21 Jul 15_-	BH18	21/07/2015	water	26.75	*6.75*	**819**	***5.24***	69	17.6	*7*	820	-	500	<1	-	210	27	8	44	67	23	0.1	-	-		-	-	-	-	-	5	-	-	-	-	-
BH18_21 Oct 15_-	BH18	21/10/2015	water	26.93	7.02	**495**	***5.75***	35	22.4	7.1	920	-	460	<1	-	190	27	4.7	84	120	97	0.1	-	-		-	-	-	-	-	4	-	-	-	-	-
BH18_21 Jan 16_-	BH18	21/01/2016	water	27.12	7.09	**1115**	***7.25***	13	25.5	7.3	830	-	560	<1	-	200	33	4.2	93	91	55	0.1	-	-	0.007	1.7	<0.01	-	-	-	5	<0.005	0.007	0.022	<0.0001	<0.001
BH18_19 Apr 16_-	BH18	19/04/2016	water	27.87	*6.94*	**1111**	***3.02***	59	21.9	7.2	880	-	510	<5	-	190	30	3.6	83	99	50	0.1	-	-		-	-	-	-	-	4	-	-	-	-	-
BH18_18 Oct 16_-	BH18	18/10/2016	water	5.37	7.6	**1005**	***2.75***	19	19.2	7.5	700	-	360	<5	-	180	18	14	58	45	150	0.1	-	-	***0.94***	-	-	-	-	-	6	-	-	-	-	-
BH18_19 Jan 17_-	BH18	19/01/2017	water	5.47	7.07	**934**	***2.04***	61	19.5	7.4	650	-	270	<5	-	140	15	12	49	55	190	0.1	-	-	***0.78***	0.064	<0.005	-	-	-	9	<0.01	<0.001	0.067	<0.0001	<0.001
BH18_03 Jul 19_-	BH18	3/07/2019	water	27.11	7.02	**1280**	***2.37***	101.4	21.6	7.2	800	-	550	<5	-	190	32	6.4	58	90	60	0.1	-	-	***1.9***	-	-	-	-	-	3	-	-	-	-	-
BH18_25 Oct 19_-	BH18	25/10/2019	water	27.13	7.18	**1300**	***4.26***	61.7	23.2	7.5	910	-	510	<5	-	200	30	7.8	62	83	52	0.1	-	-	***1.4***	-	-	-	-	-	3	-	-	-	-	-
BH18_13 Jan 20_-	BH18	13/01/2020	water	27.28	7.04	**1299**	***1.88***	-154.8	23.1	*6.9*	870	-	500	<5	-	180	29	6.8	65	88	58	0.1	-	-	***1.9***	17	0.019	-	-	-	4	<0.01	0.002	0.031	<0.0001	<0.001
BH18_23 Apr 20_-	BH18	23/04/2020	water	26.97	7.09	**1310**	***1.62***	97.4	22.5	7.1	880	-	530	<5	-	190	30	6.2	56	83	67	0.1	-	-	***0.3***	-	-	-	-	-	3	-	-	-	-	-
BH19_01 Jul 06_-	BH19	1/07/2006	water	-	*7*	-	-	-	-	-	960	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.608***	-	-	-	<0.01	16	-	-	0.066	-	-	-
BH19_01 Oct 06_-	BH19	1/10/2006	water	-	*6.87*	-	-	-	-	-	1200	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.556***	-	-	-	<0.01	18	-	-	0.07	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]								0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
BH19 _01 Jan 07_-	BH19	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_01 Jan 07_-	BH19	1/01/2007	water	-	*7*	-	-	-	-	-	1110	-	-	-	-	-	-	-	-	-	-	-	***1.92***	-	-	-	<0.01	12	-	-	**0.047**	-	-	<0.001
BH19_01 Apr 07_-	BH19	1/04/2007	water	-	*6.84*	-	-	-	-	-	1100	-	-	-	448	138	28	14	240	460	7	-	20	22.1	***3.94***	<0.01	0.015	-	-	17	-	-	**0.051**	-	-	-
BH19_16 Apr 13_-	BH19	16/04/2013	water	2.75	7.54	**836**	***1.1***	-154	25	7.5	630	-	330	<1	-	130	14	9.9	61	70	89	0.14	-	-	***1.7***	-	-	-	-	-	14	-	-	-	-	-
BH19_09 Jul 13_-	BH19	9/07/2013	water	26.71	*6.86*	**755**	***4.4***	135	20.1	7.5	730	-	510	<1	-	200	30	9	42	52	31	-	-	-		-	-	-	-	-	4	-	-	-	-	-
BH19_29 Oct 13_-	BH19	29/10/2013	water	26.85	**8.42**	**1401**	***4.18***	37	21.1	7.2	990	-	540	<1	-	260	30	4.5	74	82	86	-	-	-	**0.01**	-	-	-	-	-	5	-	-	-	-	-
BH19_28 Jan 14_-	BH19	28/01/2014	water	27.02	7.02	**1405**	***5.49***	55	22.8	*7*	870	-	530	<1	-	210	28	3.4	79	110	82	0.11	-	-	0.006	0.98	0.018	-	-	-	2	<0.005	0.004	0.023	<0.0001	<0.001
BH19_16 Apr 14_-	BH19	16/04/2014	water	3.1	7.22	**914**	***1.26***	-73	19.9	*7*	670	-	390	<1	-	150	15	10	71	71	65	0.14	-	-	***1.4***	-	-	-	-	-	12	-	-	-	-	-
BH19_07 Jul 14_-	BH19	7/07/2014	water	-	7.91	**397**	***2.01***	370	13.7	7.2	510	-	280	<1	-	120	12	10	45	34	67	0.14	-	-	***0.71***	-	-	-	-	-	9	-	-	-	-	-
BH19_29 Jul 14_-	BH19	29/07/2014	water	2.87	7.57	**867**	***2.78***	115	18.5	7.3	540	-	330	<1	-	210	24	14	47	38	110	0.18	-	-	***0.98***	-	-	-	-	-	200	-	-	-	-	-
BH19_16 Oct 14_-	BH19	16/10/2014	water	3.18	*6.97*	**884**	***1.41***	59	17.6	7.1	660	-	310	<1	-	170	19	5.8	47	-	-	<0.1	-	-	0.009	-	-	-	-	-	30	-	-	-	-	-
BH19_20 Jan 15_-	BH19	20/01/2015	water	3.25	***6.49***	**919**	***0.03***	87	19.6	7.1	800	-	300	<1	-	170	18	6.1	52	47	200	<0.1	-	-	0.005	0.009	<0.01	-	-	-	19	0.09	0.001	0.012	<0.0001	-
BH19_22 Apr 15_-	BH19	22/04/2015	water	2.92	*6.87*	**1222**	***2.72***	68	18.9	*6.8*	870	-	430	<1	-	190	22	10	65	48	160	<0.1	-	-	***0.059***	-	-	-	-	-	30	-	-	-	-	-
BH19_21 Jul 15_-	BH19	21/07/2015	water	3.28	*6.67*	**1199**	***2.71***	29	16.8	*6.8*	1100	-	390	<1	-	260	26	7.5	63	78	330	<0.1	-	-	0.007	-	-	-	-	-	35	-	-	-	-	-
BH19_20 Oct 15_-	BH19	20/10/2015	water	3.57	*6.59*	**337**	***1.85***	84	20.6	7.2	1600	-	450	<1	-	320	35	8.1	68	86	480	<0.1	-	-	***0.048***	-	-	-	-	-	65	-	-	-	-	-
BH19_20 Jan 16_-	BH19	20/01/2016	water	3.34	*6.82*	**1546**	***2.63***	60	24.7	*6.9*	1300	-	400	<1	-	300	34	9.1	68	63	370	<0.1	-	-	***0.05***	4.5	0.31	-	-	-	76	0.05	0.002	0.026	<0.0001	<0.001
BH19_14 Apr 16_-	BH19	14/04/2016	water	3.42	7.85	**1415**	***1.61***	21	22	*6.9*	1100	-	470	<5	-	290	28	9.4	67	49	270	<0.1	-	-		-	-	-	-	-	160	-	-	-	-	-
BH19_13 Jul 16_-	BH19	13/07/2016	water	26.74	*6.79*	**1234**	***3.8***	91	16.6	7.6	420	-	240	<5	-	97	9.7	1.1	41	74	21	0.2	-	-	-	-	-	-	-	-	3	-	-	-	-	-
BH19_18 Oct 16_-	BH19	18/10/2016	water	26.87	*6.97*	**780**	***2.29***	-22	17	*7*	820	-	570	<5	-	210	31	7.2	70	100	25	0.1	-	-	***0.016***	-	-	-	-	-	3	-	-	-	-	-
BH19_19 Jan 17_-	BH19	19/01/2017	water	27.83	7.15	**1270**	***2.09***	51	22	7.2	890	-	420	<5	-	180	28	5.1	100	130	210	0.1	-	-	***0.29***	6.6	<0.005	-	-	-	5	<0.01	**0.015**	0.029	**0.0002**	<0.001
BH19A_02 Jul 19_-	BH19A	2/07/2019	water	3.44	7.46	**253.2**	***3.81***	2.7	16.8	*7*	360	-	100	<5	-	94	8.6	6.6	21	32	140	<0.1	-	-	***0.018***	-	-	-	-	-	51	-	-	-	-	-
BH19A_24 Oct 19_-	BH19A	24/10/2019	water	3.57	7.38	**655**	***3.64***	54.3	18.7	*7*	490	-	96	<5	-	120	10	6.7	24	39	160	<0.1	-	-	<0.005	-	-	-	-	-	37	-	-	-	-	-
BH19A_15 Jan 20_-	BH19A	15/01/2020	water	3.88	***5.88***	**762**	***0.63***	-19.6	21.5	***5.8***	590	-	160	<5	-	120	11	6.1	27	170	40	<0.1	-	-	***0.099***	0.084	<0.005	-	-	-	16	**0.14**	0.002	0.016	<0.0001	**0.001**
BH19A_22 Apr 20_-	BH19A	22/04/2020	water	3.5	7.86	**508**	***1.96***	-60.3	22.5	7.1	330	-	140	<5	-	92	7.1	5.6	25	27	92	<0.1	-	-	***0.11***	-	-	-	-	-	57	-	-	-	-	-
BH19B_18 Nov 19_-	BH19B	18/11/2019	water	4.28	*6.51*	**1115**	***0.16***	70.9	21.3	*7*	740	**740**	410	<5	-	170	29	9.2	34	57	140	<0.1	-	-	***0.069***	<0.005	<0.005	-	-	-	34	**0.15**	**0.024**	0.01	<0.0001	<0.001
BH19B_15 Jan 20_-	BH19B	15/01/2020	water	4.4	*6.78*	**975**	***0.05***	-28	20.6	*6.8*	700	-	440	<5	-	160	21	9.2	40	68	63	<0.1	-	-	***1.1***	<0.005	<0.005	-	-	-	26	**0.2**	**0.089**	0.035	<0.0001	**0.001**
BH19B_22 Apr 20_-	BH19B	22/04/2020	water	4.19	7.21	**976**	***2.24***	-13.5	21.9	7.2	660	-	410	<5	-	180	24	7	38	44	130	<0.1	-	-	***0.1***	-	-	-	-	-	73	-	-	-	-	-
BH20_01 Jul 06_-	BH20	1/07/2006	water	-	7.11	-	-	-	-	-	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.65***	-	-	-	<0.01	10	-	**0.019**	-	-	-
BH20_01 Oct 06_-	BH20	1/10/2006	water	-	*6.94*	-	-	-	-	-	1900	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.515***	-	-	-	0.013	12	-	**0.02**	-	-	-
BH20 _01 Jan 07_-	BH20	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_01 Jan 07_-	BH20	1/01/2007	water	-	*6.96*	-	-	-	-	-	800	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.53***	-	-	-	<0.01	9	-	**0.019**	-	-	<0.001
BH20_01 Apr 07_-	BH20	1/04/2007	water	-	*6.85*	-	-	-	-	-	910	-	-	-	364	175	25	10	53	90	211	-	13.3	14.2	***0.537***	<0.01	0.09	-	-	13	-	-	**0.021**	-	-	-
BH20_16 Apr 13_-	BH20	16/04/2013	water	1.75	7.59	28.4	***1.92***	-974	18	7.5	490	-	240	<1	-	91	14	7.8	52	51	66	<0.1	-	-	***0.46***	-	-	-	-	-	18	-	-	-	-	-
BH20_28 Jan 14_-	BH20	28/01/2014	water	3.02	7.08	**1208**	***2.67***	66	18.5	7.1	830	-	380	<1	-	180	19	14	94	120	99	0.12	-	-	***1.2***	<0.1	<0.01	-	-	-	18	<0.005	0.005	0.066	<0.0001	<0.001
BH20_07 Jul 14_-	BH20	7/07/2014	water	-	**8.27**	**405**	***4.54***	53	12.3	7.3	440	-	210	<1	-	110	17	10	55	46	86	<0.1	-	-	***0.32***	-	-	-	-	-	44	-	-	-	-	-
BH20_21 Jan 15_-	BH20	21/01/2015	water	2.11	7.17	**645**	***0.24***	-134	21.8	7.3	700	-	310	<1	-	150	24	18	86	95	63	<0.1	-	-	***1.6***	0.006	0.009	-	-	-	130	<0.005	0.002	0.11	<0.0001	-
BH20_27 Apr 15_-	BH20	27/04/2015	water	5.8	7.9	**259.9**	***0.23***	23	15.1	*6.9*	350	-	50	<1	-	35	6.7	6	34	40	35	<0.1	-	-	***0.018***	-	-	-	-	-	18	-	-	-	-	-
BH20_20 Oct 15_-	BH20	20/10/2015	water	2.32	7.17	**262**	***1.85***	74	19.9	7.5	400	-	190	<1	-	97	14	9.8	54	72	55	<0.1	-	-	***0.025***	-	-	-	-	-	19	-	-	-	-	-
BH20_10 Mar 16_-	BH20	10/03/2016	water	2.87	7.51	**801**	***2.41***	-40	20.8	*7*	500	-	200	<1	-	96	14	7.1	50	49	59	0.2	-	-	***0.43***	10	0.009	-	-	-	21	<0.005	<0.001	0.058	<0.0001	<0.001
BH20_19 Apr 16_-	BH20	19/04/2016	water	2.56	***5.73***	**425**	***2.01***	15	20.8	*6.6*	290	-	59	<5	-	51	8	3.9	32	34	61	0.1	-	-		-	-	-	-	-	9	-	-	-	-	-
BH20_25 Jan 17_-	BH20	25/01/2017	water	3.41	***6.47***	**1248**	***0.3***	53	19.9	7.3	960	-	370	<5	-	190	21	9.2	81	52	250	<0.1	-	-	***0.081***	0.28	0.055	-	-	-	21	**0.08**	0.001	0.014	<0.0001	<0.001
BH20_02 Jul 19_-	BH20	2/07/2019	water	2.28	7.34	**522**	***10.15***	24.2	16.5	*6.9*	460	-	92	<5	-	90	14	9.6	37	51	140	0.1	-	-	***0.048***	-	-	-	-	-	12	-	-	-	-	-
BH20_24 Oct 19_-	BH20	24/10/2019	water	2.48	7.24	**566**	***6.54***	27.5	18.3	7.3	480	-	200	<5	-	92	13	5.7	31	45	85	0.2	-	-	***0.2***	-	-	-	-	-	9.9	-	-	-	-	-
BH20_14 Jan 20_-	BH20	14/01/2020	water	2.51	***6.01***	**688**	***0.29***	15.8	21.7	***6.1***	570	-	230	<5	-	100	16	5.5	40	60	100	0.1	-	-	***0.5***	0.01	<0.005	-	-	-	7	0.05	0.007	0.073	<0.0001	<0.001
BH20_22 Apr 20_-	BH20	22/04/2020	water	2.3	7.72	**746**	***3.01***	21.3	20.3	7.4	520	-	200	<5	-	72	21	7.4	74	67	100	0.1	-	-	<0.005	-	-	-	-	-	15	-	-	-	-	-
BH22_01 Jul 06_-	BH22	1/07/2006	water	-	7.6	-	-	-	-	-	460	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.053***	-	-	-	0.53	9	-	-	0.007	-	-
BH22_01 Oct 06_-	BH22	1/10/2006	water	-	7.42	-	-	-	-	-	600	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.095***	-	-	-	0.47	7	-	-	0.003	-	-	-
BH22 _01 Jan 07_-	BH22	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_01 Jan 07_-	BH22	1/01/2007	water	-	7.39	-	-	-	-	-	486	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.081***	-	-	-	0.627	7	-	-	0.006	-	-	<0.001
BH22_01 Apr 07_-	BH22	1/04/2007	water	-	7.15	-	-	-	-	-	524	-	-	-	146	87	15	6	50	81.1	143	-	7.92	8.18	***0.108***	0.465	0.051	-	-	12	-	-	0.005	-	-	-
BH22_22 Jul 13_-	BH22	22/07/2013	water	1.77	7.67	**312**	***2.13***	-14	15.6	7.1	380	-	180	<1	-	100	13	6.3	46	45	95	-	-	-	***0.041***	-	-	-	-	-	22	-	-	-	-	-
BH22_29 Oct 13_-	BH22	29/10/2013	water	2.17	7.71	**896**	***2.14***	-26	18.1	7.5	660	-	300	<1	-	130	19	10	74	70	110	-	-	-	***0.46***	-	-	-	-	-	19	-	-	-	-	-
BH22_28 Jan 14_-	BH22	28/01/2014	water	2.2	7.36	**1065**	***3.35***	-58	19.2	7.3	730	-	370	<1	-	150	22	11	82	95	110	0.18	-	-	***0.92***	0.011	0.019	-	-	-	13	<0.005	0.004	0.077	<0.0001	<0.001
BH22_16 Apr 14_-	BH22	16/04/2014	water	2.86	7.84	**388**	***1.61***	-33	18.4	*6.8*	270	-	120	<1	-	62	4.7	4.4	15	18	56	0.32	-	-	***0.026***	-	-	-	-	-	6	-	-	-	-	-
BH22_07 Jul 14_-	BH22	7/07/2014	water	-	**8.29**	**314**	***1.8***	-62	16.6	7.6	250	-	140	<1	-	62	4.3	4.1	13	13	24	0.29	-	-		-	-	-	-	-	19	-	-	-	-	-
BH22_16 Oct 14_-	BH22	16/10/2014	water	2.23	-	**375**	***1.36***	7	16.4	7.6	230	-	120	<1	-	55	3.9	4	18	20	33	0.3	-	-	0.006	-	-	-	-	-	14	-	-	-	-	-
BH22_20 Jan 15_-	BH22	20/01/2015	water	2.92	***6.24***	**302**	***0.4***	12	19.2	7.2	290	-	91	<1	-	50	3.9	3.5	12	21	29	0.31	-	-	***0.026***	0.016	<0.01	-	-	-	32	0.02	0.004	0.012	<0.0001	-
BH22_22 Apr 15_-	BH22	22/04/2015	water	2.54	7.62	**298**	***1.2***	-27	17.3	7.2	200	-	120	<1	-	50	3.4	3.4	16	18	19	0.3	-	-	**0.011**	-	-	-	-	-	39	-	-	-	-	-
BH22_22 Jul 15_-	BH22	22/07/2015	water	2.3	7.71	**596**	***5.55***	-84	12.8	7.2	380	-	160	<1	-	72	8	7.1	48	57	62	0.3	-	-	***0.4***	-	-	-	-	-	14	-	-	-	-	-
BH22_20 Oct 15_-	BH22	20/10/2015	water	3.01	*6.9*	**2500**	***2.19***	57	18.3	7.5	500	-	230	<1	-	100	12	8	61	70	94	0.2	-	-	***0.097***	-	-	-	-	-	18	-	-	-	-	-
BH22_20 Jan 16_-	BH22	20/01/2016	water	2.47	7.19	**835**	***3.19***	-48	20.8	7.4	530	-	280	<1	-	110	15	11	74	55	71	0.1	-	-	0.008	0.04	<0.01	-	-	-	22	0.01	0.004	0.028	<0.0001	<0.001
BH22_14 Apr 16_-	BH22	14/04/2016	water	2.77	*6.9*	**522**	***0.65***	-200	19.3	*7*	310	-	190	<5	-	68	8.9	8.4	31	21	22	0.4	-	-	***0.14***	-	-	-	-	-	28	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions								Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]								0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
BH22_13 Jul 16_-	BH22	13/07/2016	water	1.35	7.18	**273**	***3.83***	-47	17.3	***6.1***	310	-	40	<5	-	63	8.9	6.5	27	32	120	<0.1	-	-	***0.061***	-	-	-	-	-	38	-	-	-	-	-
BH22_18 Oct 16_-	BH22	18/10/2016	water	1.97	7.65	**519**	***1.96***	-34	17.3	7.4	300	-	210	<5	-	73	10	4.9	28	29	19	<0.1	-	-	***0.088***	-	-	-	-	-	7	-	-	-	-	-
BH22_25 Jan 17_-	BH22	25/01/2017	water	2.04	***6.01***	**652**	***0.28***	-15	20	***6.5***	450	-	200	<5	-	90	12	5.4	39	34	110	<0.1	-	-	***0.78***	<0.005	<0.005	-	-	-	8	<0.01	0.002	0.057	<0.0001	<0.001
BH22_02 Jul 19_-	BH22	2/07/2019	water	2.8	7.43	**820**	***5.29***	-75.1	18.5	7.6	610	-	270	<5	-	110	16	13	52	72	130	0.2	-	-	***0.12***	-	-	-	-	-	12	-	-	-	-	-
BH22_24 Oct 19_-	BH22	24/10/2019	water	3.16	7.48	**574**	***1.29***	56.3	18.4	7.5	420	-	180	<5	-	83	12	12	36	43	76	0.3	-	-	***0.084***	-	-	-	-	-	16	-	-	-	-	-
BH22_14 Jan 20_-	BH22	14/01/2020	water	3.52	7.45	**452.2**	***0.11***	-23	20.5	7.4	320	-	120	<5	-	56	8.4	11	24	35	64	0.3	-	-	***0.13***	<0.005	<0.005	-	-	-	8	0.04	0.01	0.013	<0.0001	<0.001
BH22_22 Apr 20_-	BH22	22/04/2020	water	3.16	7.65	**687**	***0.85***	-71.6	20.4	7.5	430	-	240	<5	-	91	12	11	39	57	75	0.3	-	-	***0.19***	-	-	-	-	-	17	-	-	-	-	-
BH23_01 Jul 06_-	BH23	1/07/2006	water	-	7.75	-	-	-	-	-	340	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.016***	-	-	-	0.588	3	-	-	0.006	-	-	-
BH23_01 Oct 06_-	BH23	1/10/2006	water	-	7.34	-	-	-	-	-	480	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.835	3	-	-	0.005	-	-	-
BH23 _01 Jan 07_-	BH23	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_01 Jan 07_-	BH23	1/01/2007	water	-	7.463	-	-	-	-	-	452	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.017***	-	-	-	0.475	3	-	-	0.006	-	-	<0.001
BH23_01 Apr 07_-	BH23	1/04/2007	water	-	7.38	-	-	-	-	-	364	-	-	-	150	66	6	5	29	56.7	36	-	5.2	5.34	***0.032***	0.821	0.075	-	-	4	-	-	0.006	-	-	-
BH23_16 Apr 13_-	BH23	16/04/2013	water	-	***10.72***	**8.6**	***1.79***	-1033	19.7	7.6	300	-	170	<1	-	63	5.4	2.6	32	43	11	<0.1	-	-		-	-	-	-	-	16	-	-	-	-	-
BH23_09 Jul 13_-	BH23	9/07/2013	water	2.15	**8**	**251**	***0.98***	-65	15.2	7.6	240	-	150	<1	-	-	8.3	3.4	16	20	34	-	-	-	***0.027***	-	-	-	-	-	48	-	-	-	-	-
BH23_29 Oct 13_-	BH23	29/10/2013	water	3.18	7.89	**259**	***1.1***	-101	17.6	7.6	220	-	130	<1	-	87	5.2	3.7	14	10	28	-	-	-	0.006	-	-	-	-	-	39	-	-	-	-	-
BH23_28 Jan 14_-	BH23	28/01/2014	water	3.33	**8.05**	**372**	***1.51***	-32	18.6	7.2	230	-	160	<1	-	61	5.6	4	15	13	24	0.37	-	-	0.005	0.12	<0.01	-	-	-	10	0.05	0.005	0.011	<0.0001	<0.001
BH23_16 Apr 14_-	BH23	16/04/2014	water	3.78	7.36	**315**	***1.4***	-49	20.1	7.1	300	-	180	<1	-	72	6.6	4.5	35	45	22	0.1	-	-	***0.072***	-	-	-	-	-	5	-	-	-	-	-
BH23_07 Jul 14_-	BH23	7/07/2014	water	-	**8.04**	**458**	***2.29***	-74	17.2	7.5	320	-	180	<1	-	77	7.6	6.4	35	43	29	0.11	-	-	***0.041***	-	-	-	-	-	5	-	-	-	-	-
BH23_16 Oct 14_-	BH23	16/10/2014	water	2.9	7.34	**657**	***1.79***	-17	17.3	7.4	370	-	200	<1	-	93	8.5	10	39	62	36	0.13	-	-	***0.018***	-	-	-	-	-	8	-	-	-	-	-
BH23_20 Jan 15_-	BH23	20/01/2015	water	3.6	***5.63***	**517**	***0.27***	87	19.9	***6.5***	300	-	160	<1	-	68	7.1	5.7	37	54	20	0.15	-	-		0.69	0.027	-	-	-	6	<0.005	0.003	0.023	<0.0001	-
BH23_22 Apr 15_-	BH23	22/04/2015	water	3.49	7.61	**418**	***2.08***	14	17.7	*7*	240	-	110	<1	-	60	5.8	3.7	28	36	18	<0.1	-	-	0.007	-	-	-	-	-	8	-	-	-	-	-
BH23_22 Jul 15_-	BH23	22/07/2015	water	3.18	7.13	**629**	***5.31***	-100	15.5	*7*	450	-	230	<1	-	100	9.1	6.8	38	53	51	0.2	-	-	***0.04***	-	-	-	-	-	11	-	-	-	-	-
BH23_20 Oct 15_-	BH23	20/10/2015	water	3.42	7.04	**266**	***3.64***	4	23	7.4	410	-	250	<1	-	92	9.3	5.7	59	79	29	<0.1	-	-		-	-	-	-	-	15	-	-	-	-	-
BH23_20 Jan 16_-	BH23	20/01/2016	water	3.18	7.12	**789**	***2.7***	-19	21.6	7.2	460	-	280	<1	-	110	9	9.1	53	39	35	0.2	-	-	0.009	1.4	0.017	-	-	-	15	<0.005	0.006	0.031	<0.0001	<0.001
BH23_14 Apr 16_-	BH23	14/04/2016	water	3.3	***8.98***	**722**	***1.72***	-15	20.4	*6.7*	560	-	200	<5	-	110	7.6	11	41	22	67	0.2	-	-	***0.044***	-	-	-	-	-	12	-	-	-	-	-
BH23_13 Jul 16_-	BH23	13/07/2016	water	1.97	7.55	**769**	***2.11***	-85	11.1	7.3	480	-	160	<5	-	93	13	10	57	54	140	0.3	-	-	***1***	-	-	-	-	-	16	-	-	-	-	-
BH23_18 Oct 16_-	BH23	18/10/2016	water	2.62	7.51	**817**	***1.71***	23	18.5	*6.8*	550	-	190	<5	-	120	16	11	53	53	130	0.2	-	-	***1.4***	-	-	-	-	-	16	-	-	-	-	-
BH23_25 Jan 17_-	BH23	25/01/2017	water	3.27	7.03	**846**	***0.27***	-86	16.4	7.7	540	-	260	<5	-	97	14	12	67	59	94	0.4	-	-	***5.7***	<0.005	<0.005	-	-	-	14	<0.01	0.005	0.015	<0.0001	<0.001
BH23_02 Jul 19_-	BH23	2/07/2019	water	2.87	7.33	**256.7**	***3.54***	-160.7	18.5	7.3	340	-	190	<5	-	66	7.5	6.2	28	50	23	0.2	-	-	***0.032***	-	-	-	-	-	7	-	-	-	-	-
BH23_24 Oct 19_-	BH23	24/10/2019	water	3.57	7.35	**551**	7.59	52.4	20.8	7.2	420	-	180	<5	-	80	9.7	9	30	61	23	0.1	-	-	***0.56***	-	-	-	-	-	15	-	-	-	-	-
BH23_15 Jan 20_-	BH23	15/01/2020	water	3.28	***6.05***	**585**	***0.15***	-51.9	21.1	***5.9***	400	-	150	<5	-	64	8.2	7.3	33	66	21	<0.1	-	-	***1.8***	0.01	<0.005	-	-	-	13	0.02	0.007	0.027	<0.0001	<0.001
BH23_22 Apr 20_-	BH23	22/04/2020	water	3	7.45	**893**	***3.77***	-94.7	21.5	7.2	540	-	290	<5	-	110	11	7.1	62	96	60	0.2	-	-	***0.59***	-	-	-	-	-	11	-	-	-	-	-
BH24_01 Jul 06_-	BH24	1/07/2006	water	-	7.16	-	-	-	-	-	900	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.219***	-	-	-	<0.01	11	-	-	0.067	-	-	-
BH24_01 Oct 06_-	BH24	1/10/2006	water	-	7.06	-	-	-	-	-	800	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.167***	-	-	-	<0.01	6	-	-	0.061	-	-	-
BH24_01 Jan 07_-	BH24	1/01/2007	water	-	7.07	-	-	-	-	-	960	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.102***	-	-	-	<0.01	4	-	-	0.048	-	-	<0.001
BH24_01 Apr 07_-	BH24	1/04/2007	water	-	*6.91*	-	-	-	-	-	1200	-	-	-	150	62	8	6	21	31.5	54	-	4.83	5.01	***0.417***	<0.01	<0.01	-	-	9	-	-	0.004	-	-	-
BH24_16 Apr 13_-	BH24	16/04/2013	water	9.01	7.45	**1033**	***0.73***	186	15.2	**8.1**	950	-	390	<1	-	130	12	13	170	40	260	0.19	-	-	***0.98***	-	-	-	-	-	42	-	-	-	-	-
BH24_29 Oct 13_-	BH24	29/10/2013	water	3.58	***8.8***	**278**	***1.77***	-3	18.4	7.3	170	-	72	<1	-	34	2.9	2	28	27	11	-	-	-	***0.049***	-	-	-	-	-	5	-	-	-	-	-
BH24_28 Jan 14_-	BH24	28/01/2014	water	3.65	**8.11**	**259**	***2.02***	-75	19.2	*7*	210	-	130	<1	-	55	6.1	3.4	28	42	13	<0.1	-	-		1.5	0.26	-	-	-	4	<0.005	<0.001	0.01	<0.0001	<0.001
BH24_16 Apr 14_-	BH24	16/04/2014	water	9.1	7.88	**1392**	***3.83***	-67	19.3	7.7	1100	-	610	<1	-	230	34	16	100	34	220	0.15	-	-	***0.9***	-	-	-	-	-	21	-	-	-	-	-
BH24_09 Jul 14_-	BH24	9/07/2014	water	-	**8.1**	**781**	***2.25***	-55	19.4	7.9	950	-	580	<1	-	240	28	17	110	30	180	0.14	-	-	***1.7***	-	-	-	-	-	26	-	-	-	-	-
BH24_16 Oct 14_-	BH24	16/10/2014	water	8.65	7.66	**1060**	***2.15***	-15	21.7	7.9	850	-	530	<1	-	220	33	15	65	36	190	0.12	-	-	***1.5***	-	-	-	-	-	20	-	-	-	-	-
BH24_21 Jan 15_-	BH24	21/01/2015	water	12.63	***5.84***	**373**	***2.24***	119	18.8	***6.5***	220	-	110	<1	-	60	7.1	4.1	15	19	43	<0.1	-	-	**0.011**	51	<0.01	-	-	-	6	<0.005	0.002	0.021	<0.0001	-
BH24_22 Apr 15_-	BH24	22/04/2015	water	5.6	7.33	**1157**	***3.61***	17.5	17.5	7.5	1000	-	600	<1	-	230	33	16	56	35	180	0.12	-	-	***0.17***	-	-	-	-	-	11	-	-	-	-	-
BH24_22 Jul 15_-	BH24	22/07/2015	water	12.2	*6.91*	**1306**	***4.45***	-31	16.8	7.6	1100	-	510	<1	-	320	50	18	58	60	330	0.2	-	-	***1.5***	-	-	-	-	-	22	-	-	-	-	-
BH24_21 Oct 15_-	BH24	21/10/2015	water	3.04	*6.66*	**339**	***3.33***	31	20.8	*7*	330	-	250	<1	-	96	8.7	4.2	14	14	40	<0.1	-	-	0.006	-	-	-	-	-	3	-	-	-	-	-
BH24_20 Jan 16_-	BH24	20/01/2016	water	12.54	**8.49**	**463**	***4.79***	58	26.1	7.1	350	-	300	<1	-	110	9.6	4.3	11	11	19	<0.1	-	-	0.007	0.072	<0.01	-	-	-	10	<0.005	0.003	0.028	<0.0001	<0.001
BH24_14 Apr 16_-	BH24	14/04/2016	water	6.89	*6.64*	**526**	***1.59***	22	19.5	*6.8*	340	-	230	<5	-	91	7.2	3.3	15	9	21	<0.1	-	-		-	-	-	-	-	7	-	-	-	-	-
BH24_13 Jul 16_-	BH24	13/07/2016	water	12.24	*6.8*	**514**	***3.21***	68	14.8	*6.8*	310	-	210	<5	-	99	8.3	3.5	12	20	50	<0.1	-	-		-	-	-	-	-	14	-	-	-	-	-
BH24_18 Oct 16_-	BH24	18/10/2016	water	3.31	7.36	**364**	***1.57***	-6	18.8	7.2	380	-	270	<5	-	110	13	16	35	31	21	<0.1	-	-	0.006	-	-	-	-	-	28	-	-	-	-	-
BH24_25 Jan 17_-	BH24	25/01/2017	water	3.1	***5.97***	**326**	***0.25***	31	19.3	*6.8*	330	-	210	<5	-	59	6.9	14	40	34	12	<0.1	-	-	***0.069***	1.6	0.15	-	-	-	16	<0.01	0.005	0.024	<0.0001	<0.001
BH24_02 Jul 19_-	BH24	2/07/2019	water	12.75	*6.72*	**375**	***4.77***	64	18.1	*6.7*	280	-	210	<5	-	73	5.6	3.1	12	12	21	<0.1	-	-	0.009	-	-	-	-	-	9	-	-	-	-	-
BH24_25 Oct 19_-	BH24	25/10/2019	water	12.77	*6.87*	**405.1**	***6.1***	79.8	18	7.1	220	-	190	<5	-	79	6.1	3	12	19	21	<0.1	-	-	<0.005	-	-	-	-	-	6	-	-	-	-	-
BH24_14 Jan 20_-	BH24	14/01/2020	water	12.92	*6.54*	**253.6**	***3.88***	-48.8	18.8	***6.3***	190	-	77	<5	-	39	3.7	1.9	11	23	23	<0.1	-	-	<0.005	0.075	<0.005	-	-	-	2	<0.01	0.002	0.01	<0.0001	<0.001
BH24_23 Apr 20_-	BH24	23/04/2020	water	12.57	7.19	**474.5**	***4.22***	65.4	20.7	*6.6*	330	-	110	<5	-	66	4.8	4	28	50	73	<0.1	-	-	<0.005	-	-	-	-	-	4	-	-	-	-	-
BH25_17 Apr 13_-	BH25	17/04/2013	water	7.29	*7*	**1014**	***0.25***	-41	15.7	7.7	730	-	360	<1	-	130	14	3.5	130	210	13	0.19	-	-	***0.56***	-	-	-	-	-	5	-	-	-	-	-
BH25_09 Jul 13_-	BH25	9/07/2013	water	9.14	7.95	**954**	***1.02***	-159	17.8	**8.1**	1100	-	510	<1	-	190	22	16	150	38	240	-	-	-	***1.3***	-	-	-	-	-	31	-	-	-	-	-
BH25_28 Jan 14_-	BH25	28/01/2014	water	10.77	7.31	**2710**	***3.46***	-90	21.5	7.3	3900	-	1100	<1	-	1200	79	30	320	1000	84	0.21	-	-	***8.8***	<0.1	<0.01	-	-	-	36	<0.005	0.002	0.27	<0.0001	<0.001
BH25_16 Apr 14_-	BH25	16/04/2014	water	7.6	7.58	**1243**	***0.83***	-125	21	7.5	760	-	380	<1	-	140	17	3.4	140	190	10	0.21	-	-	***0.49***	-	-	-	-	-	3	-	-	-	-	-
BH25_07 Jul 14_-	BH25	7/07/2014	water	7.28	**8.04**	**1185**	***2.29***	-120	17.2	7.4	740	-	360	<1	-	150	17	3.7	140	210	12	0.18	-	-	***0.62***	-	-	-	-	-	3	-	-	-	-	-
BH25_15 Oct 14_-	BH25	15/10/2014	water	7.23	7.19	**1141**	***0.86***	-182	17.7	7.3	760	-	360	<1	-	140	19	3.8	160	230	19	0.22	-	-	***0.5***	-	-	-	-	-	4	-	-	-	-	-
BH25_21 Jan 15_-	BH25	21/01/2015	water	7.24	*6.96*	**1198**	***0.21***	-87	20.8	***6***	770	-	370	<1	-	130	18	4.1	170	220	14	0.2	-	-	***0.39***	14	<0.01	-	-	-	4	<0.005	<0.001	0.01	<0.0001	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions								Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]							0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																														
BH25_22 Apr 15_-	BH25	22/04/2015	water	7.2	7.36	**1491**	***7.36***	-132	18	7.2	750	-	350	<1	-	140	17	3.7	160	210	31	0.19	-	-	***0.51***	-	-	-	-	-	5	-	-	-	-	-
BH25_21 Jul 15_-	BH25	21/07/2015	water	7.19	7.28	**1072**	***0.97***	-152	19.4	7.2	700	-	370	<1	-	130	17	3.5	150	200	9	0.2	-	-	***0.64***	-	-	-	-	-	4	-	-	-	-	-
BH25_20 Oct 15_-	BH25	20/10/2015	water	7.37	*6.61*	**531**	***2.3***	80	20.1	7.3	840	-	310	<1	-	140	18	3.8	150	210	81	0.2	-	-	***0.59***	-	-	-	-	-	4	-	-	-	-	-
BH25_21 Jan 16_-	BH25	21/01/2016	water	7.47	7.57	**829**	***2.27***	-58	25.7	7.7	730	-	400	<1	-	150	18	4.4	160	200	9	0.2	-	-	***0.48***	0.29	<0.01	-	-	-	5	<0.005	<0.001	0.009	<0.0001	<0.001
BH25_14 Apr 16_-	BH25	14/04/2016	water	7.35	7.73	**1248**	***1.24***	-244	19.4	7.5	760	-	380	<5	-	120	16	3.4	160	190	10	0.2	-	-	***0.43***	-	-	-	-	-	4	-	-	-	-	-
BH25_21 Jul 16_-	BH25	21/07/2016	water	7.15	7.76	**1241**	***2.83***	41	17	7.5	710	-	400	<5	-	130	17	4.1	140	160	8	0.2	-	-	***0.54***	-	-	-	-	-	4	-	-	-	-	-
BH25_18 Oct 16_-	BH25	18/10/2016	water	12.31	7.44	**430**	***3.72***	18	19.3	*6.7*	230	-	160	<5	-	63	5.4	3.1	12	13	24	<0.1	-	-	***0.018***	-	-	-	-	-	5	-	-	-	-	-
BH25_25 Jan 17_-	BH25	25/01/2017	water	12.67	***6.44***	**371**	***3.05***	13	18.9	*6.9*	240	-	150	<5	-	60	5.7	2.8	14	15	33	<0.1	-	-	<0.005	0.12	<0.005	-	-	-	3	<0.01	0.002	0.012	<0.0001	<0.001
BH25_02 Jul 19_-	BH25	2/07/2019	water	7.3	7.55	**664**	***5.2***	-176.3	19.4	7.7	730	-	410	<5	-	140	18	3.9	120	180	54	0.2	-	-	***0.61***	-	-	-	-	-	4	-	-	-	-	-
BH25_25 Oct 19_-	BH25	25/10/2019	water	7.35	7.55	**1329**	***4.07***	64.6	20.1	**8**	810	-	410	<5	-	150	20	4.2	130	180	10	0.2	-	-	***0.55***	-	-	-	-	-	5	-	-	-	-	-
BH25_13 Jan 20_-	BH25	13/01/2020	water	7.39	7.5	**1341**	***0.2***	-312.4	21.4	7.4	820	-	420	<5	-	140	20	3.8	140	220	15	0.2	-	-	***0.48***	<0.005	<0.005	-	-	-	4	<0.01	<0.001	0.011	<0.0001	<0.001
BH25_23 Apr 20_-	BH25	23/04/2020	water	7.27	7.47	**1276**	***2.25***	-101.8	20.2	7.5	790	-	420	<5	-	140	19	3.7	110	210	16	0.2	-	-	***0.67***	-	-	-	-	-	4	-	-	-	-	-
BH3A_01 Jul 00_-	BH3A	1/07/2000	water	-	7.1	**710**	-	-	-	-	450	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.36***	-	-	1.6	0.92	5	-	-	0.002	-	0.004
BH3A_01 Oct 00_-	BH3A	1/10/2000	water	-	*7*	**560**	-	-	-	-	320	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.06***	-	-	0.4	1.11	4	-	-	0.001	-	0.002
BH3A_01 Jan 01_-	BH3A	1/01/2001	water	-	7.6	**660**	-	-	-	-	390	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.16***	-	-	1.8	0.12	11	-	-	0.005	-	0.007
BH3A_01 Apr 01_-	BH3A	1/04/2001	water	-	7.4	**610**	-	-	-	-	350	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.77***	-	-	1.6	0.24	7	-	-	0.002	-	0.001
BH3A_01 Jul 01_-	BH3A	1/07/2001	water	-	7.5	**780**	-	-	-	-	450	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.33***	-	-	2.2	0.26	7	-	-	0.002	-	0.003
BH3A_01 Oct 01_-	BH3A	1/10/2001	water	-	7.6	**800**	-	-	-	-	450	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.55***	-	-	1.8	0.58	8	-	-	0.001	-	0.002
BH3A_01 Jan 02_-	BH3A	1/01/2002	water	-	7.2	**970**	-	-	-	-	610	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.18***	-	-	1.8	0.61	6	-	-	0.001	-	0.001
BH3A_01 Apr 02_-	BH3A	1/04/2002	water	-	7.5	**800**	-	-	-	-	500	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.09***	-	-	1.4	4.09	8	-	-	0.003	-	0.011
BH3A_01 Jul 02_-	BH3A	1/07/2002	water	-	7.9	**850**	-	-	-	-	470	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.64***	-	-	2	0.19	6	-	-	0.002	-	<0.001
BH3A_01 Oct 02_-	BH3A	1/10/2002	water	-	7.9	**940**	-	-	-	-	570	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.4***	-	-	1.6	0.34	7	-	-	<0.001	-	0.003
BH3A_01 Jan 03_-	BH3A	1/01/2003	water	-	**8.03**	**840**	-	-	-	-	470	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.44***	-	-	1.6	1.43	6	-	-	0.002	-	<0.001
BH3A_01 Apr 03_-	BH3A	1/04/2003	water	-	7.68	**626**	-	-	-	-	364	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.05***	-	-	0.7	0.75	11	-	-	0.001	-	0.001
BH3A_01 Jul 03_-	BH3A	1/07/2003	water	-	7.74	**905**	-	-	-	-	564	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.67***	-	-	2.4	1.47	10	-	-	0.001	-	0.001
BH3A_01 Oct 03_-	BH3A	1/10/2003	water	-	7.67	**905**	-	-	-	-	620	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.25***	-	-	1.6	0.02	14	-	-	0.001	-	0.001
BH3A_01 Jan 04_-	BH3A	1/01/2004	water	-	**8.24**	**979**	-	-	-	-	694	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.48***	-	-	2.2	0.08	14	-	-	0.001	-	0.005
BH3A_01 Apr 04_-	BH3A	1/04/2004	water	-	7.93	-	-	-	-	-	530	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.66***	-	-	-	0.01	7	-	-	0.001	-	-
BH3A_01 Jul 04_-	BH3A	1/07/2004	water	-	7.69	-	-	-	-	-	532	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.26***	-	-	-	0.01	8	-	-	0.001	-	-
BH3A_01 Oct 04_-	BH3A	1/10/2004	water	-	7.93	-	-	-	-	-	562	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.67***	-	-	-	0.01	9	-	-	0.001	-	-
BH3A_01 Jan 05_-	BH3A	1/01/2005	water	-	7.89	-	-	-	-	-	674	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.59***	-	-	-	0.034	6	-	-	0.01	-	0.01
BH3A_01 Apr 05_-	BH3A	1/04/2005	water	-	7.4	-	-	-	-	-	574	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.75***	-	-	-	0.015	7	-	-	0.002	-	-
BH3A_01 Jul 05_-	BH3A	1/07/2005	water	-	**8.43**	-	-	-	-	-	514	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.59***	-	-	-	0.148	6	-	-	<0.001	-	-
BH3A_01 Oct 05_-	BH3A	1/10/2005	water	-	7.79	-	-	-	-	-	528	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.41***	-	-	-	0.026	5	-	-	<0.001	-	-
BH3A_01 Jan 06_-	BH3A	1/01/2006	water	-	7.92	-	-	-	-	-	440	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.99***	-	-	-	0.021	7	-	-	<0.001	-	<0.001
BH3A_01 Apr 06_-	BH3A	1/04/2006	water	-	7.16	-	-	-	-	-	702	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.021***	-	-	-	1.15	6	-	-	0.002	-	-
BH3A_01 Jul 06_-	BH3A	1/07/2006	water	-	7.59	-	-	-	-	-	476	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.31***	-	-	-	<0.01	8	-	-	<0.001	-	-
BH3A_01 Oct 06_-	BH3A	1/10/2006	water	-	7.81	-	-	-	-	-	494	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.48***	-	-	-	<0.01	7	-	-	<0.001	-	-
BH3A_01 Jan 07_-	BH3A	1/01/2007	water	-	7.71	-	-	-	-	-	534	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.24***	-	-	-	0.014	5	-	-	<0.001	-	<0.001
BH3A_01 Apr 07_-	BH3A	1/04/2007	water	-	7.31	-	-	-	-	-	606	-	-	-	313	102	15	7	82	89.7	98	-	10.1	10.8	***1.97***	0.027	<0.01	-	-	10	-	-	<0.001	-	-
BH3A_16 Apr 13_-	BH3A	16/04/2013	water	4.94	*6.7*	**1039**	***0.46***	214	19.2	7.2	850	-	460	<1	-	180	23	9.9	63	56	150	0.14	-	-		-	-	-	-	-	9	-	-	-	-	-
BH3A_09 Jul 13_-	BH3A	9/07/2013	water	2.59	*6.83*	**975**	***5.02***	11	16	7.2	680	-	220	<1	-	150	14	6.3	48	49	150	-	-	-		-	-	-	-	-	7	-	-	-	-	-
BH3A_30 Oct 13_-	BH3A	30/10/2013	water	3.23	7.52	**492**	***1.83***	-51	16.8	**8**	550	-	150	<1	-	91	14	9.9	47	37	150	-	-	-	***2.2***	-	-	-	-	-	5	-	-	-	-	-
BH3A_28 Jan 14_-	BH3A	28/01/2014	water	3.42	7.96	**461**	***3.98***	-130	19.1	7.8	430	-	150	<1	-	84	14	9.7	43	40	150	0.18	-	-	***2.1***	0.007	<0.01	-	-	-	5	<0.005	<0.001	0.008	<0.0001	<0.001
BH3A_14 Apr 14_-	BH3A	14/04/2014	water	3.21	7.95	**659**	***2.87***	-78	19.1	**8**	460	-	150	<1	-	83	13	10	45	36	130	0.17	-	-	***2.1***	-	-	-	-	-	4	-	-	-	-	-
BH3A_07 Jul 14_-	BH3A	7/07/2014	water	-	**8.41**	**667**	***2.63***	-38	15.8	*6.8*	440	-	110	<1	-	81	13	10	42	37	180	0.17	-	-	***2.1***	-	-	-	-	-	5	-	-	-	-	-
BH3A_15 Oct 14_-	BH3A	15/10/2014	water	3	7.56	**690**	***2.59***	-102	15.3	7.8	470	-	150	<1	-	100	13	12	44	39	160	0.2	-	-	***1.8***	-	-	-	-	-	9	-	-	-	-	-
BH3A_21 Jan 15_-	BH3A	21/01/2015	water	3.24	***6.3***	**691**	***0.13***	20	18.2	*6.7*	480	-	150	<1	-	98	14	12	43	38	160	0.16	-	-	***1.8***	0.036	0.005	-	-	-	5	0.02	<0.001	0.003	<0.0001	-
BH3A_22 Apr 15_-	BH3A	22/04/2015	water	2.74	7.81	**620**	***2.76***	-72	17.2	7.8	450	-	160	<1	-	88	12	11	43	34	140	0.19	-	-	***1.5***	-	-	-	-	-	5	-	-	-	-	-
BH3A_21 Jul 15_-	BH3A	21/07/2015	water	3.26	7.97	**685**	***3.22***	-50	14.8	*6.7*	510	-	110	<1	-	91	12	11	42	36	180	0.2	-	-	***1.6***	-	-	-	-	-	5	-	-	-	-	-
BH3A_20 Oct 15_-	BH3A	20/10/2015	water	3.45	*6.65*	**950**	***3.28***	23.4	19.7	7.1	560	-	110	<1	-	93	14	9.8	42	39	240	0.2	-	-	***1.7***	-	-	-	-	-	5	-	-	-	-	-
BH3A_21 Jan 16_-	BH3A	21/01/2016	water	3.11	7.72	**679**	***1.24***	-81	22.1	7.4	550	-	130	<1	-	110	15	12	44	31	240	0.2	-	-	***1.2***	0.3	0.006	-	-	-	6	<0.005	<0.001	0.01	<0.0001	<0.001
BH3A_14 Apr 16_-	BH3A	14/04/2016	water	4.07	*6.7*	**1055**	***2.47***	67	19.4	*7*	750	-	360	<5	-	160	12	9.6	53	44	150	0.2	-	-	**0.01**	-	-	-	-	-	9	-	-	-	-	-
BH3A_21 Jul 16_-	BH3A	21/07/2016	water	3.75	***8.56***	**892**	***3.43***	78	17	*6.8*	690	-	140	<5	-	130	10	9.1	50	29	240	0.2	-	-	**0.014**	-	-	-	-	-	9	-	-	-	-	-
BH3A_18 Oct 16_-	BH3A	18/10/2016	water	3.27	7.91	**555**	***3.08***	-5	18.3	7.4	590	-	120	<5	-	120	17	12	36	46	220	0.2	-	-	***1.6***	-	-	-	-	-	5	-	-	-	-	-
BH3A_19 Jan 17_-	BH3A	19/01/2017	water	3.34	7.43	**828**	***3.79***	-36	19.5	**8**	600	-	140	<5	-	120	18	11	39	51	250	0.2	-	-	***1.4***	0.03	0.009	-	-	-	5	<0.01	<0.001	0.012	<0.0001	<0.001
BH3A_02 Jul 19_-	BH3A	2/07/2019	water	3.3	7.69	**729**	***2.28***	167.1	19.2	7.7	670	-	140	<5	-	130	17	12	34	37	280	0.2	-	-	***1.1***	-	-	-	-	-	5	-	-	-	-	-
BH3A_24 Oct 19_-	BH3A	24/10/2019	water	3.37	7.75	**956**	***2.08***	61.7	18.8	7.6	740	-	140	<5	-	170	21	12	32	42	310	0.2	-	-	***1.1***	-	-	-	-	-	6	-	-	-	-	-
BH3A_27 Apr 20_-	BH3A	27/04/2020	water	3.29	7.89	**999**	***1.72***	-147.1	20.8	7.7	770	-	150	<5	-	150	19	11	33	49	340	0.2	-	-	***1.4***	-	-	-	-	-	4	-	-	-	-	-
BH4_01 Sep 94_-	BH4	1/09/1994	water	-	7.1	**790**	-	-	-	-	524	-	-	-	-	-	-	-	-	-	-	-	-	-	***1***	-	-	-	-	17	-	-	0.003	-	0.003
BH4_01 Dec 94_-	BH4	1/12/1994	water	-	7.4	**771**	-	-	-	-	484	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.5***	-	-	-	-	23	-	-	0.002	-	0.001
BH4_01 Mar 95_-	BH4	1/03/1995	water	-	7.4	**923**	-	-	-	-	386	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.5***	-	-	-	-	18	-	-	0.003	-	0.004

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]							0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
BH4_01 Jun 95_-	BH4	1/06/1995	water	-	7.55	**816**	-	-	-	-	504	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.4***	-	-	-	-	12	-	-	0.005	-	-	0.001
BH4_01 Sep 95_-	BH4	1/09/1995	water	-	7.39	**1002**	-	-	-	-	512	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	1.6	0.06	17	-	-	0.003	-	-	0.003
BH4_01 Jan 96_-	BH4	1/01/1996	water	-	7.67	**903**	-	-	-	-	710	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.75***	-	-	1.4	-	3	-	-	0.005	-	-	0.001
BH4_01 Apr 96_-	BH4	1/04/1996	water	-	7.59	**926**	-	-	-	-	588	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.6***	-	-	1.1	0.06	16	-	-	0.005	-	-	0.001
BH4_01 Jul 96_-	BH4	1/07/1996	water	-	7.6	**810**	-	-	-	-	432	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.7***	-	-	1.6	0.76	20	-	-	0	-	-	0.001
BH4_01 Oct 96_-	BH4	1/10/1996	water	-	7.3	**1338**	-	-	-	-	798	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.64***	-	-	1	0.4	15	-	-	0.01	-	-	0.003
BH4_01 Jan 97_-	BH4	1/01/1997	water	-	7.64	**1281**	-	-	-	-	796	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.58***	-	-	0.9	0.09	12	-	-	0.002	-	-	0.001
BH4_01 Apr 97_-	BH4	1/04/1997	water	-	7.45	**957**	-	-	-	-	808	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.65***	-	-	0.7	0.08	14	-	-	0.003	-	-	0.003
BH4_01 Jul 97_-	BH4	1/07/1997	water	-	7.39	**1179**	-	-	-	-	792	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.41***	-	-	1.6	0.03	15	-	-	0.005	-	-	0.001
BH4_01 Oct 97_-	BH4	1/10/1997	water	-	7.21	**1529**	-	-	-	-	792	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.5***	-	-	0.8	0.21	12	-	-	0.005	-	-	0.002
BH4_01 Jan 98_-	BH4	1/01/1998	water	-	7.28	**1388**	-	-	-	-	1020	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.39***	-	-	0.5	0.09	7	-	-	0.003	-	-	0.001
BH4_01 Apr 98_-	BH4	1/04/1998	water	-	7.36	**1445**	-	-	-	-	1020	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.16***	-	-	0.6	0.01	8	-	-	0.002	-	-	0.001
BH4A_01 Jan 98_-	BH4A	1/01/1998	water	-	*6.51*	**1110**	-	-	-	-	816	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.43***	-	-	0.1	0.93	2	-	-	0.02	-	-	0.004
BH4A_01 Apr 98_-	BH4A	1/04/1998	water	-	*6.73*	**1162**	-	-	-	-	702	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.47***	-	-	1.2	0.68	9	-	-	0.002	-	-	0.004
BH4A_01 Jul 98_-	BH4A	1/07/1998	water	-	*6.87*	**1100**	-	-	-	-	844	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.9	1.86	12	-	-	0.001	-	-	0.001
BH4A_01 Oct 98_-	BH4A	1/10/1998	water	-	*6.89*	**1490**	-	-	-	-	960	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	0.8	4.77	21	-	-	0.01	-	-	0.001
BH4A_01 Jan 99_-	BH4A	1/01/1999	water	-	*6.6*	**1420**	-	-	-	-	863	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.5	0.27	10	-	-	0.002	-	-	0.001
BH4A_01 Mar 99_-	BH4A	1/03/1999	water	-	*6.6*	**954**	-	-	-	-	596	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.4	1.5	8	-	-	0.002	-	-	0.009
BH4A_01 Jul 99_-	BH4A	1/07/1999	water	-	*6.6*	**1050**	-	-	-	-	634	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.5	0.68	9	-	-	0.002	-	-	0.008
BH4A_01 Oct 99_-	BH4A	1/10/1999	water	-	*6.6*	**1273**	-	-	-	-	731	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.08***	-	-	0.8	2.41	9	-	-	0.002	-	-	0.003
BH4A_01 Jan 00_-	BH4A	1/01/2000	water	-	*6.8*	**1200**	-	-	-	-	810	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.24***	-	-	0.9	0.06	9	-	-	0.002	-	-	0.004
BH4A_01 Apr 00_-	BH4A	1/04/2000	water	-	***6.5***	**1100**	-	-	-	-	730	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.3	2.17	7	-	-	0.003	-	-	0.017
BH4A_01 Jul 00_-	BH4A	1/07/2000	water	-	*6.6*	**730**	-	-	-	-	440	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.7	0.72	6	-	-	0.001	-	-	0.006
BH4A_01 Oct 00_-	BH4A	1/10/2000	water	-	*6.8*	**490**	-	-	-	-	290	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.8	3	6	-	-	0.001	-	-	0.002
BH4A_01 Jan 01_-	BH4A	1/01/2001	water	-	*6.6*	**760**	-	-	-	-	520	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	1.41	6	-	-	0.005	-	-	0.007
BH4A_01 Apr 01_-	BH4A	1/04/2001	water	-	***6.4***	**440**	-	-	-	-	250	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	1.6	1.79	7	-	-	0.001	-	-	0.002
BH4A_01 Jul 01_-	BH4A	1/07/2001	water	-	***6.4***	**450**	-	-	-	-	250	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.3	5.5	5	-	-	0.001	-	-	0.002
BH4A_01 Oct 01_-	BH4A	1/10/2001	water	-	*6.6*	**870**	-	-	-	-	540	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	0.5	1.38	7	-	-	0.001	-	-	0.004
BH4A_01 Jan 02_-	BH4A	1/01/2002	water	-	***6.4***	**1300**	-	-	-	-	700	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.7	2.3	6	-	-	0.001	-	-	0.002
BH4A_01 Apr 02_-	BH4A	1/04/2002	water	-	*7*	**960**	-	-	-	-	660	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.8	4.23	8	-	-	<0.001	-	-	0.009
BH4A_01 Jul 02_-	BH4A	1/07/2002	water	-	*7*	**1200**	-	-	-	-	830	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.15***	-	-	0.7	0.8	9	-	-	0.002	-	-	0.004
BH4A_01 Oct 02_-	BH4A	1/10/2002	water	-	7.1	**1500**	-	-	-	-	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.16***	-	-	0.8	0.34	12	-	-	0.003	-	-	0.009
BH4A_01 Jan 03_-	BH4A	1/01/2003	water	-	7.47	**1300**	-	-	-	-	890	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.2***	-	-	0.7	0.15	11	-	-	0.003	-	-	0.005
BH4A_01 Apr 03_-	BH4A	1/04/2003	water	-	7.06	**1360**	-	-	-	-	934	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	1	0.03	20	-	-	0.001	-	-	0.003
BH4A_01 Jul 03_-	BH4A	1/07/2003	water	-	7.07	**1100**	-	-	-	-	714	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	2.4	4.04	14	-	-	0.001	-	-	0.001
BH4A_01 Oct 03_-	BH4A	1/10/2003	water	-	*6.96*	**1280**	-	-	-	-	862	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	1.5	5.19	12	-	-	0.001	-	-	0.001
BH4A_01 Jan 04_-	BH4A	1/01/2004	water	-	7.94	**1440**	-	-	-	-	1160	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	0.9	0.89	15	-	-	0.001	-	-	0.005
BH4A_01 Apr 04_-	BH4A	1/04/2004	water	-	7.15	-	-	-	-	-	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.08***	-	-	-	0.22	37	-	-	0.001	-	-	-
BH4A_01 Jul 04_-	BH4A	1/07/2004	water	-	7.21	-	-	-	-	-	920	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.16***	-	-	-	0.01	8	-	-	0.001	-	-	-
BH4A_01 Oct 04_-	BH4A	1/10/2004	water	-	7.2	-	-	-	-	-	972	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.38***	-	-	-	0.18	11	-	-	0.001	-	-	-
BH4A_01 Jan 05_-	BH4A	1/01/2005	water	-	7.24	-	-	-	-	-	1220	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.037***	-	-	-	0.56	10	-	-	0.02	-	-	0.01
BH4A_01 Apr 05_-	BH4A	1/04/2005	water	-	*6.74*	-	-	-	-	-	982	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.086***	-	-	-	0.269	9	-	-	0.001	-	-	-
BH4A_01 Jul 05_-	BH4A	1/07/2005	water	-	**8.37**	-	-	-	-	-	688	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.05***	-	-	-	11.2	4	-	-	0.001	-	-	-
BH4A_01 Oct 05_-	BH4A	1/10/2005	water	-	*6.67*	-	-	-	-	-	714	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.046***	-	-	-	10.9	8	-	-	<0.001	-	-	-
BH4A_01 Jan 06_-	BH4A	1/01/2006	water	-	*6.93*	-	-	-	-	-	892	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.537***	-	-	-	25	12	-	-	0.001	-	-	0.006
BH4A_01 Apr 06_-	BH4A	1/04/2006	water	-	*6.66*	-	-	-	-	-	734	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	-	1.93	12	-	-	<0.001	-	-	-
BH4A_01 Jul 06_-	BH4A	1/07/2006	water	-	*6.84*	-	-	-	-	-	694	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.313***	-	-	-	6.76	10	-	-	<0.001	-	-	-
BH4A_01 Oct 06_-	BH4A	1/10/2006	water	-	*6.8*	-	-	-	-	-	800	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.434***	-	-	-	2.21	12	-	-	0.001	-	-	-
BH4A_01 Jan 07_-	BH4A	1/01/2007	water	-	*6.7*	-	-	-	-	-	960	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.664***	-	-	-	2.59	12	-	-	0.002	-	-	0.006
BH4A_01 Apr 07_-	BH4A	1/04/2007	water	-	*6.63*	-	-	-	-	-	968	-	-	-	535	231	26	11	56	83.5	211	-	16.4	17.4	***0.948***	3.37	<0.01	-	-	14	-	-	<0.001	-	-	-
BH4A_17 Apr 13_-	BH4A	17/04/2013	water	3.74	*6.98*	**618**	***0.17***	-43	18.5	7.9	490	-	170	<1	-	73	11	8.6	41	47	130	0.16	-	-	***2.2***	-	-	-	-	-	5	-	-	-	-	-
BH4A_22 Jul 13_-	BH4A	22/07/2013	water	3.71	7.01	**551**	***1.23***	-52	15.9	7.5	430	-	170	<1	-	110	13	11	49	42	130	-	-	-	***2.5***	-	-	-	-	-	4	-	-	-	-	-
BH4A_30 Oct 13_-	BH4A	30/10/2013	water	7.01	7.92	**1306**	***3.33***	-69	18.3	7.9	820	-	350	<1	-	140	16	3.4	150	190	28	-	-	-	***0.57***	-	-	-	-	-	5	-	-	-	-	-
BH4A_28 Jan 14_-	BH4A	28/01/2014	water	7.42	7.45	**1277**	***3.1***	144	19.6	7.8	650	-	360	<1	-	150	18	3.7	140	210	12	0.2	-	-	***0.47***	0.013	<0.01	-	-	-	3	<0.005	<0.001	0.008	<0.0001	<0.001
BH4A_14 Apr 14_-	BH4A	14/04/2014	water	4.12	*6.51*	**958**	***4.08***	255	18.2	7.1	750	-	260	<1	-	170	14	9.3	53	46	210	0.12	-	-		-	-	-	-	-	6	-	-	-	-	-
BH4A_07 Jul 14_-	BH4A	7/07/2014	water	-	7.35	**1011**	***4.78***	280	16	*6.7*	770	-	330	<1	-	190	15	10	46	41	230	<0.1	-	-		-	-	-	-	-	8	-	-	-	-	-
BH4A_15 Oct 14_-	BH4A	15/10/2014	water	3.57	7.56	**1171**	***1.29***	110	15.3	7.2	590	-	180	<1	-	140	13	7.1	47	45	200	0.2	-	-	***0.25***	-	-	-	-	-	6	-	-	-	-	-
BH4A_21 Jan 15_-	BH4A	21/01/2015	water	4.32	***5.17***	**814**	***0.19***	176	20.5	***5.9***	700	-	130	<1	-	140	11	9.2	39	39	260	0.12	-	-	***0.14***	0.46	0.006	-	-	-	7	0.02	<0.001	0.028	0.0011	-
BH4A_27 Apr 15_-	BH4A	27/04/2015	water	2.5	*6.89*	**800**	***5.35***	46	16.1	*6.9*	570	-	68	<1	-	110	7.6	9.1	48	49	210	0.1	-	-		-	-	-	-	-	5	-	-	-	-	-
BH4A_21 Jul 15_-	BH4A	21/07/2015	water	4.03	*6.91*	**885**	***3.05***	10	16.2	*6.8*	640	-	220	<1	-	140	13	7	61	50	160	0.2	-	-		-	-	-	-	-	9	-	-	-	-	-
BH4A_20 Oct 15_-	BH4A	20/10/2015	water	4.22	***6.39***	**1101**	***2.63***	49.5	20.5	7.1	710	-	350	<1	-	190	21	7.7	66	63	240	0.1	-	-		-	-	-	-	-	7	-	-	-	-	-
BH4A_20 Jan 16_-	BH4A	20/01/2016	water	4.02	*6.89*	**136**	***3.2***	91	25.9	*6.9*	990	-	290	<1	-	250	21	14	98	58	340	0.1	-	-	0.008	1.8	<0.01	-	-	-	10	0.02	<0.001	0.053	0.0006	<0.001

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]								0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
BH4A_14 Apr 16_-	BH4A	14/04/2016	water	3.21	7.4	810	*3.09*	-32	19	*6.4*	600	-	91	<5	-	100	14	12	40	30	260	0.2	-	-	***1.3***	-	-	-	-	-	18	-	-	-	-	-
BH4A_21 Jul 16_-	BH4A	21/07/2016	water	3.13	*8.56*	811	*1.96*	-195	18.7	7.6	560	-	130	<5	-	110	14	13	38	30	210	0.2	-	-	***1.5***	-	-	-	-	-	4	-	-	-	-	-
BH4A_18 Oct 16_-	BH4A	18/10/2016	water	7.26	7.96	1187	*2.3*	-86	20.6	7.7	740	-	430	<5	-	150	19	3.5	150	170	12	0.2	-	-	***0.59***	-	-	-	-	-	4	-	-	-	-	-
BH4A_19 Jan 17_-	BH4A	19/01/2017	water	7.3	7.34	1021	*2.61*	-124	21	7.9	710	-	430	<5	-	130	17	3.3	140	200	10	0.2	-	-	***0.5***	<0.005	<0.005	-	-	-	6	<0.01	<0.001	0.01	<0.0001	<0.001
BH4A_03 Jul 19_-	BH4A	3/07/2019	water	4.05	*6.88*	1067	*1.83*	107.2	18.2	7.1	830	-	310	<5	-	210	15	11	38	51	270	0.1	-	-	***0.061***	-	-	-	-	-	8	-	-	-	-	-
BH4A_25 Oct 19_-	BH4A	25/10/2019	water	4.33	7.22	1201	*4.4*	79.7	19.1	7.1	980	-	340	<5	-	240	17	11	38	52	260	0.1	-	-	***0.033***	-	-	-	-	-	7	-	-	-	-	-
BH4A_13 Jan 20_-	BH4A	13/01/2020	water	4.31	7.29	1212	*0.62*	-246.9	20	*7*	900	-	250	<5	-	210	14	11	32	49	360	0.2	-	-	***0.045***	0.58	0.026	-	-	-	7	0.01	<0.001	0.045	0.0009	0.001
BH4A_23 Apr 20_-	BH4A	23/04/2020	water	4.12	*6.93*	1225	*2.19*	112.7	20.5	*7*	1000	-	200	<5	-	200	14	11	58	93	390	0.2	-	-	***0.016***	-	-	-	-	-	9	-	-	-	-	-
BH5A_01 Jul 00_-	BH5A	1/07/2000	water	-	*6.9*	860	-	-	-	-	490	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	3.61	3	-	-	0.003	-	-	0.004
BH5A_01 Oct 00_-	BH5A	1/10/2000	water	-	*7*	790	-	-	-	-	450	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.6	4.36	3	-	-	0.002	-	-	0.002
BH5A_01 Jan 01_-	BH5A	1/01/2001	water	-	7.3	600	-	-	-	-	350	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.03***	-	-	0.3	0.01	5	-	-	0.003	-	-	0.008
BH5A_01 Apr 01_-	BH5A	1/04/2001	water	-	7.3	560	-	-	-	-	320	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.3	2.18	2	-	-	0.002	-	-	0.002
BH5A_01 Jul 01_-	BH5A	1/07/2001	water	-	7.1	580	-	-	-	-	370	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.88***	-	-	0.5	0.06	5	-	-	0.002	-	-	0.002
BH5A_01 Oct 01_-	BH5A	1/10/2001	water	-	7.2	640	-	-	-	-	360	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.98***	-	-	1.2	1.35	3	-	-	0.002	-	-	0.001
BH5A_01 Jan 02_-	BH5A	1/01/2002	water	-	*6.9*	570	-	-	-	-	370	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.06***	-	-	0.2	1.58	2	-	-	0.001	-	-	0.001
BH5A_01 Apr 02_-	BH5A	1/04/2002	water	-	7.6	460	-	-	-	-	270	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.8	1.5	3	-	-	0.002	-	-	0.005
BH5A_01 Jul 02_-	BH5A	1/07/2002	water	-	7.6	600	-	-	-	-	350	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.04***	-	-	1	3.37	2	-	-	0.002	-	-	<0.001
BH5A_01 Jan 03_-	BH5A	1/01/2003	water	-	7.8	630	-	-	-	-	300	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.02***	-	-	<0.1	13.6	2	-	-	0.002	-	-	<0.001
BH5A_01 Apr 03_-	BH5A	1/04/2003	water	-	7.52	771	-	-	-	-	506	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.49***	-	-	2.2	16.8	9	-	-	0.002	-	-	0.001
BH5A_01 Jul 03_-	BH5A	1/07/2003	water	-	7.48	635	-	-	-	-	388	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.13***	-	-	1.2	6.43	8	-	-	0.002	-	-	0.001
BH5A_01 Oct 03_-	BH5A	1/10/2003	water	-	7.7	540	-	-	-	-	310	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.45***	-	-	0.5	4.86	1	-	-	0.001	-	-	0.008
BH5A_01 Jan 04_-	BH5A	1/01/2004	water	-	8.12	807	-	-	-	-	568	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.65***	-	-	1.4	1.7	12	-	-	0.002	-	-	0.005
BH5A_01 Apr 04_-	BH5A	1/04/2004	water	-	7.7	-	-	-	-	-	290	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.11***	-	-	-	2.75	3	-	-	0.001	-	-	-
BH5A_01 Jul 04_-	BH5A	1/07/2004	water	-	7.52	-	-	-	-	-	316	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	-	4.39	7	-	-	0.001	-	-	-
BH5A_01 Oct 04_-	BH5A	1/10/2004	water	-	7.57	-	-	-	-	-	410	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.44***	-	-	-	3.74	10	-	-	0.002	-	-	-
BH5A_01 Jan 05_-	BH5A	1/01/2005	water	-	7.64	-	-	-	-	-	444	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.078***	-	-	-	4.76	2	-	-	0.02	-	-	0.01
BH5A_01 Apr 05_-	BH5A	1/04/2005	water	-	7.01	-	-	-	-	-	718	-	-	-	-	-	-	-	-	-	-	-	-	-	***8.15***	-	-	-	2.59	10	-	-	0.003	-	-	-
BH5A_01 Jul 05_-	BH5A	1/07/2005	water	-	8.16	-	-	-	-	-	406	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.122***	-	-	-	3.88	1	-	-	0.001	-	-	-
BH5A_01 Oct 05_-	BH5A	1/10/2005	water	-	7.26	-	-	-	-	-	366	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.22***	-	-	-	3.95	4	-	-	<0.001	-	-	-
BH5A_01 Jan 06_-	BH5A	1/01/2006	water	-	7.21	-	-	-	-	-	678	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.55***	-	-	-	2.23	7	-	-	0.002	-	-	0.001
BH5A_01 Apr 06_-	BH5A	1/04/2006	water	-	7.09	-	-	-	-	-	676	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.1***	-	-	-	2.02	3	-	-	0.003	-	-	-
BH5A_01 Jul 06_-	BH5A	1/07/2006	water	-	7.07	-	-	-	-	-	742	-	-	-	-	-	-	-	-	-	-	-	-	-	***9.76***	-	-	-	2.32	9	-	-	0.002	-	-	-
BH5A_01 Oct 06_-	BH5A	1/10/2006	water	-	7.83	-	-	-	-	-	706	-	-	-	-	-	-	-	-	-	-	-	-	-	***15.4***	-	-	-	3.28	12	-	-	0.002	-	-	-
BH5A_01 Jan 07_-	BH5A	1/01/2007	water	-	*6.9*	-	-	-	-	-	866	-	-	-	-	-	-	-	-	-	-	-	-	-	***6.69***	-	-	-	1.19	11	-	-	0.002	-	-	<0.001
BH5A_01 Apr 07_-	BH5A	1/04/2007	water	-	*6.8*	-	-	-	-	-	918	-	-	-	580	176	31	15	117	198	58	-	16.8	18.4	***6.56***	1.04	<0.01	-	-	14	-	-	0.001	-	-	-
BH5A_17 Apr 13_-	BH5A	17/04/2013	water	7.22	*6.99*	1322	*0.28*	-8	16.3	7.7	1000	-	530	<1	-	180	27	19	110	130	180	<0.1	-	-	***16***	-	-	-	-	-	18	-	-	-	-	-
BH5A_22 Jul 13_-	BH5A	22/07/2013	water	7.21	7.02	1298	*0.47*	-11	15.1	7.1	900	-	530	<1	-	240	31	20	130	140	180	-	-	-	***13***	-	-	-	-	-	16	-	-	-	-	-
BH5A_30 Oct 13_-	BH5A	30/10/2013	water	2.63	7.7	906	*2.3*	22	15.4	7.3	700	-	320	<1	-	180	18	7.1	50	47	130	-	-	-	0.006	-	-	-	-	-	13	-	-	-	-	-
BH5A_28 Jan 14_-	BH5A	28/01/2014	water	4.3	7.16	807	*3.2*	49	18	*6.9*	560	-	210	<1	-	130	12	7.4	45	45	150	0.13	-	-		1.8	0.005	-	-	-	7	0.01	<0.001	0.02	0.0005	0.002
BH5A_14 Apr 14_-	BH5A	14/04/2014	water	7.25	*6.76*	1513	*2.15*	-17	20.4	7.3	930	-	570	<1	-	200	32	18	140	120	120	<0.1	-	-	***7.2***	-	-	-	-	-	18	-	-	-	-	-
BH5A_07 Jul 14_-	BH5A	7/07/2014	water	7.2	7.46	1544	*2.9*	110	18.1	*7*	1000	-	580	<1	-	180	33	24	130	140	160	<0.1	-	-	***15***	-	-	-	-	-	20	-	-	-	-	-
BH5A_15 Oct 14_-	BH5A	15/10/2014	water	7.07	7.35	1626	*4.17*	56	16.8	*7*	1200	-	580	<1	-	210	35	27	150	180	180	<0.1	-	-	***18***	-	-	-	-	-	23	-	-	-	-	-
BH5A_21 Jan 15_-	BH5A	21/01/2015	water	7.26	*6.56*	1541	*0.17*	-60	20.2	*6.2*	1100	-	570	<1	-	210	38	28	150	150	190	<0.1	-	-	***13***	0.12	<0.01	-	-	-	20	<0.005	0.009	0.064	<0.0001	-
BH5A_22 Apr 15_-	BH5A	22/04/2015	water	7.17	*6.91*	1815	*0.83*	-89	18.6	7.1	1300	-	630	<1	-	210	41	34	150	150	200	<0.1	-	-	***18***	-	-	-	-	-	21	-	-	-	-	-
BH5A_21 Jul 15_-	BH5A	21/07/2015	water	7.07	*6.84*	1096	*4.03*	42	15.7	7.1	1100	-	550	<1	-	200	36	20	150	150	170	<0.1	-	-	***8.5***	-	-	-	-	-	23	-	-	-	-	-
BH5A_20 Oct 15_-	BH5A	20/10/2015	water	7.2	*6.74*	663	*2.01*	117	21.1	7.3	1300	-	610	<1	-	210	40	21	170	180	180	<0.1	-	-	***11***	-	-	-	-	-	21	-	-	-	-	-
BH5A_21 Jan 16_-	BH5A	21/01/2016	water	7.07	7.04	1238	*1.22*	-12	25.2	7.4	1100	-	670	<1	-	210	41	25	210	180	180	<0.1	-	-	***10***	0.02	0.007	-	-	-	23	<0.005	0.02	0.046	<0.0001	<0.001
BH5A_14 Apr 16_-	BH5A	14/04/2016	water	7.03	7.49	1667	*2.26*	-138	20.6	7.5	1000	-	530	<5	-	160	27	22	130	150	190	0.1	-	-	***20***	-	-	-	-	-	19	-	-	-	-	-
BH5A_21 Jul 16_-	BH5A	21/07/2016	water	7.1	7.38	1619	*1.73*	-23	17.3	*7*	1000	-	520	<5	-	180	30	20	130	140	120	<0.1	-	-	***10***	-	-	-	-	-	18	-	-	-	-	-
BH5A_18 Oct 16_-	BH5A	18/10/2016	water	4.01	*6.79*	629	*1.56*	47	18.2	7.1	750	-	320	<5	-	180	16	7.2	43	32	190	0.2	-	-	**0.014**	-	-	-	-	-	7	-	-	-	-	-
BH5A_19 Jan 17_-	BH5A	19/01/2017	water	4.22	*6.88*	521	*2.61*	38	20.9	7.4	750	-	290	<5	-	170	14	10	47	42	260	0.1	-	-	0.009	1.8	<0.005	-	-	-	20	<0.01	<0.001	0.042	0.0008	0.002
BH5A_02 Jul 19_-	BH5A	2/07/2019	water	7.33	*6.98*	925	*2.39*	-76.3	19.5	7.2	1000	-	650	<5	-	170	28	27	120	160	84	<0.1	-	-	***19***	-	-	-	-	-	27	-	-	-	-	-
BH5A_24 Oct 19_-	BH5A	24/10/2019	water	7.23	*6.79*	1692	*2.5*	55	20	*6.9*	1100	-	710	<5	-	190	33	32	140	170	27	0.1	-	-	***23***	-	-	-	-	-	26	-	-	-	-	-
BH5A_15 Jan 20_-	BH5A	15/01/2020	water	7.36	7.24	1544	*0.9*	-12.5	20.5	7.1	940	-	630	<5	-	170	28	24	130	160	31	<0.1	-	-	***19***	1.2	<0.005	-	-	-	19	<0.01	0.092	0.052	<0.0001	<0.001
BH5A_23 Apr 20_-	BH5A	23/04/2020	water	7.22	7.02	1567	*2.61*	-13	20.3	7.3	1000	-	670	<5	-	160	31	25	120	180	36	<0.1	-	-	***22***	-	-	-	-	-	26	-	-	-	-	-
BH6A_01 Jul 01_-	BH6A	1/07/2001	water	-	*6.7*	1100	-	-	-	-	710	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.95***	-	-	2	0.01	11	-	-	0.02	-	-	0.004
BH6A_01 Oct 01_-	BH6A	1/10/2001	water	-	*6.8*	1100	-	-	-	-	680	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.42***	-	-	2	0.01	11	-	-	0.013	-	-	0.002
BH6A_01 Jan 02_-	BH6A	1/01/2002	water	-	*6.7*	1300	-	-	-	-	690	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.04***	-	-	3.4	0.01	15	-	-	0.01	-	-	0.001
BH6A_01 Apr 02_-	BH6A	1/04/2002	water	-	7.1	1200	-	-	-	-	720	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.37***	-	-	4	0.01	14	-	-	0.02	-	-	0.006
BH6A_01 Jul 02_-	BH6A	1/07/2002	water	-	7.3	1000	-	-	-	-	630	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.01***	-	-	3	0.05	10	-	-	0.009	-	-	<0.001
BH6A_01 Oct 02_-	BH6A	1/10/2002	water	-	7.4	990	-	-	-	-	560	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.54***	-	-	2.6	<0.01	10	-	-	0.01	-	-	<0.001
BH6A_01 Jan 03_-	BH6A	1/01/2003	water	-	7.51	960	-	-	-	-	580	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.92***	-	-	3.2	0.19	13	-	-	0.004	-	-	0.005

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]							0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
BH6A_01 Apr 03_-	BH6A	1/04/2003	water	-	7.4	**941**	-	-	-	-	540	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.98***	-	-	2	0.03	24	-	-	0.017	-	-	0.001
BH6A_01 Jul 03_-	BH6A	1/07/2003	water	-	7.63	**1100**	-	-	-	-	714	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.3***	-	-	1.5	0.05	24	-	-	0.014	-	-	0.001
BH6A_01 Oct 03_-	BH6A	1/10/2003	water	-	7.32	**1320**	-	-	-	-	872	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.19***	-	-	3.3	0.01	21	-	-	0.009	-	-	0.001
BH6A_01 Jan 04_-	BH6A	1/01/2004	water	-	7.92	**1090**	-	-	-	-	724	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.19***	-	-	3.5	0.01	22	-	-	0.011	-	-	0.005
BH6A_01 Apr 04_-	BH6A	1/04/2004	water	-	7.22	-	-	-	-	-	606	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.85***	-	-	-	0.01	36	-	-	0.009	-	-	-
BH6A_01 Jul 04_-	BH6A	1/07/2004	water	-	7.28	-	-	-	-	-	552	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.25***	-	-	-	0.01	22	-	-	0.005	-	-	-
BH6A_01 Oct 04_-	BH6A	1/10/2004	water	-	7.31	-	-	-	-	-	630	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.67***	-	-	-	0.01	13	-	-	0.008	-	-	-
BH6A_01 Jan 05_-	BH6A	1/01/2005	water	-	7.41	-	-	-	-	-	638	-	-	-	-	-	-	-	-	-	-	-	-	-	***3.36***	-	-	-	0.015	10	-	-	0.006	-	-	0.001
BH6A_01 Apr 05_-	BH6A	1/04/2005	water	-	*6.86*	-	-	-	-	-	588	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.08***	-	-	-	0.01	12	-	-	0.006	-	-	-
BH6A _01 Jul 05_-	BH6A	1/07/2005	water	-	**8.37**	-	-	-	-	-	562	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.34***	-	-	-	0.035	11	-	-	0.006	-	-	-
BH6A_01 Oct 05_-	BH6A	1/10/2005	water	-	*6.83*	-	-	-	-	-	544	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.19***	-	-	-	0.028	9	-	-	0.003	-	-	-
BH6A_01 Jan 06_-	BH6A	1/01/2006	water	-	7.19	-	-	-	-	-	586	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.28***	-	-	-	0.01	11	-	-	0.006	-	-	<0.005
BH6A_01 Apr 06_-	BH6A	1/04/2006	water	-	*6.99*	-	-	-	-	-	562	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.24***	-	-	-	0.01	11	-	-	0.01	-	-	-
BH6A_01 Jul 06_-	BH6A	1/07/2006	water	-	7.04	-	-	-	-	-	1200	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.759***	-	-	-	0.021	15	-	-	0.005	-	-	-
BH6A_01 Oct 06_-	BH6A	1/10/2006	water	-	*6.95*	-	-	-	-	-	656	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.999***	-	-	-	0.014	12	-	-	0.004	-	-	-
BH6A_01 Jan 07_-	BH6A	1/01/2007	water	-	7.08	-	-	-	-	-	568	-	-	-	-	-	-	-	-	-	-	-	-	-	***1***	-	-	-	0.013	7	-	-	0.01	-	-	<0.001
BH6A_01 Apr 07_-	BH6A	1/04/2007	water	-	*6.79*	-	-	-	-	-	606	-	-	-	432	141	19	6	52	92.9	37	-	11	12	***1.77***	0.024	<0.01	-	-	11	-	-	0.01	-	-	-
BH6A_17 Apr 13_-	BH6A	17/04/2013	water	14.81	*6.95*	**294**	***0.04***	-100	16.3	7.8	1300	-	680	<1	-	250	48	13	120	230	110	0.14	-	-	***2.9***	-	-	-	-	67	-	-	-	-	-	-
BH6A_09 Jul 13_-	BH6A	9/07/2013	water	14.2	*6.95*	**1362**	***1.59***	-90	17.1	7.7	1400	-	700	<1	-	290	45	16	140	250	100	-	-	-	***4.2***	-	-	-	-	-	51	-	-	-	-	-	-
BH6A_29 Oct 13_-	BH6A	29/10/2013	water	14.72	7.26	**1910**	***1.3***	-56	18.7	7.3	1300	-	610	<1	-	250	44	13	130	200	84	-	-	-	***2.8***	-	-	-	-	-	44	-	-	-	-	-	-
BH6A_28 Jan 14_-	BH6A	28/01/2014	water	7.42	*6.92*	**1023**	***2.46***	5	20.1	7.1	850	-	540	<1	-	200	35	18	140	150	170	<0.1	-	-	***9***	0.32	<0.01	-	-	-	18	<0.005	0.004	0.051	<0.0001	<0.001
BH6A_16 Apr 14_-	BH6A	16/04/2014	water	14.72	7.03	**1950**	***1.42***	-78	19	*6.8*	1400	-	670	<1	-	250	43	14	180	270	54	0.15	-	-	***3.8***	-	-	-	-	-	67	-	-	-	-	-	-
BH6A_09 Jul 14_-	BH6A	9/07/2014	water	-	7.11	**1233**	***1.85***	-52	18.6	7.1	1700	-	730	<1	-	280	46	23	240	340	61	0.17	-	-	***8.1***	-	-	-	-	-	81	-	-	-	-	-	-
BH6A_16 Oct 14_-	BH6A	16/10/2014	water	15.52	*6.95*	**2046**	***0.64***	-120	20.1	7.1	1300	-	650	<1	-	280	42	20	180	310	120	0.15	-	-	***8.2***	-	-	-	-	-	65	-	-	-	-	-	-
BH6A_20 Jan 15_-	BH6A	20/01/2015	water	14.9	*6.64*	**2060**	***1.03***	-105	21.4	7.3	1800	-	710	<1	-	280	48	23	250	360	100	0.19	-	-	***8.6***	<0.1	<0.01	-	-	-	92	<0.005	0.004	0.16	<0.0001	-
BH6A_27 Apr 15_-	BH6A	27/04/2015	water	23.17	*6.7*	**910**	***2.75***	-27	17.9	7.2	850	-	420	<1	-	140	37	4.1	110	120	61	0.11	-	-	***0.26***	-	-	-	-	-	6	-	-	-	-	-	-
BH6A_22 Jul 15_-	BH6A	22/07/2015	water	14.1	*6.65*	**1599**	***3.14***	-56	15.9	*6.8*	1600	-	690	<1	-	260	41	23	200	310	110	0.2	-	-	***10***	-	-	-	-	-	78	-	-	-	-	-	-
BH6A_21 Oct 15_-	BH6A	21/10/2015	water	11.22	*6.76*	**1530**	***0.87***	-92	22.4	7.2	2000	-	820	<1	-	290	47	28	240	400	100	0.2	-	-	***14***	-	-	-	-	-	87	-	-	-	-	-	-
BH6A_20 Jan 16_-	BH6A	20/01/2016	water	12.01	*6.8*	**2658**	***2.23***	-118	28.4	7.1	1900	-	860	<1	-	340	50	41	310	340	80	0.2	-	-	***18***	1.3	0.13	-	-	-	100	<0.005	0.003	0.29	<0.0001	<0.001
BH6A_14 Apr 16_-	BH6A	14/04/2016	water	13.83	7.37	**2990**	***0.68***	-90	21.2	7.5	2000	-	880	<5	-	330	46	38	280	190	60	0.3	-	-	***17***	-	-	-	-	-	100	-	-	-	-	-	-
BH6A_20 Sep 16_-	BH6A	20/09/2016	water	14.75	*6.78*	**2186**	***0.12***	-78.3	19.1	7.1	1300	-	620	<5	-	240	39	22	220	290	59	0.2	-	-	***7.3***	-	-	-	-	-	65	-	-	-	-	-	-
BH6A_18 Oct 16_-	BH6A	18/10/2016	water	14.65	*6.77*	**2360**	***1.4***	-70	20.1	7.2	1900	-	850	<5	-	320	53	29	270	400	88	0.2	-	-	***12***	-	-	-	-	-	84	-	-	-	-	-	-
BH6A_19 Jan 17_-	BH6A	19/01/2017	water	7.12	***6.47***	**1036**	***2.57***	85	20.6	7.6	1200	-	770	<5	-	220	41	24	160	180	120	0.1	-	-	***13***	0.29	<0.005	-	-	-	27	<0.01	0.044	0.051	<0.0001	<0.001
BH6A_25 Jan 17_-	BH6A	25/01/2017	water	15.16	*6.87*	**2109**	***0.9***	-90	21.1	7.3	1500	-	740	<5	-	230	39	28	270	320	44	0.2	-	-	***12***	<0.005	<0.005	-	-	-	68	<0.01	0.004	0.17	<0.0001	0.001
BH6A_02 Jul 19_-	BH6A	2/07/2019	water	10.64	*6.6*	**754**	***5.01***	50.4	18.4	*6.6*	660	-	180	<5	-	170	14	6.4	29	55	230	<0.1	-	-	***0.15***	-	-	-	-	-	110	-	-	-	-	-	-
BH6A_25 Oct 19_-	BH6A	25/10/2019	water	10.66	***6.49***	**955**	***3.75***	79.4	19	*7*	800	-	280	<5	-	210	23	10	32	49	230	<0.1	-	-	***0.11***	-	-	-	-	-	52	-	-	-	-	-	-
BH6A_14 Jan 20_-	BH6A	14/01/2020	water	10.79	*6.85*	**801**	***2.3***	-129.5	19.2	***6.5***	580	-	250	<5	-	140	14	2.3	18	34	140	<0.1	-	-	***0.035***	0.37	0.024	-	-	-	9	0.01	0.004	0.055	<0.0001	<0.001
BH6A_23 Apr 20_-	BH6A	23/04/2020	water	10.45	7.28	**759**	***2.03***	-88.1	19.4	*6.8*	560	-	260	<5	-	130	16	4.8	22	34	130	<0.1	-	-	***0.061***	-	-	-	-	-	12	-	-	-	-	-	-
BH7_01 Sep 93_-	BH7	1/09/1993	water	-	7.4	**430**	-	-	-	-	324	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.3***	-	-	-	-	23	-	-	0.328	-	-	0.0036
BH7_01 Jun 94_-	BH7	1/06/1994	water	-	7.6	**660**	-	-	-	-	288	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.1***	-	-	-	-	3	-	-	0.24	-	-	0.004
BH7_01 Sep 94_-	BH7	1/09/1994	water	-	7.3	**650**	-	-	-	-	380	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.2***	-	-	-	-	22	-	-	0.305	-	-	0.003
BH7_01 Dec 94_-	BH7	1/12/1994	water	-	*6.8*	**400**	-	-	-	-	376	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.2***	-	-	-	-	13	-	-	0.284	-	-	0.001
BH7_01 Mar 95_-	BH7	1/03/1995	water	-	7.13	**698**	-	-	-	-	318	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.8***	-	-	-	-	15	-	-	0.273	-	-	0.001
BH7_01 Jun 95_-	BH7	1/06/1995	water	-	7.41	**647**	-	-	-	-	340	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.4***	-	-	-	-	22	-	-	0.204	-	-	0.001
BH7_01 Sep 95_-	BH7	1/09/1995	water	-	7.73	**703**	-	-	-	-	446	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	1.2	0.07	22	-	-	0.199	-	-	0.004
BH7_01 Jan 96_-	BH7	1/01/1996	water	-	7.5	**633**	-	-	-	-	340	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.5***	-	-	1.2	-	24	-	-	0.214	-	-	0.001
BH7_01 Apr 96_-	BH7	1/04/1996	water	-	7.3	**717**	-	-	-	-	476	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.48***	-	-	1	0.07	35	-	-	0.219	-	-	0.001
BH7_01 Jul 96_-	BH7	1/07/1996	water	-	7.16	**727**	-	-	-	-	443	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.48***	-	-	0.8	0.03	18	-	-	0.204	-	-	0.001
BH7_01 Oct 96_-	BH7	1/10/1996	water	-	7.33	**855**	-	-	-	-	508	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.74***	-	-	0.9	0.18	14	-	-	0.279	-	-	0.001
BH7_01 Jan 97_-	BH7	1/01/1997	water	-	7.39	**856**	-	-	-	-	432	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.44***	-	-	2.1	0.07	31	-	-	0.126	-	-	0.001
BH7_01 Apr 97_-	BH7	1/04/1997	water	-	7.36	**706**	-	-	-	-	438	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.55***	-	-	0.7	0.35	17	-	-	0.238	-	-	0.003
BH7_01 Jul 97_-	BH7	1/07/1997	water	-	7.29	**837**	-	-	-	-	432	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.36***	-	-	0.9	0.33	17	-	-	0.23	-	-	0.002
BH7_01 Oct 97_-	BH7	1/10/1997	water	-	7.32	**843**	-	-	-	-	400	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.57***	-	-	1.3	0.01	7	-	-	0.21	-	-	0.001
BH7_01 Jan 98_-	BH7	1/01/1998	water	-	7.31	**875**	-	-	-	-	448	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.29***	-	-	1.3	0.36	10	-	-	0.239	-	-	0.001
BH7_01 Apr 98_-	BH7	1/04/1998	water	-	7.45	**869**	-	-	-	-	442	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.65***	-	-	1.3	0.04	6	-	-	0.185	-	-	0.001
BH7A_01 Jan 98_-	BH7A	1/01/1998	water	-	7.25	**565**	-	-	-	-	346	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.17***	-	-	0.8	0.18	9	-	-	0.042	-	-	0.001
BH7A_01 Apr 98_-	BH7A	1/04/1998	water	-	7.23	**663**	-	-	-	-	372	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	0.6	27.8	6	-	-	0.002	-	-	0.001
BH7A_01 Jul 98_-	BH7A	1/07/1998	water	-	7.54	**437**	-	-	-	-	322	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.6	2.25	5	-	-	0.004	-	-	0.001
BH7A_01 Oct 98_-	BH7A	1/10/1998	water	-	7.8	**416**	-	-	-	-	230	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.5	0.11	38	-	-	0.01	-	-	0.002
BH7A_01 Jan 99_-	BH7A	1/01/1999	water	-	7.6	**439**	-	-	-	-	256	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.05***	-	-	0.1	1.5	4	-	-	0.004	-	-	0.001
BH7A_01 Mar 99_-	BH7A	1/03/1999	water	-	7.3	**479**	-	-	-	-	359	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	4.9	3	-	-	0.006	-	-	0.005
BH7A_01 Jul 99_-	BH7A	1/07/1999	water	-	7.2	**842**	-	-	-	-	476	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.9***	-	-	1.9	0.37	7	-	-	0.01	-	-	0.005

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]							0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
BH7A_01 Oct 99_-	BH7A	1/10/1999	water	-	7.5	**532**	-	-	-	-	313	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	0.3	0.08	4	-	-	0.004	-	-	0.001
BH7A_01 Jan 00_-	BH7A	1/01/2000	water	-	7.3	**690**	-	-	-	-	430	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.3	2.66	6	-	-	0.004	-	-	0.002
BH7A_01 Apr 00_-	BH7A	1/04/2000	water	-	*6.9*	**690**	-	-	-	-	450	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	0.1	4.74	4	-	-	0.005	-	-	0.007
BH7A_01 Jul 00_-	BH7A	1/07/2000	water	-	*6.9*	**760**	-	-	-	-	450	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.8	1.79	4	-	-	0.003	-	-	0.003
BH7A_01 Oct 00_-	BH7A	1/10/2000	water	-	7.2	**640**	-	-	-	-	360	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.4	1.25	3	-	-	0.002	-	-	0.002
BH7A_01 Jan 01_-	BH7A	1/01/2001	water	-	7.4	**560**	-	-	-	-	330	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	0.4	0.27	7	-	-	0.001	-	-	0.008
BH7A_01 Apr 01_-	BH7A	1/04/2001	water	-	7.3	**610**	-	-	-	-	350	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	0.31	2	-	-	0.003	-	-	0.001
BH7A_01 Jul 01_-	BH7A	1/07/2001	water	-	7.2	**520**	-	-	-	-	320	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	0.3	0.08	3	-	-	0.004	-	-	0.002
BH7A_01 Oct 01_-	BH7A	1/10/2001	water	-	7.3	**570**	-	-	-	-	290	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.3	0.04	3	-	-	0.005	-	-	0.001
BH7A_01 Jan 02_-	BH7A	1/01/2002	water	-	7.1	**750**	-	-	-	-	430	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.3	0.81	3	-	-	0.001	-	-	0.001
BH7A_01 Apr 02_-	BH7A	1/04/2002	water	-	7.6	**700**	-	-	-	-	440	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.22***	-	-	0.4	0.34	5	-	-	0.008	-	-	0.004
BH7A_01 Jul 02_-	BH7A	1/07/2002	water	-	7.6	**570**	-	-	-	-	330	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	0.2	0.05	2	-	-	0.009	-	-	<0.001
BH7A_01 Oct 02_-	BH7A	1/10/2002	water	-	7.7	**770**	-	-	-	-	440	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.32***	-	-	0.4	0.02	4	-	-	0.018	-	-	0.021
BH7A_01 Jan 03_-	BH7A	1/01/2003	water	-	7.73	**430**	-	-	-	-	320	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	1.2	0.33	2	-	-	0.006	-	-	<0.001
BH7A_01 Apr 03_-	BH7A	1/04/2003	water	-	7.69	**590**	-	-	-	-	336	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	0.08	14	-	-	0.012	-	-	0.001
BH7A_01 Jul 03_-	BH7A	1/07/2003	water	-	7.75	**656**	-	-	-	-	392	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.32***	-	-	0.6	0.01	10	-	-	0.018	-	-	0.001
BH7A_01 Oct 03_-	BH7A	1/10/2003	water	-	7.88	**667**	-	-	-	-	466	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.08***	-	-	0.5	0.06	13	-	-	0.02	-	-	0.001
BH7A_01 Jan 04_-	BH7A	1/01/2004	water	-	**8.41**	**678**	-	-	-	-	432	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.11***	-	-	0.4	0.01	8	-	-	0.042	-	-	0.005
BH7A_01 Apr 04_-	BH7A	1/04/2004	water	-	7.54	-	-	-	-	-	504	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.11***	-	-	-	0.03	20	-	-	0.032	-	-	-
BH7A_01 Jul 04_-	BH7A	1/07/2004	water	-	7.7	-	-	-	-	-	366	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	-	0.02	1	-	-	0.017	-	-	-
BH7A_01 Oct 04_-	BH7A	1/10/2004	water	-	7.68	-	-	-	-	-	406	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.14***	-	-	-	0.01	4	-	-	0.019	-	-	-
BH7A_01 Jan 05_-	BH7A	1/01/2005	water	-	7.8	-	-	-	-	-	410	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.61***	-	-	-	0.037	5	-	-	0.035	-	-	0.001
BH7A_01 Apr 05_-	BH7A	1/04/2005	water	-	7.27	-	-	-	-	-	326	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.086***	-	-	-	0.035	1	-	-	0.02	-	-	-
BH7A_01 Jul 05_-	BH7A	1/07/2005	water	-	7.77	-	-	-	-	-	318	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	-	0.041	1	-	-	0.011	-	-	-
BH7A_01 Oct 05_-	BH7A	1/10/2005	water	-	7.34	-	-	-	-	-	396	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.173***	-	-	-	0.03	1	-	-	0.037	-	-	-
BH7A_01 Jan 06_-	BH7A	1/01/2006	water	-	7.47	-	-	-	-	-	458	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.108***	-	-	-	0.053	3	-	-	0.044	-	-	0.002
BH7A_01 Apr 06_-	BH7A	1/04/2006	water	-	7.19	-	-	-	-	-	444	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.08***	-	-	-	0.01	4	-	-	0.094	-	-	-
BH7A_01 Jul 06_-	BH7A	1/07/2006	water	-	7.26	-	-	-	-	-	408	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.061***	-	-	-	<0.01	4	-	-	0.039	-	-	-
BH7A_01 Oct 06_-	BH7A	1/10/2006	water	-	7.25	-	-	-	-	-	482	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.088***	-	-	-	0.17	4	-	-	0.039	-	-	-
BH7A_01 Jan 07_-	BH7A	1/01/2007	water	-	7.14	-	-	-	-	-	576	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.192***	-	-	-	0.18	3	-	-	0.016	-	-	<0.001
BH7A_01 Apr 07_-	BH7A	1/04/2007	water	-	*6.98*	-	-	-	-	-	504	-	-	-	446	136	23	2	22	30.9	14	-	9.68	10.1	***0.145***	0.151	0.027	-	-	7	-	-	0.022	-	-	-
BH7A_17 Apr 13_-	BH7A	17/04/2013	water	2.17	7.56	**2.1**	***0.83***	29	17.3	7.7	2700	-	1900	<1	-	200	88	170	470	490	210	0.15	-	-	***240***	-	-	-	-	-	310	-	-	-	-	-
BH7A_09 Jul 13_-	BH7A	9/07/2013	water	2.98	7.12	**863**	***2.04***	-20	18.4	7.8	520	-	430	<1	-	130	21	2.7	38	34	11	-	-	-	***0.2***	-	-	-	-	-	6	-	-	-	-	-
BH7A_29 Oct 13_-	BH7A	29/10/2013	water	2.2	**8.1**	**924**	***3.16***	-11	19	7.5	540	-	420	<1	-	150	24	2.1	19	22	26	-	-	-	**0.012**	-	-	-	-	-	5	-	-	-	-	-
BH7A_28 Jan 14_-	BH7A	28/01/2014	water	2.46	7.23	**926**	***3.92***	36	20.3	7.3	560	-	410	<1	-	150	25	2.3	27	32	28	0.11	-	-	0.009	12	0.15	-	-	-	4	<0.005	0.005	0.024	<0.0001	<0.001
BH7A_16 Apr 14_-	BH7A	16/04/2014	water	2.25	7.02	**780**	***2.12***	86	21.5	7.2	550	-	410	<1	-	140	22	1.6	33	32	19	0.16	-	-	***0.061***	-	-	-	-	-	6	-	-	-	-	-
BH7A_09 Jul 14_-	BH7A	9/07/2014	water	-	7.71	**600**	***4.2***	79	19.6	7.5	710	-	420	<1	-	170	26	2.2	38	50	23	0.12	-	-		-	-	-	-	-	7	-	-	-	-	-
BH7A_16 Oct 14_-	BH7A	16/10/2014	water	2	7.13	**852**	***0.92***	-74	18.9	7.4	480	-	400	<1	-	140	22	2	32	26	19	0.19	-	-	***0.45***	-	-	-	-	-	10	-	-	-	-	-
BH7A_21 Jan 15_-	BH7A	21/01/2015	water	2.37	***6.09***	**818**	***0.13***	85	19.8	***6.4***	640	-	410	<1	-	150	25	3.3	25	31	32	0.11	-	-	***0.041***	6.6	0.26	-	-	-	7	<0.005	0.005	0.03	<0.0001	-
BH7A_23 Apr 15_-	BH7A	23/04/2015	water	8.93	7.08	**1848**	***2.08***	-91	20	7.2	500	-	370	<1	-	130	22	2.1	24	28	27	0.22	-	-	***0.36***	-	-	-	-	-	8	-	-	-	-	-
BH7A_21 Jul 15_-	BH7A	21/07/2015	water	2.63	7.1	**836**	***3.46***	-35	17.4	7.1	520	-	390	<1	-	140	21	3.1	26	36	23	0.2	-	-	***0.058***	-	-	-	-	-	18	-	-	-	-	-
BH7A_21 Oct 15_-	BH7A	21/10/2015	water	2.21	*6.94*	**330**	***3.35***	25	20.5	7.3	550	-	320	<1	-	130	20	2.7	26	43	71	0.1	-	-		-	-	-	-	-	9	-	-	-	-	-
BH7A_21 Jan 16_-	BH7A	21/01/2016	water	2.15	7.26	**979**	***4.29***	67	24.1	7.1	650	-	410	<1	-	160	26	3.3	41	44	38	0.2	-	-	***0.26***	0.57	0.011	-	-	-	16	<0.005	0.002	0.028	<0.0001	<0.001
BH7A_19 Apr 16_-	BH7A	19/04/2016	water	2.25	*6.8*	**755**	***2.35***	-37	21.3	7.4	550	-	420	<5	-	160	25	3	29	30	41	0.2	-	-	***0.078***	-	-	-	-	-	16	-	-	-	-	-
BH7A_13 Jul 16_-	BH7A	13/07/2016	water	2.2	7.33	**896**	***3.86***	-76	15.2	7.8	560	-	440	<5	-	140	23	2.2	27	36	26	0.2	-	-	***0.18***	-	-	-	-	-	17	-	-	-	-	-
BH7A_18 Oct 16_-	BH7A	18/10/2016	water	2.27	*6.88*	**631**	***2.5***	40	16.8	7.3	580	-	440	<5	-	150	23	2.3	29	27	36	0.2	-	-	**0.012**	-	-	-	-	-	8	-	-	-	-	-
BH7A_19 Jan 17_-	BH7A	19/01/2017	water	2.35	*6.97*	**787**	***2.17***	-4	20.1	*7*	570	-	380	<5	-	150	25	1.7	21	28	85	0.1	-	-	0.009	9.8	0.21	-	-	-	5	<0.01	0.011	0.026	<0.0001	<0.001
BH7A_02 Jul 19_-	BH7A	2/07/2019	water	2.61	7.46	**712**	**6.92**	-36.5	18.6	7.4	500	-	420	<5	-	120	22	2	17	26	21	0.2	-	-	***0.076***	-	-	-	-	-	4	-	-	-	-	-
BH7A_25 Oct 19_-	BH7A	25/10/2019	water	2.62	7.32	**858**	***3.68***	51	19.1	7.8	610	-	420	<5	-	150	24	2.4	21	36	31	0.2	-	-	***0.12***	-	-	-	-	-	4	-	-	-	-	-
BH7A_14 Jan 20_-	BH7A	14/01/2020	water	2.82	7.27	**794**	7.74	-252.7	19.7	7.1	540	-	420	<5	-	140	25	2.1	17	27	26	0.2	-	-	0.006	4.7	0.19	-	-	-	3	<0.01	0.005	0.024	<0.0001	<0.001
BH7A_23 Apr 20_-	BH7A	23/04/2020	water	2.39	7.55	**860**	***2.44***	-19.6	19.3	7.2	510	-	410	<5	-	140	22	2.3	25	48	34	0.2	-	-	***0.068***	-	-	-	-	-	4	-	-	-	-	-
BH8_01 Sep 93_-	BH8	1/09/1993	water	-	7.4	**800**	-	-	-	-	652	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.3***	-	-	-	-	60	-	-	0.0116	-	-	0.003
BH8_01 Jun 94_-	BH8	1/06/1994	water	-	7.4	**1020**	-	-	-	-	432	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.6***	-	-	-	-	3	-	-	0.042	-	-	0.006
BH8_01 Sep 94_-	BH8	1/09/1994	water	-	7.2	**1130**	-	-	-	-	784	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.5***	-	-	-	-	49	-	-	0.013	-	-	0.003
BH8_01 Dec 94_-	BH8	1/12/1994	water	-	7.1	**805**	-	-	-	-	452	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.2***	-	-	-	-	27	-	-	0.013	-	-	0.001
BH8_01 Mar 95_-	BH8	1/03/1995	water	-	7.24	**957**	-	-	-	-	442	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.2***	-	-	-	-	15	-	-	0.025	-	-	0.001
BH8_01 Jun 95_-	BH8	1/06/1995	water	-	7.33	**1012**	-	-	-	-	532	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.7***	-	-	-	-	21	-	-	0.04	-	-	0.001
BH8_01 Sep 95_-	BH8	1/09/1995	water	-	7.78	**916**	-	-	-	-	684	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	1.3	0.02	18	-	-	0.038	-	-	0.003
BH8_01 Jan 96_-	BH8	1/01/1996	water	-	7.49	**783**	-	-	-	-	440	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.32***	-	-	1.1	-	19	-	-	0.05	-	-	0.001
BH8_01 Apr 96_-	BH8	1/04/1996	water	-	7.68	**730**	-	-	-	-	324	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.46***	-	-	0.7	0.06	11	-	-	0.056	-	-	0.001
BH8_01 Jul 96_-	BH8	1/07/1996	water	-	***8.91***	**699**	-	-	-	-	296	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.85***	-	-	1.7	0.16	7	-	-	0.055	-	-	0.001
BH8_01 Oct 96_-	BH8	1/10/1996	water	-	7.44	**681**	-	-	-	-	456	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.55***	-	-	0.8	0.26	8	-	-	0.073	-	-	0.001

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]							0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
BH8A_01 Jul 96_-	BH8A	1/07/1996	water	-	*7*	**394**	-	-	-	-	770	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	0.63	18	-	-	0.002	-	-	0.001
BH8A_01 Oct 96_-	BH8A	1/10/1996	water	-	7.6	**448**	-	-	-	-	306	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	0.1	1.32	2	-	-	0.002	-	-	0.001
BH8A_01 Jan 97_-	BH8A	1/01/1997	water	-	**8.04**	**470**	-	-	-	-	268	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	2.07	8	-	-	0.008	-	-	0.001
BH8A_01 Apr 97_-	BH8A	1/04/1997	water	-	7.62	**379**	-	-	-	-	256	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	1.32	3	-	-	0.002	-	-	0.001
BH8A_01 Jul 97_-	BH8A	1/07/1997	water	-	7.65	**463**	-	-	-	-	266	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.2	2.04	4	-	-	0.002	-	-	0.002
BH8A_01 Oct 97_-	BH8A	1/10/1997	water	-	7.67	**468**	-	-	-	-	250	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.88***	-	-	1.3	1.61	4	-	-	0.01	-	-	0.001
BH8A_01 Jan 98_-	BH8A	1/01/1998	water	-	7.61	**458**	-	-	-	-	298	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	0.37	4	-	-	0.004	-	-	0.001
BH8A_01 Apr 98_-	BH8A	1/04/1998	water	-	7.75	**449**	-	-	-	-	266	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.6	1.59	3	-	-	0.002	-	-	0.001
BH8A_01 Jul 98_-	BH8A	1/07/1998	water	-	7.86	**406**	-	-	-	-	262	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.6	1.5	4	-	-	0.003	-	-	0.001
BH8A_01 Oct 98_-	BH8A	1/10/1998	water	-	7.79	**429**	-	-	-	-	252	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	0.82	10	-	-	0.01	-	-	0.002
BH8A_01 Jan 99_-	BH8A	1/01/1999	water	-	7.7	**437**	-	-	-	-	230	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.05***	-	-	0.5	0.58	5	-	-	0.002	-	-	0.001
BH8A_01 Mar 99_-	BH8A	1/03/1999	water	-	7.6	**354**	-	-	-	-	228	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.4	0.57	9	-	-	0.003	-	-	0.005
BH8A_01 Jul 99_-	BH8A	1/07/1999	water	-	7.6	**482**	-	-	-	-	258	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.4	0.48	1	-	-	0.003	-	-	0.004
BH8A_01 Oct 99_-	BH8A	1/10/1999	water	-	7.6	**475**	-	-	-	-	255	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.4	0.28	7	-	-	0.003	-	-	0.001
BH8A_01 Jan 00_-	BH8A	1/01/2000	water	-	7.5	**440**	-	-	-	-	260	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	0.75	2	-	-	0.003	-	-	0.001
BH8A_01 Apr 00_-	BH8A	1/04/2000	water	-	7.4	**460**	-	-	-	-	260	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	0.59	1	-	-	0.003	-	-	0.005
BH8A_01 Jul 00_-	BH8A	1/07/2000	water	-	*7*	**460**	-	-	-	-	250	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	1.2	0.47	2	-	-	0.002	-	-	0.003
BH8A_01 Oct 00_-	BH8A	1/10/2000	water	-	7.3	**460**	-	-	-	-	250	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.6	0.51	1	-	-	0.002	-	-	0.001
BH8A_01 Jan 01_-	BH8A	1/01/2001	water	-	7.6	**430**	-	-	-	-	250	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	0.46	10	-	-	0.002	-	-	0.005
BH8A_01 Apr 01_-	BH8A	1/04/2001	water	-	7.5	**430**	-	-	-	-	250	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.2	0.46	2	-	-	0.004	-	-	0.003
BH8A_01 Jul 01_-	BH8A	1/07/2001	water	-	7.4	**580**	-	-	-	-	380	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.5	0.25	3	-	-	0.003	-	-	0.003
BH8A_01 Oct 01_-	BH8A	1/10/2001	water	-	7.3	**650**	-	-	-	-	360	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.3	0.12	2	-	-	0.002	-	-	0.001
BH8A_01 Jan 02_-	BH8A	1/01/2002	water	-	7.2	**650**	-	-	-	-	380	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.4	0.14	2	-	-	0.001	-	-	0.001
BH8A_01 Apr 02_-	BH8A	1/04/2002	water	-	7.6	**620**	-	-	-	-	370	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.5	0.11	4	-	-	0.002	-	-	0.004
BH8A_01 Jul 02_-	BH8A	1/07/2002	water	-	7.7	**590**	-	-	-	-	310	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	<0.1	0.06	1	-	-	0.002	-	-	<0.001
BH8A_01 Oct 02_-	BH8A	1/10/2002	water	-	7.7	**590**	-	-	-	-	340	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	<0.1	0.08	1	-	-	0.002	-	-	0.013
BH8A_01 Jan 03_-	BH8A	1/01/2003	water	-	7.74	**400**	-	-	-	-	300	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	0.4	0.12	2	-	-	0.002	-	-	0.005
BH8A_01 Apr 03_-	BH8A	1/04/2003	water	-	7.72	**493**	-	-	-	-	320	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	0.21	11	-	-	0.001	-	-	0.001
BH8A_01 Jul 03_-	BH8A	1/07/2003	water	-	7.7	**757**	-	-	-	-	496	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.3	0.11	11	-	-	0.003	-	-	0.001
BH8A_01 Oct 03_-	BH8A	1/10/2003	water	-	7.7	**562**	-	-	-	-	402	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.3	0.05	9	-	-	0.002	-	-	0.001
BH8A_01 Jan 04_-	BH8A	1/01/2004	water	-	**8.05**	**573**	-	-	-	-	374	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.1	0.09	7	-	-	0.002	-	-	0.005
BH8A_01 Apr 04_-	BH8A	1/04/2004	water	-	7.75	-	-	-	-	-	338	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.06***	-	-	-	0.06	9	-	-	0.002	-	-	-
BH8A_01 Jul 04_-	BH8A	1/07/2004	water	-	7.71	-	-	-	-	-	312	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	-	0.08	1	-	-	0.001	-	-	-
BH8A_01 Oct 04_-	BH8A	1/10/2004	water	-	7.71	-	-	-	-	-	342	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	-	0.16	2	-	-	0.002	-	-	-
BH8A_01 Jan 05_-	BH8A	1/01/2005	water	-	7.78	-	-	-	-	-	342	-	-	-	-	-	-	-	-	-	-	-	-	-	***1.15***	-	-	-	0.131	2	-	-	0.002	-	-	<0.001
BH8A_01 Apr 05_-	BH8A	1/04/2005	water	-	7.3	-	-	-	-	-	334	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.036***	-	-	-	0.052	1	-	-	0.001	-	-	-
BH8A_01 Jul 05_-	BH8A	1/07/2005	water	-	**8.07**	-	-	-	-	-	278	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	-	0.062	1	-	-	0.001	-	-	-
BH8A_01 Oct 05_-	BH8A	1/10/2005	water	-	7.32	-	-	-	-	-	332	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.068***	-	-	-	0.05	1	-	-	0.001	-	-	-
BH8A_01 Jan 06_-	BH8A	1/01/2006	water	-	7.6	-	-	-	-	-	352	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	-	0.035	1	-	-	0.001	-	-	0.002
BH8A_01 Apr 06_-	BH8A	1/04/2006	water	-	7.3	-	-	-	-	-	306	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	-	0.065	1	-	-	0.001	-	-	-
BH8A_01 Jul 06_-	BH8A	1/07/2006	water	-	7.4	-	-	-	-	-	344	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.122	2	-	-	0.001	-	-	-
BH8A_01 Oct 06_-	BH8A	1/10/2006	water	-	-	-	-	-	-	-	428	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.079	-	-	-	0.001	-	-	-
BH8A_01 Jan 07_-	BH8A	1/01/2007	water	-	7.36	-	-	-	-	-	406	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.066***	-	-	-	0.212	2	-	-	0.002	-	-	<0.001
BH8A_01 Apr 07_-	BH8A	1/04/2007	water	-	7.18	-	-	-	-	-	368	-	-	-	245	95	8	1	22	50.9	13	-	6.38	6.61	***0.051***	0.188	0.019	-	-	6	-	-	0.002	-	-	-
BH8A_17 Apr 13_-	BH8A	17/04/2013	water	16.66	7.85	**3000**	***0.29***	-17	17	7.9	300	-	250	<1	-	78	6.2	1	23	30	8	0.13	-	-	0.007	-	-	-	-	-	2	-	-	-	-	-
BH8A_09 Jul 13_-	BH8A	9/07/2013	water	16.16	7.35	**410**	**6.65**	81	16.9	7.8	390	-	250	<1	-	98	8.8	1.3	35	48	10	-	-	-		-	-	-	-	-	1	-	-	-	-	-
BH8A_29 Oct 13_-	BH8A	29/10/2013	water	16.88	7.71	**440**	***3.11***	35	18.1	7.7	360	-	230	<1	-	98	8.8	1.2	39	55	27	-	-	-	0.007	-	-	-	-	-	2	-	-	-	-	-
BH8A_28 Jan 14_-	BH8A	28/01/2014	water	16.62	7.71	**618**	8.7	73	20.2	7.4	360	-	240	<1	-	91	8.8	1.2	36	54	13	0.14	-	-		0.14	<0.01	-	-	-	1	<0.005	0.002	0.008	<0.0001	<0.001
BH8A_16 Apr 14_-	BH8A	16/04/2014	water	16.6	7.82	**533**	***6.23***	79	20.5	7.5	330	-	240	<1	-	79	7.5	1.1	36	42	10	0.14	-	-		-	-	-	-	-	<1	-	-	-	-	-
BH8A_09 Jul 14_-	BH8A	9/07/2014	water	-	**8.49**	**353**	**7.17**	45	17.9	7.1	420	-	190	<1	-	90	8.6	1.2	40	39	65	0.12	-	-		-	-	-	-	-	<1	-	-	-	-	-
BH8A_16 Oct 14_-	BH8A	16/10/2014	water	16.31	7.54	**665**	***4.39***	44	18.9	7.6	360	-	250	<1	-	98	9.1	1.3	40	57	14	0.12	-	-		-	-	-	-	-	<1	-	-	-	-	-
BH8A_21 Jan 15_-	BH8A	21/01/2015	water	16.56	7.16	**555**	***5.76***	18.3	18.3	7.6	370	-	240	<1	-	97	9.2	1.3	34	48	10	0.14	-	-		0.086	<0.01	-	-	-	2	<0.005	0.002	0.01	<0.0001	-
BH8A_23 Apr 15_-	BH8A	23/04/2015	water	16.48	7.72	**540**	***3.68***	84	19.4	7.5	370	-	240	<1	-	89	8.5	1.2	37	42	12	0.16	-	-		-	-	-	-	-	3	-	-	-	-	-
BH8A_21 Jul 15_-	BH8A	21/07/2015	water	16.22	7.26	**714**	***5.67***	49	16.6	7.1	430	-	220	<1	-	89	8.6	1.1	46	75	14	0.2	-	-		-	-	-	-	-	<1	-	-	-	-	-
BH8A_21 Oct 15_-	BH8A	21/10/2015	water	16.23	7.73	**243**	***3.4***	48	20.2	7.7	420	-	240	<1	-	90	8.8	1.2	40	68	14	0.2	-	-		-	-	-	-	-	2	-	-	-	-	-
BH8A_21 Jan 16_-	BH8A	21/01/2016	water	16.34	***6.09***	**774**	8.6	126	22.7	7.6	380	-	45	<1	-	95	9.2	1.4	37	63	13	0.2	-	-		0.27	<0.01	-	-	-	34	<0.005	0.002	0.008	<0.0001	<0.001
BH8A_19 Apr 16_-	BH8A	19/04/2016	water	16.18	***5.4***	**557**	***4.84***	55	19.6	7.7	380	-	230	<5	-	94	9.2	1.2	35	57	12	0.2	-	-		-	-	-	-	-	1	-	-	-	-	-
BH8A_13 Jul 16_-	BH8A	13/07/2016	water	16.23	7.47	**399**	***1.91***	71	14.3	7.2	710	-	560	<5	-	210	32	8.9	43	67	27	0.1	-	-		-	-	-	-	-	6	-	-	-	-	-
BH8A_18 Oct 16_-	BH8A	18/10/2016	water	16.11	*6.81*	**980**	***2.46***	-179	16	7.6	400	-	270	<5	-	100	9.9	1.2	47	55	15	0.2	-	-		-	-	-	-	-	1	-	-	-	-	-
BH8A_19 Jan 17_-	BH8A	19/01/2017	water	16.25	7.6	**614**	***6.17***	53	20.1	7.6	360	-	280	<5	-	93	8.5	1.2	37	49	15	0.1	-	-	<0.005	0.067	<0.005	-	-	-	6	<0.01	0.002	0.009	<0.0001	<0.001
BH8A_02 Jul 19_-	BH8A	2/07/2019	water	9.87	**8.17**	**455.9**	***9.78***	53.1	16.5	7.7	310	-	230	<5	-	76	7.2	1	26	42	12	0.2	-	-	**0.01**	-	-	-	-	-	<1	-	-	-	-	-
BH8A_22 Apr 20_-	BH8A	22/04/2020	water	16.59	7.7	**753**	8.03	39.9	18.1	7.5	520	-	250	<5	-	110	11	1.4	45	120	34	0.1	-	-	<0.005	-	-	-	-	-	1	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]							0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
BH9_01 Jun 94_-	BH9	1/06/1994	water	-	7.6	**1210**	-	-	-	-	580	-	-	-	-	-	-	-	-	-	-	-	-	-	***10***	-	-	-	-	18	-	-	0.0722	-	-	0.009
BH9_01 Sep 94_-	BH9	1/09/1994	water	-	7.4	**1090**	-	-	-	-	640	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.3***	-	-	-	-	58	-	-	0.117	-	-	0.004
BH9_01 Dec 94_-	BH9	1/12/1994	water	-	*7*	**1068**	-	-	-	-	676	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.3***	-	-	-	-	129	-	-	0.095	-	-	0.001
BH9_01 Mar 95_-	BH9	1/03/1995	water	-	7.2	**1242**	-	-	-	-	516	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.3***	-	-	-	-	35	-	-	0.192	-	-	0.003
BH9_01 Jun 95_-	BH9	1/06/1995	water	-	7.31	**1670**	-	-	-	-	1060	-	-	-	-	-	-	-	-	-	-	-	-	-	***4***	-	-	-	-	41	-	-	0.0149	-	-	0.002
BH9_01 Sep 95_-	BH9	1/09/1995	water	-	7.85	**1784**	-	-	-	-	1540	-	-	-	-	-	-	-	-	-	-	-	-	-	***2***	-	-	4.5	0.1	29	-	-	0.071	-	-	0.009
BH9_01 Jan 96_-	BH9	1/01/1996	water	-	7.46	**1224**	-	-	-	-	1010	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.44***	-	-	7	-	5	-	-	0.108	-	-	0.001
BH9_01 Apr 96_-	BH9	1/04/1996	water	-	7.55	**659**	-	-	-	-	680	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.79***	-	-	1.2	0.05	25	-	-	0.031	-	-	0.002
BH9_01 Jul 96_-	BH9	1/07/1996	water	-	7.95	**1655**	-	-	-	-	1560	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.99***	-	-	15.3	1.68	24	-	-	0.018	-	-	0.002
BH9A_01 Jul 96_-	BH9A	1/07/1996	water	-	***8.6***	**1229**	-	-	-	-	1020	-	-	-	-	-	-	-	-	-	-	-	-	-	***9.18***	-	-	14.6	0.06	25	-	-	0.191	-	-	0.002
BH9A_01 Oct 96_-	BH9A	1/10/1996	water	-	7.6	**1521**	-	-	-	-	982	-	-	-	-	-	-	-	-	-	-	-	-	-	***14.5***	-	-	15.4	0.45	31	-	-	0.207	-	-	0.004
BH9A_01 Jan 97_-	BH9A	1/01/1997	water	-	7.73	**1502**	-	-	-	-	780	-	-	-	-	-	-	-	-	-	-	-	-	-	***9.97***	-	-	14.7	0.43	88	-	-	0.153	-	-	0.001
BH9A_01 Apr 97_-	BH9A	1/04/1997	water	-	7.8	**1116**	-	-	-	-	792	-	-	-	-	-	-	-	-	-	-	-	-	-	***12.9***	-	-	12.9	0.02	33	-	-	0.203	-	-	0.005
BH9A_01 Jul 97_-	BH9A	1/07/1997	water	-	7.57	**1140**	-	-	-	-	632	-	-	-	-	-	-	-	-	-	-	-	-	-	***8.32***	-	-	10	0.05	28	-	-	0.186	-	-	0.002
BH9A_01 Oct 97_-	BH9A	1/10/1997	water	-	7.67	**1030**	-	-	-	-	566	-	-	-	-	-	-	-	-	-	-	-	-	-	***8.42***	-	-	10.4	0.01	17	-	-	0.17	-	-	0.001
BH9A_01 Jan 98_-	BH9A	1/01/1998	water	-	7.68	**1022**	-	-	-	-	594	-	-	-	-	-	-	-	-	-	-	-	-	-	***9.06***	-	-	8.9	0.08	18	-	-	0.165	-	-	0.008
BH9A_01 Apr 98_-	BH9A	1/04/1998	water	-	7.7	**987**	-	-	-	-	578	-	-	-	-	-	-	-	-	-	-	-	-	-	***9.51***	-	-	12.8	0.01	21	-	-	0.177	-	-	0.006
BH9A_01 Nov 98_-	BH9A	1/11/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 99_-	BH9A	1/01/1999	water	-	7.5	**957**	-	-	-	-	525	-	-	-	-	-	-	-	-	-	-	-	-	-	***9.18***	-	-	9	0.01	20	-	-	0.171	-	-	0.001
BH9A_01 Mar 99_-	BH9A	1/03/1999	water	-	7.5	**869**	-	-	-	-	512	-	-	-	-	-	-	-	-	-	-	-	-	-	***8.4***	-	-	8.1	0.05	23	-	-	0.17	-	-	0.003
BH9A_01 Jul 99_-	BH9A	1/07/1999	water	-	7.4	**990**	-	-	-	-	551	-	-	-	-	-	-	-	-	-	-	-	-	-	***4.18***	-	-	5.6	0.01	12	-	-	0.019	-	-	0.005
BH9A_01 Oct 99_-	BH9A	1/10/1999	water	-	7.5	**893**	-	-	-	-	508	-	-	-	-	-	-	-	-	-	-	-	-	-	***9.66***	-	-	12	0.01	31	-	-	0.169	-	-	0.009
BH9A_01 Jan 00_-	BH9A	1/01/2000	water	-	7.1	**720**	-	-	-	-	480	-	-	-	-	-	-	-	-	-	-	-	-	-	***6.79***	-	-	7.6	0.01	38	-	-	0.196	-	-	0.004
BH9A_01 Apr 00_-	BH9A	1/04/2000	water	-	7.5	**930**	-	-	-	-	580	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.22***	-	-	8	0.01	39	-	-	0.211	-	-	0.009
BH9A_01 Jul 00_-	BH9A	1/07/2000	water	-	7.3	**950**	-	-	-	-	570	-	-	-	-	-	-	-	-	-	-	-	-	-	***6.4***	-	-	8.8	0.01	34	-	-	0.169	-	-	0.005
BH9A_01 Oct 00_-	BH9A	1/10/2000	water	-	7.4	**970**	-	-	-	-	610	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.7***	-	-	8.8	0.01	45	-	-	0.064	-	-	0.006
BH9A_01 Jan 01_-	BH9A	1/01/2001	water	-	7.8	**840**	-	-	-	-	580	-	-	-	-	-	-	-	-	-	-	-	-	-	***9.45***	-	-	11	0.01	49	-	-	0.212	-	-	0.01
BH9A_01 Apr 01_-	BH9A	1/04/2001	water	-	7.7	**940**	-	-	-	-	620	-	-	-	-	-	-	-	-	-	-	-	-	-	***10.1***	-	-	13	0.03	41	-	-	0.197	-	-	0.004
BH9A_01 Jul 01_-	BH9A	1/07/2001	water	-	7.5	**1100**	-	-	-	-	640	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.44***	-	-	14	0.01	35	-	-	0.247	-	-	0.005
BH9A_01 Jan 02_-	BH9A	1/01/2002	water	-	7.7	**980**	-	-	-	-	610	-	-	-	-	-	-	-	-	-	-	-	-	-	***12.3***	-	-	14	0.01	21	-	-	0.124	-	-	0.003
BH9A_01 Apr 02_-	BH9A	1/04/2002	water	-	**8**	**1100**	-	-	-	-	690	-	-	-	-	-	-	-	-	-	-	-	-	-	***12.9***	-	-	1.4	0.02	29	-	-	0.205	-	-	0.005
BH9A_01 Jul 02_-	BH9A	1/07/2002	water	-	**8**	**960**	-	-	-	-	580	-	-	-	-	-	-	-	-	-	-	-	-	-	***11.5***	-	-	12	0.01	23	-	-	0.153	-	-	0.001
BH9A_01 Oct 02_-	BH9A	1/10/2002	water	-	**8.1**	**980**	-	-	-	-	590	-	-	-	-	-	-	-	-	-	-	-	-	-	***13.1***	-	-	15	<0.01	27	-	-	0.169	-	-	0.002
BH9A_01 Jan 03_-	BH9A	1/01/2003	water	-	**8.48**	**850**	-	-	-	-	600	-	-	-	-	-	-	-	-	-	-	-	-	-	***11.3***	-	-	13	0.04	32	-	-	0.145	-	-	0.002
BH9A_01 Apr 03_-	BH9A	1/04/2003	water	-	**8.03**	**1070**	-	-	-	-	570	-	-	-	-	-	-	-	-	-	-	-	-	-	***12.9***	-	-	15.2	0.01	47	-	-	0.129	-	-	0.001
BH9A_01 Jul 03_-	BH9A	1/07/2003	water	-	7.86	**1250**	-	-	-	-	826	-	-	-	-	-	-	-	-	-	-	-	-	-	***8.79***	-	-	11.7	0.01	40	-	-	0.14	-	-	0.001
BH9A_01 Oct 03_-	BH9A	1/10/2003	water	-	**8.09**	**1010**	-	-	-	-	690	-	-	-	-	-	-	-	-	-	-	-	-	-	***13.3***	-	-	20.2	0.01	55	-	-	0.193	-	-	0.002
BH9A_01 Jan 04_-	BH9A	1/01/2004	water	-	**8.35**	**1010**	-	-	-	-	756	-	-	-	-	-	-	-	-	-	-	-	-	-	***13.3***	-	-	24.8	0.01	36	-	-	0.168	-	-	0.005
BH9A_01 Apr 04_-	BH9A	1/04/2004	water	-	**8.02**	-	-	-	-	-	832	-	-	-	-	-	-	-	-	-	-	-	-	-	***12.4***	-	-	-	0.01	40	-	-	0.175	-	-	-
BH9A_01 Jul 04_-	BH9A	1/07/2004	water	-	**8.15**	-	-	-	-	-	618	-	-	-	-	-	-	-	-	-	-	-	-	-	***10.5***	-	-	-	0.78	46	-	-	0.165	-	-	-
BH9A_01 Oct 04_-	BH9A	1/10/2004	water	-	7.91	-	-	-	-	-	718	-	-	-	-	-	-	-	-	-	-	-	-	-	***7.91***	-	-	-	0.01	18	-	-	0.073	-	-	-
BH9A_01 Jan 05_-	BH9A	1/01/2005	water	-	**8.16**	-	-	-	-	-	722	-	-	-	-	-	-	-	-	-	-	-	-	-	***15.1***	-	-	-	0.018	35	-	-	0.171	-	-	0.001
BH9A_01 Apr 05_-	BH9A	1/04/2005	water	-	7.32	-	-	-	-	-	694	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.278***	-	-	-	0.027	20	-	-	0.008	-	-	-
BH9A_01 Jul 05_-	BH9A	1/07/2005	water	-	***8.51***	-	-	-	-	-	640	-	-	-	-	-	-	-	-	-	-	-	-	-	***8.61***	-	-	-	0.54	23	-	-	0.082	-	-	-
BH9A_01 Jan 07_-	BH9A	1/01/2007	water	-	7.4	**1815**	-	-	-	-	1130	-	-	-	502	119	20	21	187	136	153	0.7	16.3	17.1	***6.44***	<0.01	<0.01	-	-	40	-	0.06	0.097	0.072	<0.0001	0.002
BH9B_01 Jul 05_-	BH9B	1/07/2005	water	-	7.69	-	-	-	-	-	1720	-	-	-	-	-	-	-	-	-	-	-	-	-	***5.69***	-	-	-	<0.01	68	-	-	0.073	-	-	-
BH9B_01 Oct 06_-	BH9B	1/10/2006	water	-	7.56	-	-	-	-	-	1240	-	-	-	-	-	-	-	-	-	-	-	-	-	***8.58***	-	-	-	<0.01	44	-	-	0.101	-	-	-
BH9B_01 Jan 07_-	BH9B	1/01/2007	water	-	7.4	-	-	-	-	-	1130	-	-	-	-	-	-	-	-	-	-	-	-	-	***6.44***	-	-	-	<0.01	40	-	-	0.097	-	-	0.002
BH9B_01 Apr 07_-	BH9B	1/04/2007	water	-	7.36	-	-	-	-	-	832	-	-	-	460	86	14	22	178	156	73	-	13.8	15.1	***11.9***	0.014	<0.01	-	-	47	-	-	0.118	-	-	-
BH9C_17 Apr 13_-	BH9C	17/04/2013	water	4.54	7.26	**861**	***0.62***	-9	25	7.3	640	-	450	<1	-	150	17	11	50	62	45	0.2	-	-	***1.5***	-	-	-	-	-	52	-	-	-	-	-
BH9C_09 Jul 13_-	BH9C	9/07/2013	water	4.38	7.19	**1210**	***2.1***	-112	18.9	7.8	810	-	550	<1	-	140	20	26	120	100	10	-	-	-	***16***	-	-	-	-	-	29	-	-	-	-	-
BH9C_29 Oct 13_-	BH9C	29/10/2013	water	5.57	7.29	**1210**	***3.9***	-130	7.3	7.4	720	-	570	<1	-	170	21	21	99	81	40	-	-	-	***15***	-	-	-	-	-	60	-	-	-	-	-
BH9C_28 Jan 14_-	BH9C	28/01/2014	water	5.75	7.08	**1077**	***2.96***	44	19.4	*7*	620	-	480	<1	-	9	16	13	60	62	39	0.22	-	-	***5.6***	0.19	0.083	-	-	-	66	0.01	0.012	0.05	<0.0001	<0.001
BH9C_16 Apr 14_-	BH9C	16/04/2014	water	5.74	*6.95*	**1136**	***1.42***	270	18.4	*6.9*	690	-	530	<1	-	170	20	15	64	61	52	0.18	-	-	***7.8***	-	-	-	-	-	32	-	-	-	-	-
BH9C_07 Jul 14_-	BH9C	7/07/2014	water	5.6	7.31	**46.8**	***2.72***	496	17.3	*7*	780	-	540	<1	-	170	19	16	68	64	53	0.19	-	-	***8.4***	-	-	-	-	-	95	-	-	-	-	-
BH9C_15 Oct 14_-	BH9C	15/10/2014	water	5.23	*6.99*	**1614**	***0.64***	-91	17.8	*7*	1100	-	1700	<1	-	410	43	36	190	150	85	0.2	-	-	***29***	-	-	-	-	-	120	-	-	-	-	-
BH9C_20 Jan 15_-	BH9C	20/01/2015	water	5.74	***6.18***	**894**	***0.29***	13	19.5	*6.6*	690	-	480	<1	-	160	20	14	58	57	49	0.22	-	-	***6.6***	0.072	0.058	-	-	-	35	<0.005	0.006	0.095	<0.0001	-
BH9C_22 Apr 15_-	BH9C	22/04/2015	water	4.99	*7*	**1739**	***0.12***	-79	17.9	*6.8*	1400	-	1200	<1	-	350	35	35	200	150	110	0.19	-	-	***27***	-	-	-	-	-	280	-	-	-	-	-
BH9C_21 Jul 15_-	BH9C	21/07/2015	water	5.3	*6.84*	**913**	***0.41***	-124	18.9	*6.8*	630	-	710	<1	-	230	19	11	58	50	41	0.2	-	-	***6.5***	-	-	-	-	-	280	-	-	-	-	-
BH9C_20 Oct 15_-	BH9C	20/10/2015	water	5.65	*6.85*	**1700**	***1.92***	95	24.1	7.1	510	-	440	<1	-	180	16	8.1	47	39	45	0.2	-	-	***4.6***	-	-	-	-	-	110	-	-	-	-	-
BH9C_20 Jan 16_-	BH9C	20/01/2016	water	5.45	7.2	**927**	***3.67***	69	23.2	7.2	620	-	480	<1	-	210	17	11	59	45	50	0.2	-	-	***5.8***	2	0.16	-	-	-	150	0.01	0.012	0.079	<0.0001	<0.001
BH9C_14 Apr 16_-	BH9C	14/04/2016	water	5.65	*6.88*	**877**	***1.7***	42	20	*6.9*	530	-	550	<5	-	330	15	7.7	41	32	46	0.3	-	-	***0.89***	-	-	-	-	-	430	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity			Major Ions									Nutrients					Organic Indicators		Metals				
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*													*0.015* [#2]											
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**													**0.01** [#2]											
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																						0.9 [#3]							0.055 [#4]	0.013 [#5]		0.0002	0.001 [#6]
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																	
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																						0.91 [#7]										0.0055	0.0044 [#8]
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																	

Sample ID	Location Code	Date	Matrix Type																															
BH9C_13 Jul 16_-	BH9C	13/07/2016	water	5.17	***6.31***	**1749**	***2.15***	16.8	16.8	7.2	800	-	640	<5	-	220	29	22	100	83	86	0.2	-	-	***22***	-	-	-	-	-	100	-	-	-	-	-
BH9C_18 Oct 16_-	BH9C	18/10/2016	water	5.54	7.23	**477**	***2.41***	48	20.3	*7*	450	-	520	<5	-	250	20	7.5	28	23	19	0.2	-	-	***4.8***	-	-	-	-	-	230	-	-	-	-	-
BH9C_19 Jan 17_-	BH9C	19/01/2017	water	5.75	7.05	**691**	***1.6***	11	21.5	*6.9*	460	-	500	<5	-	310	17	6.2	26	23	31	0.2	-	-	***1.5***	0.51	0.021	-	-	-	490	<0.01	0.012	0.09	<0.0001	<0.001
BH9C_02 Jul 19_-	BH9C	2/07/2019	water	5.72	7.07	**1110**	8.28	-6.2	16.3	*7*	810	-	580	<5	-	190	23	16	71	85	88	0.2	-	-	***13***	-	-	-	-	-	150	-	-	-	-	-
BH9C_24 Oct 19_-	BH9C	24/10/2019	water	5.9	*6.9*	**830**	***3.02***	73.7	20.4	*6.9*	570	-	340	<5	-	160	9	5.9	26	32	86	0.2	-	-	***0.19***	-	-	-	-	-	30	-	-	-	-	-
BH9C_13 Jan 20_-	BH9C	13/01/2020	water	5.99	7.45	**828**	7.55	-415.7	20.3	*7*	680	-	370	<5	-	150	11	8	39	59	100	0.2	-	-	***4.5***	0.67	0.009	-	-	-	10	0.04	0.008	0.06	<0.0001	<0.001
BH9C_23 Apr 20_-	BH9C	23/04/2020	water	5.66	7.14	**1059**	***3.02***	0.9	21.5	7.3	680	-	480	<5	-	140	24	13	57	60	77	0.2	-	-	***12***	-	-	-	-	-	27	-	-	-	-	-
Statistical Summary																																		
Number of Results				404	1114	887	421	421	421	420	1116	2	420	420	22	440	442	442	442	441	441	387	22	22	1115	127	127	431	628	695	420	106	801	106	106	610
Number of Detects				404	1114	887	421	421	421	420	1116	2	420	0	22	440	442	442	442	441	440	286	22	22	1012	104	56	423	592	691	415	29	756	106	6	475
Minimum Concentration				0.43	5.17	2.1	0.03	-1033	7.3	5.8	94	740	40	<1	106	9	2.9	1	11	9	2	<0.1	3.25	3.34	<0.005	<0.005	<0.005	0.01	<0.01	<1	<1	<0.005	0	0.003	<0.0001	0.0005
Minimum Detect				0.43	5.17	2.1	0.03	ND	7.3	5.8	94	740	40	ND	106	9	2.9	1	11	9	2	0.1	3.25	3.34	0.005	0.006	0.005	0.01	0.01	1	1	0.01	0.001	0.003	0.0002	0.0005
Maximum Concentration				29.8	10.72	36800	10.15	496	28.4	8.1	3900	1100	1900	<5	686	1200	88	170	540	1000	480	0.7	20	22.1	240	51	0.31	24.8	32	129	490	0.2	0.328	0.29	0.0011	0.03
Maximum Detect				29.8	10.72	36800	10.15	496	28.4	8.1	3900	1100	1900	ND	686	1200	88	170	540	1000	480	0.7	20	22.1	240	51	0.31	24.8	32	129	490	0.2	0.328	0.29	0.0011	0.03
Average Concentration				7.4	7.3	985	2.6	-12	19	7.2	643		378	1.3	365	156	21	9.8	75	86	97	0.15	11	12	2.1	1.9	0.028	2.8	1.7	14	27	0.014	0.029	0.049	0.000086	0.0026
Median Concentration				4.29	7.3	913	2.3	-4	19.3	7.2	610	920	370	0.5	398	150	19	7.8	55	60	75	0.13	10.7	11.45	0.24	0.12	0.005	1.1	0.16	10	10	0.005	0.004	0.0275	0.00005	0.001
Standard Deviation				7	0.49	1308	1.8	123	2.6	0.38	313		209	0.99	157	85	12	10	60	82	85	0.092	4.3	4.8	8	5.5	0.056	4	3.7	13	51	0.03	0.055	0.055	0.00016	0.0033
Number of Guideline Exceedances				0	385	886	414	0	0	144	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1038	0	0	0	0	0	0	6	245	0	6	481
Number of Guideline Exceedances(Detects Only)				0	385	886	414	0	0	144	0	2	0	0	0	0	0	0	0	0	0	0	0	0	976	0	0	0	0	0	0	6	245	0	6	473

Env Stds Comments
#1:calculated from % Saturation
#2:assumed same as NH4
#3:Measured as NH3-N at pH 8
#4:(pH >6.5)
#5:In absence of total As guideline, As (V) guideline has been adopted.
#6:Guideline for Cr (VI) adopted
#7:Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#8:In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#9:Freshwater DGV adopted (insufficient marine toxicity data)

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																								
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																								
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																						
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																												
AB01_01 Jul 01_-	AB01	1/07/2001	water	-	-	<0.001	-	<0.001	-	-	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Oct 01_-	AB01	1/10/2001	water	-	-	<0.001	-	<0.001	-	-	0.036	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Jan 02_-	AB01	1/01/2002	water	-	-	0.001	-	<0.001	-	-	0.033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Apr 02_-	AB01	1/04/2002	water	-	-	<0.001	-	<0.001	-	-	0.018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Jul 02_-	AB01	1/07/2002	water	-	-	<0.001	-	<0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Apr 03_-	AB01	1/04/2003	water	-	-	<0.001	-	<0.001	-	-	0.026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Jul 04_-	AB01	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Jan 05_-	AB01	1/01/2005	water	-	-	<0.001	-	<0.001	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jun 94_-	BH10	1/06/1994	water	-	-	0.005	-	0.003	-	-	0.034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Sep 94_-	BH10	1/09/1994	water	-	-	0.006	-	0.003	-	-	0.043	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Dec 94_-	BH10	1/12/1994	water	-	-	0.002	-	0.001	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Mar 95_-	BH10	1/03/1995	water	-	-	0.003	-	0.001	-	-	0.045	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jun 95_-	BH10	1/06/1995	water	-	-	0.006	-	0.003	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Sep 95_-	BH10	1/09/1995	water	-	-	0.002	-	0.001	-	-	0.038	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 96_-	BH10	1/01/1996	water	-	-	0.001	-	0.001	-	-	0.079	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 96_-	BH10	1/04/1996	water	-	-	0.002	-	0.001	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 96_-	BH10	1/07/1996	water	-	-	0.002	-	0.013	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 96_-	BH10	1/10/1996	water	-	-	0.003	-	0.001	-	-	0.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 97_-	BH10	1/01/1997	water	-	-	0.001	-	0.001	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 97_-	BH10	1/04/1997	water	-	-	0.001	-	0.001	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 97_-	BH10	1/07/1997	water	-	-	0.001	-	0.001	-	-	0.006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 97_-	BH10	1/10/1997	water	-	-	0.001	-	0.001	-	-	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 98_-	BH10	1/01/1998	water	-	-	0.003	-	0.001	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 98_-	BH10	1/04/1998	water	-	-	0.001	-	0.001	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 98_-	BH10	1/07/1998	water	-	-	0.001	-	0.001	-	-	0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 98_-	BH10	1/10/1998	water	-	-	0.001	-	0.002	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 99_-	BH10	1/01/1999	water	-	-	0.001	-	0.001	-	-	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Mar 99_-	BH10	1/03/1999	water	-	-	0.012	-	0.001	-	-	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 99_-	BH10	1/07/1999	water	-	-	0.002	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 99_-	BH10	1/10/1999	water	-	-	0.001	-	0.001	-	-	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 00_-	BH10	1/01/2000	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 00_-	BH10	1/04/2000	water	-	-	0.003	-	0.001	-	-	0.019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 00_-	BH10	1/07/2000	water	-	-	0.001	-	0.001	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 00_-	BH10	1/10/2000	water	-	-	0.001	-	0.001	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 01_-	BH10	1/01/2001	water	-	-	0.001	-	0.001	-	-	0.032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 01_-	BH10	1/04/2001	water	-	-	0.001	-	0.001	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 01_-	BH10	1/07/2001	water	-	-	0.002	-	0.001	-	-	0.051	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 01_-	BH10	1/10/2001	water	-	-	0.002	-	0.001	-	-	0.042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 02_-	BH10	1/01/2002	water	-	-	0.001	-	0.001	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 02_-	BH10	1/04/2002	water	-	-	0.002	-	<0.001	-	-	0.054	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 02_-	BH10	1/07/2002	water	-	-	0.001	-	<0.001	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 02_-	BH10	1/10/2002	water	-	-	<0.001	-	<0.001	-	-	0.025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 03_-	BH10	1/01/2003	water	-	-	<0.001	-	<0.001	-	-	0.047	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 03_-	BH10	1/04/2003	water	-	-	0.002	-	0.001	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 03_-	BH10	1/07/2003	water	-	-	0.001	-	0.001	-	-	0.026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 03_-	BH10	1/10/2003	water	-	-	0.001	-	0.001	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 04_-	BH10	1/01/2004	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_29 Jul 14_-	BH10	29/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_15 Oct 14_-	BH10	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_20 Jan 15_-	BH10	20/01/2015	water	<0.01	<0.001	<0.001	-	<0.001	0.32		0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH10_22 Apr 15_-	BH10	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_21 Jul 15_-	BH10	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_20 Oct 15_-	BH10	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_20 Jan 16_-	BH10	20/01/2016	water	<0.01	<0.001	0.001	-	<0.001	0.23		<0.001	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH10_14 Apr 16_-	BH10	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_13 Jul 16_-	BH10	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_18 Oct 16_-	BH10	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 01_-	BH10A	1/07/2001	water	-	-	0.001	-	0.001	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Oct 01_-	BH10A	1/10/2001	water	-	-	0.001	-	0.001	-	-	0.047	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 02_-	BH10A	1/01/2002	water	-	-	0.001	-	0.001	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 02_-	BH10A	1/04/2002	water	-	-	<0.001	-	<0.001	-	-	0.059	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 02_-	BH10A	1/07/2002	water	-	-	<0.001	-	<0.001	-	-	0.059	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16														PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																									
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																									
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																							
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																													
Sample ID	**Location Code**	**Date**	**Matrix Type**																																							
BH10A_01 Oct 02_-	BH10A	1/10/2002	water	-	-	<0.001	-	<0.001	-	-	0.033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 03_-	BH10A	1/01/2003	water	-	-	<0.001	-	<0.001	-	-	0.062	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 03_-	BH10A	1/04/2003	water	-	-	0.003	-	0.001	-	-	0.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 03_-	BH10A	1/07/2003	water	-	-	0.001	-	0.001	-	-	0.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Oct 03_-	BH10A	1/10/2003	water	-	-	0.001	-	0.001	-	-	0.032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 04_-	BH10A	1/01/2004	water	-	-	0.001	-	0.001	-	-	0.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 04_-	BH10A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 04_-	BH10A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Oct 04_-	BH10A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 05_-	BH10A	1/01/2005	water	-	-	0.001	-	0.001	-	-	0.035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 05_-	BH10A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 05_-	BH10A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Oct 05_-	BH10A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 06_-	BH10A	1/01/2006	water	-	-	<0.001	-	<0.001	-	-	0.062	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 06_-	BH10A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 06_-	BH10A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Oct 06_-	BH10A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 07_-	BH10A	1/01/2007	water	-	-	<0.001	-	<0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 07_-	BH10A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_12 Apr 17_-	BH10B	12/04/2017	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_05 Jul 17_-	BH10B	5/07/2017	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_09 Oct 17_-	BH10B	9/10/2017	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_15 Jan 18_-	BH10B	15/01/2018	water	<0.05	<0.001	0.001	-	<0.001	0.35	<0.00005	0.036	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH10B_23 Apr 18_-	BH10B	23/04/2018	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_09 Jul 18_-	BH10B	9/07/2018	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_08 Oct 18_-	BH10B	8/10/2018	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_22 Jan 19_-	BH10B	22/01/2019	water	<0.005	<0.001	<0.001	-	<0.001	0.44	<0.00005	0.035	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH10B_09 Apr 19_-	BH10B	9/04/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_02 Jul 19_-	BH10B	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_24 Oct 19_-	BH10B	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_15 Jan 20_-	BH10B	15/01/2020	water	<0.005	<0.001	<0.001	-	<0.001	0.52	<0.00005	0.011	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	84	140	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH10B_22 Apr 20_-	BH10B	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jun 94_-	BH11	1/06/1994	water	-	-	0.005	-	0.003	-	-	0.058	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Sep 94_-	BH11	1/09/1994	water	-	-	0.005	-	0.003	-	-	0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Dec 94_-	BH11	1/12/1994	water	-	-	0.001	-	0.001	-	-	0.078	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Mar 95_-	BH11	1/03/1995	water	-	-	0.002	-	0.001	-	-	0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jun 95_-	BH11	1/06/1995	water	-	-	0.001	-	0.001	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Sep 95_-	BH11	1/09/1995	water	-	-	0.002	-	0.001	-	-	0.038	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 96_-	BH11	1/01/1996	water	-	-	0.001	-	0.001	-	-	0.105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 96_-	BH11	1/04/1996	water	-	-	0.002	-	0.004	-	-	0.102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 96_-	BH11	1/07/1996	water	-	-	0.001	-	0.001	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 96_-	BH11	1/10/1996	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 97_-	BH11	1/01/1997	water	-	-	0.002	-	0.001	-	-	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 97_-	BH11	1/04/1997	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 97_-	BH11	1/07/1997	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 97_-	BH11	1/10/1997	water	-	-	0.001	-	0.001	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 98_-	BH11	1/01/1998	water	-	-	0.002	-	0.001	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 98_-	BH11	1/04/1998	water	-	-	0.001	-	0.001	-	-	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 98_-	BH11	1/07/1998	water	-	-	0.001	-	0.001	-	-	0.096	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 98_-	BH11	1/10/1998	water	-	-	0.005	-	0.003	-	-	0.406	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Nov 98_-	BH11	1/11/1998	water	-	-	-	-	0.002	-	-	0.021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 99_-	BH11	1/01/1999	water	-	-	0.002	-	0.001	-	-	0.042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Mar 99_-	BH11	1/03/1999	water	-	-	0.007	-	0.001	-	-	0.048	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 99_-	BH11	1/07/1999	water	-	-	0.001	-	0.001	-	-	0.045	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 99_-	BH11	1/10/1999	water	-	-	0.004	-	0.001	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 00_-	BH11	1/01/2000	water	-	-	0.001	-	0.001	-	-	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 00_-	BH11	1/04/2000	water	-	-	0.001	-	0.001	-	-	0.032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 00_-	BH11	1/07/2000	water	-	-	0.001	-	0.001	-	-	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 00_-	BH11	1/10/2000	water	-	-	0.001	-	0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 01_-	BH11	1/01/2001	water	-	-	0.001	-	0.001	-	-	0.041	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 01_-	BH11	1/04/2001	water	-	-	0.001	-	0.001	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 01_-	BH11	1/07/2001	water	-	-	0.001	-	0.001	-	-	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																								
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																								
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																						
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																												

Sample ID	Location Code	Date	Matrix Type																																							
BH11_01 Oct 01_-	BH11	1/07/2001	water	-	-	0.001	-	0.001	-	-	0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 02_-	BH11	1/01/2002	water	-	-	0.001	-	0.001	-	-	0.057	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 02_-	BH11	1/04/2002	water	-	-	<0.001	-	<0.001	-	-	0.049	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 02_-	BH11	1/07/2002	water	-	-	<0.001	-	<0.001	-	-	0.052	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 02_-	BH11	1/10/2002	water	-	-	<0.001	-	<0.001	-	-	0.068	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 03_-	BH11	1/01/2003	water	-	-	<0.001	-	<0.001	-	-	0.055	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 03_-	BH11	1/04/2003	water	-	-	0.002	-	0.001	-	-	0.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 03_-	BH11	1/07/2003	water	-	-	0.001	-	0.001	-	-	0.032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 03_-	BH11	1/10/2003	water	-	-	0.001	-	0.001	-	-	0.032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 04_-	BH11	1/01/2004	water	-	-	0.001	-	0.001	-	-	0.035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 04_-	BH11	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 04_-	BH11	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 05_-	BH11	1/01/2005	water	-	-	0.001	-	0.001	-	-	0.006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 05_-	BH11	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 05_-	BH11	1/07/2005	water	-	-	<0.001	-	<0.001	-	-	0.006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 06_-	BH11	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 06_-	BH11	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 06_-	BH11	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 07_-	BH11	1/01/2007	water	-	-	<0.001	-	<0.001	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 07_-	BH11	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_01 Jan 06_-	BH11A	1/01/2006	water	-	-	<0.001	-	<0.001	-	-	0.006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_16 Apr 13_-	BH11A	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_09 Jul 13_-	BH11A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_29 Oct 13_-	BH11A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_28 Jan 14_-	BH11A	28/01/2014	water	<0.005	0.02	<0.001	-	<0.001	0.38		0.01	<1	<1	<1	<2	<1	-	-	-	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH11A_16 Apr 14_-	BH11A	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_16 Apr 14_-2	BH11A	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_09 Jul 14_-	BH11A	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_16 Oct 14_-	BH11A	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_21 Jan 15_-	BH11A	21/01/2015	water	<0.01	0.006	<0.001	-	<0.001	0.57	0.00005	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH11A_23 Apr 15_-	BH11A	23/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_21 Jul 15_-	BH11A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_21 Oct 15_-	BH11A	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_21 Jan 16_-	BH11A	21/01/2016	water	<0.01	0.009	<0.001	-	<0.001	0.38		0.051	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH11A_19 Apr 16_-	BH11A	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_13 Jul 16_-	BH11A	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_18 Oct 16_-	BH11A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_19 Jan 17_-	BH11A	19/01/2017	water	<0.005	0.022	<0.001	-	<0.001	0.59	<0.00005	0.014	<1	<1	<1	<1	-	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH11A_25 Jan 17_-	BH11A	25/01/2017	water	<0.05	<0.001	<0.001	-	<0.001	0.31	<0.00005	0.001	<1	<1	<1	<1	-	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH11A_02 Jul 19_-	BH11A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_25 Oct 19_-	BH11A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_14 Jan 20_-	BH11A	14/01/2020	water	<0.5	<0.001	0.002	-	<0.001	0.45	<0.00005	0.016	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH11A_22 Apr 20_-	BH11A	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Sep 94_-	BH12	1/09/1994	water	-	-	0.005	-	0.003	-	-	0.039	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Dec 94_-	BH12	1/12/1994	water	-	-	0.003	-	0.001	-	-	0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Mar 95_-	BH12	1/03/1995	water	-	-	0.002	-	0.001	-	-	0.049	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Jun 95_-	BH12	1/06/1995	water	-	-	0.001	-	0.001	-	-	0.053	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Sep 95_-	BH12	1/09/1995	water	-	-	0.005	-	0.001	-	-	0.081	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Jan 96_-	BH12	1/01/1996	water	-	-	0.001	-	0.001	-	-	0.154	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Apr 96_-	BH12	1/04/1996	water	-	-	0.002	-	0.002	-	-	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Jul 96_-	BH12	1/07/1996	water	-	-	0.001	-	0.001	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Oct 96_-	BH12	1/10/1996	water	-	-	0.003	-	0.002	-	-	0.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Jan 97_-	BH12	1/01/1997	water	-	-	0.002	-	0.001	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Apr 97_-	BH12	1/04/1997	water	-	-	0.003	-	0.001	-	-	0.026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Jul 97_-	BH12	1/07/1997	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Oct 97_-	BH12	1/10/1997	water	-	-	0.002	-	0.001	-	-	0.053	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Jan 98_-	BH12	1/01/1998	water	-	-	0.002	-	0.001	-	-	0.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Apr 98_-	BH12	1/04/1998	water	-	-	0.003	-	0.001	-	-	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Jul 98_-	BH12	1/07/1998	water	-	-	0.001	-	0.002	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Oct 98_-	BH12	1/10/1998	water	-	-	0.005	-	0.001	-	-	0.023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Jan 99_-	BH12	1/01/1999	water	-	-	0.002	-	0.001	-	-	0.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Mar 99_-	BH12	1/03/1999	water	-	-	0.006	-	0.001	-	-	0.056	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																								
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																								
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																						
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																												

Sample ID	Location Code	Date	Matrix Type																																								
BH12_01 Jul 99_-	BH12	1/07/1999	water	-	-	0.001	-	0.001	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Oct 99_-	BH12	1/10/1999	water	-	-	0.003	-	0.001	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 00_-	BH12A	1/04/2000	water	-	-	0.002	-	0.001	-	-	0.386	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 00_-	BH12A	1/07/2000	water	-	-	0.002	-	0.001	-	-	0.033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 00_-	BH12A	1/10/2000	water	-	-	0.001	-	0.001	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 01_-	BH12A	1/01/2001	water	-	-	0.001	-	0.001	-	-	0.058	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 01_-	BH12A	1/04/2001	water	-	-	0.001	-	0.001	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 01_-	BH12A	1/07/2001	water	-	-	0.001	-	0.001	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 01_-	BH12A	1/10/2001	water	-	-	0.001	-	0.001	-	-	0.043	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 02_-	BH12A	1/01/2002	water	-	-	0.001	-	0.001	-	-	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 02_-	BH12A	1/04/2002	water	-	-	<0.001	-	<0.001	-	-	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 02_-	BH12A	1/07/2002	water	-	-	<0.001	-	<0.001	-	-	0.023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 02_-	BH12A	1/10/2002	water	-	-	<0.001	-	<0.001	-	-	0.048	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 03_-	BH12A	1/01/2003	water	-	-	<0.001	-	<0.001	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 03_-	BH12A	1/04/2003	water	-	-	0.001	-	0.003	-	-	0.021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 03_-	BH12A	1/07/2003	water	-	-	0.001	-	0.001	-	-	0.028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 03_-	BH12A	1/10/2003	water	-	-	0.001	-	0.001	-	-	0.032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 04_-	BH12A	1/01/2004	water	-	-	0.001	-	0.001	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 04_-	BH12A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 04_-	BH12A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 04_-	BH12A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 05_-	BH12A	1/01/2005	water	-	-	0.01	-	0.01	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 05_-	BH12A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 05_-	BH12A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 05_-	BH12A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 06_-	BH12A	1/01/2006	water	-	-	<0.001	-	<0.001	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 06_-	BH12A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 06_-	BH12A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 06_-	BH12A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 07_-	BH12A	1/01/2007	water	-	-	0.001	-	<0.001	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 07_-	BH12A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_17 Apr 13_-	BH12A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_09 Jul 13_-	BH12A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_29 Oct 13_-	BH12A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_28 Jan 14_-	BH12A	28/01/2014	water	<0.005	<0.001	0.003	-	<0.001	0.029		0.012	<1	2	<1	<2	<1	-	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH12A_14 Apr 14_-	BH12A	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_07 Jul 14_-	BH12A	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_15 Oct 14_-	BH12A	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_21 Jan 15_-	BH12A	21/01/2015	water	<0.01	0.002	0.003	-	<0.001	0.087		0.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH12A_23 Apr 15_-	BH12A	23/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_21 Jul 15_-	BH12A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_20 Oct 15_-	BH12A	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_21 Jan 16_-	BH12A	21/01/2016	water	<0.01	0.001	0.002	-	<0.001	0.053		0.026	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH12A_14 Apr 16_-	BH12A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_21 Jul 16_-	BH12A	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_18 Oct 16_-	BH12A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_19 Jan 17_-	BH12A	19/01/2017	water	<0.005	0.001	0.001	-	<0.001	0.03	<0.00005	0.005	<1	<1	<1	<1	-	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH12A_03 Jul 19_-	BH12A	3/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_25 Oct 19_-	BH12A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_13 Jan 20_-	BH12A	13/01/2020	water	<0.005	0.003	0.009	-	<0.001	0.16	<0.00005	0.066	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	70	300	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH12A_23 Apr 20_-	BH12A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Dec 94_-	BH13	1/12/1994	water	-	-	0.009	-	0.001	-	-	0.033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Mar 95_-	BH13	1/03/1995	water	-	-	0.002	-	0.001	-	-	0.028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jun 95_-	BH13	1/06/1995	water	-	-	0.001	-	0.001	-	-	0.028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Sep 95_-	BH13	1/09/1995	water	-	-	0.002	-	0.001	-	-	0.036	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jan 96_-	BH13	1/01/1996	water	-	-	0.001	-	0.001	-	-	0.173	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Apr 96_-	BH13	1/04/1996	water	-	-	0.002	-	0.002	-	-	0.036	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jul 96_-	BH13	1/07/1996	water	-	-	0.001	-	0.001	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Oct 96_-	BH13	1/10/1996	water	-	-	0.002	-	0.002	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jan 97_-	BH13	1/01/1997	water	-	-	0.002	-	0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Apr 97_-	BH13	1/04/1997	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jul 97_-	BH13	1/07/1997	water	-	-	0.001	-	0.001	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																								
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																								
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																						
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																												

Sample ID	Location Code	Date	Matrix Type																																								
BH13_01 Oct 97_-	BH13	1/10/1997	water	-	-	0.001	-	0.001	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jan 98_-	BH13	1/01/1998	water	-	-	0.001	-	0.001	-	-	0.006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Apr 98_-	BH13	1/04/1998	water	-	-	0.001	-	0.007	-	-	0.059	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jul 98_-	BH13	1/07/1998	water	-	-	0.008	-	0.002	-	-	0.162	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Oct 98_-	BH13	1/10/1998	water	-	-	0.002	-	0.001	-	-	0.018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jan 99_-	BH13	1/01/1999	water	-	-	0.009	-	0.001	-	-	0.046	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Mar 99_-	BH13	1/03/1999	water	-	-	0.001	-	0.001	-	-	0.023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jul 99_-	BH13	1/07/1999	water	-	-	0.001	-	0.001	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Oct 99_-	BH13	1/10/1999	water	-	-	0.002	-	0.001	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jan 00_-	BH13	1/01/2000	water	-	-	0.001	-	0.001	-	-	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 00_-	BH13A	1/04/2000	water	-	-	0.001	-	0.001	-	-	0.052	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 00_-	BH13A	1/07/2000	water	-	-	0.002	-	0.001	-	-	0.033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 00_-	BH13A	1/10/2000	water	-	-	0.001	-	0.001	-	-	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 01_-	BH13A	1/01/2001	water	-	-	0.002	-	0.001	-	-	0.051	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 01_-	BH13A	1/04/2001	water	-	-	0.002	-	0.001	-	-	0.034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 01_-	BH13A	1/07/2001	water	-	-	0.001	-	0.001	-	-	0.044	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 01_-	BH13A	1/10/2001	water	-	-	0.001	-	0.001	-	-	0.056	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 02_-	BH13A	1/01/2002	water	-	-	0.001	-	0.001	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 02_-	BH13A	1/04/2002	water	-	-	<0.001	-	<0.001	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 02_-	BH13A	1/07/2002	water	-	-	<0.001	-	<0.001	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 02_-	BH13A	1/10/2002	water	-	-	0.001	-	<0.001	-	-	0.031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 03_-	BH13A	1/01/2003	water	-	-	0.002	-	<0.001	-	-	0.065	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 03_-	BH13A	1/04/2003	water	-	-	0.001	-	0.001	-	-	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 03_-	BH13A	1/07/2003	water	-	-	0.001	-	0.001	-	-	0.028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 03_-	BH13A	1/10/2003	water	-	-	0.001	-	0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 04_-	BH13A	1/01/2004	water	-	-	0.001	-	0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 04_-	BH13A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 04_-	BH13A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 04_-	BH13A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 05_-	BH13A	1/01/2005	water	-	-	0.01	-	0.01	-	-	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 05_-	BH13A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 05_-	BH13A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 05_-	BH13A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 06_-	BH13A	1/01/2006	water	-	-	<0.001	-	<0.001	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 06_-	BH13A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 06_-	BH13A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 06_-	BH13A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 07_-	BH13A	1/01/2007	water	-	-	<0.001	-	<0.001	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 07_-	BH13A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_17 Apr 13_-	BH13A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_09 Jul 13_-	BH13A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_29 Oct 13_-	BH13A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_28 Jan 14_-	BH13A	28/01/2014	water	<0.005	<0.001	<0.001	-	<0.001	<0.001		0.002	<1	<1	<1	<2	<1	-	-	-	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH13A_14 Apr 14_-	BH13A	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_07 Jul 14_-	BH13A	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_15 Oct 14_-	BH13A	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_27 Apr 15_-	BH13A	27/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_21 Jul 15_-	BH13A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_20 Oct 15_-	BH13A	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_21 Jan 16_-	BH13A	21/01/2016	water	<0.01	<0.001	<0.001	-	<0.001	<0.001		<0.001	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH13A_19 Apr 16_-	BH13A	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_21 Jul 16_-	BH13A	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_18 Oct 16_-	BH13A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_03 Jul 19_-	BH13A	3/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_25 Oct 19_-	BH13A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_13 Jan 20_-	BH13A	13/01/2020	water	<0.005	0.002	0.008	-	<0.001	0.5	<0.00005	0.055	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	65	170	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH13A_23 Apr 20_-	BH13A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 97_-	BH14	1/01/1997	water	-	-	0.001	-	0.001	-	-	0.006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 97_-	BH14	1/04/1997	water	-	-	0.002	-	0.001	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 97_-	BH14	1/07/1997	water	-	-	0.001	-	0.001	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 97_-	BH14	1/10/1997	water	-	-	0.001	-	0.001	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 98_-	BH14	1/01/1998	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																								
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																								
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																						
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																												

Sample ID	Location Code	Date	Matrix Type																																								
BH14_01 Apr 98_-	BH14	1/04/1998	water	-	-	0.001	-	0.004	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 98_-	BH14	1/07/1998	water	-	-	0.001	-	0.002	-	-	0.036	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 98_-	BH14	1/10/1998	water	-	-	0.015	-	0.001	-	-	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 99_-	BH14	1/01/1999	water	-	-	0.002	-	0.001	-	-	0.052	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Mar 99_-	BH14	1/03/1999	water	-	-	0.002	-	0.001	-	-	0.059	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 99_-	BH14	1/07/1999	water	-	-	0.003	-	0.001	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 99_-	BH14	1/10/1999	water	-	-	0.001	-	0.001	-	-	0.022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 00_-	BH14	1/01/2000	water	-	-	0.001	-	0.001	-	-	0.035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 00_-	BH14	1/04/2000	water	-	-	0.001	-	0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 00_-	BH14	1/07/2000	water	-	-	0.002	-	0.001	-	-	0.058	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 00_-	BH14	1/10/2000	water	-	-	0.001	-	0.001	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 01_-	BH14	1/01/2001	water	-	-	0.002	-	0.001	-	-	0.023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 01_-	BH14	1/04/2001	water	-	-	0.002	-	0.001	-	-	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 01_-	BH14	1/07/2001	water	-	-	0.003	-	0.001	-	-	0.044	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 01_-	BH14	1/10/2001	water	-	-	0.002	-	0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 02_-	BH14	1/01/2002	water	-	-	0.001	-	0.001	-	-	0.051	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 02_-	BH14	1/04/2002	water	-	-	0.002	-	<0.001	-	-	0.101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 02_-	BH14	1/07/2002	water	-	-	<0.001	-	<0.001	-	-	0.018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 02_-	BH14	1/10/2002	water	-	-	<0.001	-	<0.001	-	-	0.044	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 03_-	BH14	1/01/2003	water	-	-	0.001	-	<0.001	-	-	0.096	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 03_-	BH14	1/04/2003	water	-	-	0.001	-	0.001	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 03_-	BH14	1/07/2003	water	-	-	0.001	-	0.001	-	-	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 03_-	BH14	1/10/2003	water	-	-	0.001	-	0.001	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 04_-	BH14	1/01/2004	water	-	-	0.001	-	0.001	-	-	0.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 04_-	BH14	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 04_-	BH14	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 04_-	BH14	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 05_-	BH14	1/01/2005	water	-	-	0.001	-	0.001	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 05_-	BH14	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jun 05_-	BH14	1/06/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 05_-	BH14	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 06_-	BH14	1/01/2006	water	-	-	<0.001	-	<0.001	-	-	0.049	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 06_-	BH14	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 06_-	BH14	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 06_-	BH14	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 07_-	BH14	1/01/2007	water	-	-	<0.001	-	<0.001	-	-	0.006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 07_-	BH14	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_16 Apr 13_-	BH14	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_22 Apr 15_-	BH14	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_22 Jul 15_-	BH14	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_20 Oct 15_-	BH14	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_20 Jan 16_-	BH14	20/01/2016	water	<0.01	0.001	0.003	-	<0.001	0.15		0.003	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH14A_29 Jul 14_-	BH14A	29/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_29 Oct 14_-	BH14A	29/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_20 Jan 15_-	BH14A	20/01/2015	water	<0.01	<0.001	<0.001	-	<0.001	0.42		<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH14A_14 Apr 16_-	BH14A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_13 Jul 16_-	BH14A	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_19 Jan 17_-	BH14A	19/01/2017	water	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.00005	0.002	<1	<1	<1	<1	-	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH14A_02 Jul 19_-	BH14A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_24 Oct 19_-	BH14A	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_27 Apr 20_-	BH14A	27/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 97_-	BH15	1/01/1997	water	-	-	0.001	-	0.001	-	-	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 97_-	BH15	1/04/1997	water	-	-	0.001	-	0.001	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 97_-	BH15	1/07/1997	water	-	-	0.001	-	0.001	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 97_-	BH15	1/10/1997	water	-	-	0.002	-	0.001	-	-	0.022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 98_-	BH15	1/01/1998	water	-	-	0.001	-	0.001	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 98_-	BH15	1/04/1998	water	-	-	0.001	-	0.003	-	-	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 98_-	BH15	1/07/1998	water	-	-	0.001	-	0.001	-	-	0.018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 98_-	BH15	1/10/1998	water	-	-	0.001	-	0.001	-	-	0.021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 99_-	BH15	1/01/1999	water	-	-	0.001	-	0.001	-	-	0.023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Mar 99_-	BH15	1/03/1999	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 99_-	BH15	1/07/1999	water	-	-	0.003	-	0.001	-	-	0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																								
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																								
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																						
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																												

Sample ID	Location Code	Date	Matrix Type																																								
BH15_01 Oct 99_-	BH15	1/10/1999	water	-	-	0.005	-	0.001	-	-	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 00_-	BH15	1/01/2000	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 00_-	BH15	1/04/2000	water	-	-	0.001	-	0.001	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 00_-	BH15	1/07/2000	water	-	-	0.002	-	0.001	-	-	0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 00_-	BH15	1/10/2000	water	-	-	0.001	-	0.001	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 01_-	BH15	1/01/2001	water	-	-	0.002	-	0.001	-	-	0.032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 01_-	BH15	1/04/2001	water	-	-	0.003	-	0.001	-	-	0.033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jun 01_-	BH15	1/06/2001	water	-	-	0.001	-	0.001	-	-	0.041	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 01_-	BH15	1/10/2001	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 02_-	BH15	1/01/2002	water	-	-	0.001	-	0.001	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 02_-	BH15	1/04/2002	water	-	-	<0.001	-	<0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 02_-	BH15	1/07/2002	water	-	-	<0.001	-	<0.001	-	-	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 02_-	BH15	1/10/2002	water	-	-	<0.001	-	<0.001	-	-	0.031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 03_-	BH15	1/01/2003	water	-	-	<0.001	-	<0.001	-	-	0.025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 03_-	BH15	1/04/2003	water	-	-	0.001	-	0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 03_-	BH15	1/07/2003	water	-	-	0.001	-	0.001	-	-	0.022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 03_-	BH15	1/10/2003	water	-	-	0.002	-	0.001	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 04_-	BH15	1/01/2004	water	-	-	0.001	-	0.001	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 04_-	BH15	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 04_-	BH15	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 04_-	BH15	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 05_-	BH15	1/01/2005	water	-	-	0.001	-	0.001	-	-	0.031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 05_-	BH15	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jun 05_-	BH15	1/06/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 05_-	BH15	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Feb 06_-	BH15	1/02/2006	water	-	-	<0.001	-	<0.001	-	-	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 06_-	BH15	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 06_-	BH15	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 06_-	BH15	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 07_-	BH15	1/01/2007	water	-	-	<0.001	-	<0.001	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 07_-	BH15	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_16 Apr 13_-	BH15	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_09 Jul 13_-	BH15	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_29 Oct 13_-	BH15	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_28 Jan 14_-	BH15	28/01/2014	water	<0.005	<0.001	<0.001	-	<0.001	0.022		<0.001	<1	<1	<1	<2	<1	-	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH15_16 Apr 14_-	BH15	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_07 Jul 14_-	BH15	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_07 Jul 14_-2	BH15	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_16 Oct 14_-	BH15	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_20 Jan 15_-	BH15	20/01/2015	water	<0.01	<0.001	<0.001	-	<0.001	0.034		0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH15_22 Apr 15_-	BH15	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_22 Jul 15_-	BH15	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_20 Oct 15_-	BH15	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_20 Jan 16_-	BH15	20/01/2016	water	<0.01	<0.001	<0.001	-	<0.001	0.007		<0.001	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH15_14 Apr 16_-	BH15	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_13 Jul 16_-	BH15	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_18 Oct 16_-	BH15	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_25 Jan 17_-	BH15	25/01/2017	water	<0.05	<0.001	<0.001	-	<0.001	0.037	<0.00005	0.007	<1	<1	<1	<1	-	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH15_02 Jul 19_-	BH15	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_24 Oct 19_-	BH15	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_14 Jan 20_-	BH15	14/01/2020	water	<0.005	<0.001	<0.001	-	<0.001	0.033	<0.00005	0.002	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH15_22 Apr 20_-	BH15	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 00_-	BH16	1/04/2000	water	-	-	0.002	-	0.001	-	-	0.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jul 00_-	BH16	1/07/2000	water	-	-	0.001	-	0.001	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Oct 00_-	BH16	1/10/2000	water	-	-	0.001	-	0.001	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 01_-	BH16	1/01/2001	water	-	-	0.003	-	0.001	-	-	0.032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 01_-	BH16	1/04/2001	water	-	-	0.001	-	0.001	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jun 01_-	BH16	1/06/2001	water	-	-	0.002	-	0.001	-	-	0.062	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Oct 01_-	BH16	1/10/2001	water	-	-	0.001	-	0.001	-	-	0.052	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 02_-	BH16	1/01/2002	water	-	-	0.001	-	0.001	-	-	0.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 02_-	BH16	1/04/2002	water	-	-	<0.001	-	<0.001	-	-	0.053	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jul 02_-	BH16	1/07/2002	water	-	-	<0.001	-	<0.001	-	-	0.028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																								
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																								
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																						
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																												

Sample ID	Location Code	Date	Matrix Type																																							
BH16_01 Oct 02_-	BH16	1/10/2002	water	-	-	<0.001	-	<0.001	-	-	0.069	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 03_-	BH16	1/01/2003	water	-	-	<0.001	-	<0.001	-	-	0.061	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 03_-	BH16	1/04/2003	water	-	-	0.002	-	0.001	-	-	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jun 03_-	BH16	1/06/2003	water	-	-	0.002	-	0.001	-	-	0.062	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Oct 03_-	BH16	1/10/2003	water	-	-	0.001	-	0.001	-	-	0.042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 04_-	BH16	1/01/2004	water	-	-	0.001	-	0.001	-	-	0.063	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 04_-	BH16	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jul 04_-	BH16	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Oct 04_-	BH16	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 05_-	BH16	1/01/2005	water	-	-	0.001	-	0.001	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 05_-	BH16	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jul 05_-	BH16	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Oct 05_-	BH16	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 06_-	BH16	1/01/2006	water	-	-	<0.001	-	<0.001	-	-	0.024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 06_-	BH16	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jul 06_-	BH16	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Oct 06_-	BH16	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 07_-	BH16	1/01/2007	water	-	-	<0.001	-	<0.001	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 07_-	BH16	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_16 Apr 13_-	BH16	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_22 Jul 13_-	BH16	22/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_29 Oct 13_-	BH16	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_28 Jan 14_-	BH16	28/01/2014	water	<0.005	<0.001	<0.001	-	<0.001	0.088		<0.001	<1	<1	<1	<2	<1	-	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH16_16 Apr 14_-	BH16	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_09 Jul 14_-	BH16	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_16 Oct 14_-	BH16	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_20 Jan 15_-	BH16	20/01/2015	water	<0.01	<0.001	<0.001	-	<0.001	0.22		0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH16_22 Apr 15_-	BH16	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_22 Jul 15_-	BH16	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_20 Oct 15_-	BH16	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_20 Jan 16_-	BH16	20/01/2016	water	<0.01	<0.001	<0.001	-	<0.001	0.17		<0.001	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH16_14 Apr 16_-	BH16	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_13 Jul 16_-	BH16	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_18 Oct 16_-	BH16	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_25 Jan 17_-	BH16	25/01/2017	water	<0.005	<0.001	<0.001	-	<0.001	0.13	<0.00005	0.015	<1	<1	<1	<1	-	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH16_02 Jul 19_-	BH16	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_24 Oct 19_-	BH16	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_14 Jan 20_-	BH16	14/01/2020	water	<0.005	0.001	0.01	-	<0.001	0.18	<0.00005	0.11	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH16_22 Apr 20_-	BH16	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 00_-	BH17	1/07/2000	water	-	-	0.001	-	0.004	-	-	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 00_-	BH17	1/10/2000	water	-	-	0.002	-	0.002	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 01_-	BH17	1/01/2001	water	-	-	0.001	-	0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 01_-	BH17	1/04/2001	water	-	-	0.001	-	0.001	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jun 01_-	BH17	1/06/2001	water	-	-	0.001	-	0.001	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 01_-	BH17	1/10/2001	water	-	-	0.001	-	0.001	-	-	0.022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 02_-	BH17	1/01/2002	water	-	-	0.001	-	0.001	-	-	0.023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 02_-	BH17	1/04/2002	water	-	-	<0.001	-	<0.001	-	-	0.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 02_-	BH17	1/07/2002	water	-	-	<0.001	-	<0.001	-	-	0.023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 02_-	BH17	1/10/2002	water	-	-	<0.001	-	<0.001	-	-	0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 03_-	BH17	1/01/2003	water	-	-	<0.001	-	<0.001	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 03_-	BH17	1/04/2003	water	-	-	0.001	-	0.001	-	-	0.022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 03_-	BH17	1/07/2003	water	-	-	0.001	-	0.001	-	-	0.034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 03_-	BH17	1/10/2003	water	-	-	0.002	-	0.001	-	-	0.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 04_-	BH17	1/01/2004	water	-	-	0.001	-	0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 04_-	BH17	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 04_-	BH17	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 04_-	BH17	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 05_-	BH17	1/01/2005	water	-	-	0.01	-	0.01	-	-	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 05_-	BH17	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 05_-	BH17	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 05_-	BH17	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 06_-	BH17	1/01/2006	water	-	-	<0.001	-	<0.001	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																								
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																								
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																						
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																												

Sample ID	Location Code	Date	Matrix Type																																								
BH17_01 Apr 06_-	BH17	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 06_-	BH17	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 06_-	BH17	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 07_-	BH17	1/01/2007	water	-	-	<0.001	-	<0.001	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 07_-	BH17	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_17 Apr 13_-	BH17	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_22 Jul 13_-	BH17	22/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_14 Apr 14_-	BH17	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_07 Jul 14_-	BH17	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_22 Apr 15_-	BH17	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_21 Jul 15_-	BH17	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_20 Oct 15_-	BH17	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_21 Jan 16_-	BH17	21/01/2016	water	<0.01	<0.001	<0.001	-	<0.001	<0.001		0.004	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH17_14 Apr 16_-	BH17	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_21 Jul 16_-	BH17	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_02 Jul 19_-	BH17	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_24 Oct 19_-	BH17	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_15 Jan 20_-	BH17	15/01/2020	water	<0.005	<0.001	0.01	-	<0.001	0.11	<0.00005	0.034	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH17_23 Apr 20_-	BH17	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jun 01_-	BH18	1/06/2001	water	-	-	0.001	-	0.001	-	-	0.044	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 01_-	BH18	1/10/2001	water	-	-	0.001	-	0.001	-	-	0.087	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 02_-	BH18	1/01/2002	water	-	-	0.001	-	0.001	-	-	0.092	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 02_-	BH18	1/04/2002	water	-	-	<0.001	-	<0.001	-	-	0.064	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jun 02_-	BH18	1/06/2002	water	-	-	<0.001	-	<0.001	-	-	0.091	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 02_-	BH18	1/10/2002	water	-	-	<0.001	-	<0.001	-	-	0.042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 03_-	BH18	1/01/2003	water	-	-	<0.001	-	0.002	-	-	0.077	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 03_-	BH18	1/04/2003	water	-	-	0.001	-	<0.001	-	-	0.042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jul 03_-	BH18	1/07/2003	water	-	-	0.003	-	<0.001	-	-	0.066	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 03_-	BH18	1/10/2003	water	-	-	<0.001	-	<0.001	-	-	0.057	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 04_-	BH18	1/01/2004	water	-	-	<0.001	-	<0.001	-	-	0.052	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 04_-	BH18	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jul 04_-	BH18	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 04_-	BH18	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 05_-	BH18	1/01/2005	water	-	-	<0.001	-	<0.001	-	-	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 05_-	BH18	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jul 05_-	BH18	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 05_-	BH18	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 06_-	BH18	1/01/2006	water	-	-	0.001	-	<0.001	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 06_-	BH18	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jul 06_-	BH18	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 06_-	BH18	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 07_-	BH18	1/01/2007	water	-	-	<0.001	-	<0.001	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 07_-	BH18	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_16 Apr 13_-	BH18	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_30 Oct 13_-	BH18	30/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_28 Jan 14_-	BH18	28/01/2014	water	<0.005	<0.001	<0.001	-	<0.001	0.009		0.03	<1	<1	<1	<2	<1	-	-	-	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH18_16 Apr 14_-	BH18	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_29 Oct 14_-	BH18	29/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_21 Jan 15_-	BH18	21/01/2015	water	<0.01	<0.001	<0.001	-	<0.001	0.007		0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH18_23 Apr 15_-	BH18	23/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_21 Jul 15_-	BH18	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_21 Oct 15_-	BH18	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_21 Jan 16_-	BH18	21/01/2016	water	<0.01	<0.001	<0.001	-	<0.001	<0.001		0.002	<1	<1	<1	<1	-	<1	-	<10	70	<100	<100	<10	58	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH18_19 Apr 16_-	BH18	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_18 Oct 16_-	BH18	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_19 Jan 17_-	BH18	19/01/2017	water	<0.005	<0.001	0.002	-	<0.001	0.01	<0.00005	0.006	<1	<1	<1	<1	-	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH18_03 Jul 19_-	BH18	3/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_25 Oct 19_-	BH18	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_13 Jan 20_-	BH18	13/01/2020	water	<0.005	<0.001	0.007	-	<0.001	0.01	<0.00005	0.035	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH18_23 Apr 20_-	BH18	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_01 Jul 06_-	BH19	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_01 Oct 06_-	BH19	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																								
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																								
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																						
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																												

Sample ID	Location Code	Date	Matrix Type																																								
BH19 _01 Jan 07_-	BH19	1/01/2007	water	-	-	-	-	-	-	-	-	<1	<2	<2	<2	<2	-	-	-	-	-	-	<20	<50	<100	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-
BH19_01 Jan 07_-	BH19	1/01/2007	water	-	-	<0.001	-	<0.001	-	-	0.019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_01 Apr 07_-	BH19	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_16 Apr 13_-	BH19	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_09 Jul 13_-	BH19	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_29 Oct 13_-	BH19	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_28 Jan 14_-	BH19	28/01/2014	water	<0.005	<0.001	<0.001	-	<0.001	<0.001		0.005	<1	<1	<1	<2	<1	-	-	-	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH19_16 Apr 14_-	BH19	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_07 Jul 14_-	BH19	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_29 Jul 14_-	BH19	29/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_16 Oct 14_-	BH19	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_20 Jan 15_-	BH19	20/01/2015	water	<0.01	<0.001	0.001	-	<0.001	<0.001		0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH19_22 Apr 15_-	BH19	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_21 Jul 15_-	BH19	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_20 Oct 15_-	BH19	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_20 Jan 16_-	BH19	20/01/2016	water	<0.01	<0.001	<0.001	-	<0.001	0.008		<0.001	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH19_14 Apr 16_-	BH19	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_13 Jul 16_-	BH19	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_18 Oct 16_-	BH19	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_19 Jan 17_-	BH19	19/01/2017	water	<0.005	<0.001	<0.001	-	<0.001	0.012	<0.00005	0.008	<1	<1	<1	<1	-	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH19A_02 Jul 19_-	BH19A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19A_24 Oct 19_-	BH19A	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19A_15 Jan 20_-	BH19A	15/01/2020	water	<0.005	<0.001	0.017	-	0.001	0.013	<0.00005	0.19	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH19A_22 Apr 20_-	BH19A	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19B_18 Nov 19_-	BH19B	18/11/2019	water	<0.005	<0.001	0.01	-	<0.001	0.017	<0.00005	0.026	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH19B_15 Jan 20_-	BH19B	15/01/2020	water	<0.05	<0.001	<0.001	-	<0.001	0.04	<0.00005	0.01	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH19B_22 Apr 20_-	BH19B	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_01 Jul 06_-	BH20	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_01 Oct 06_-	BH20	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20 _01 Jan 07_-	BH20	1/01/2007	water	-	-	-	-	-	-	-	-	<1	<2	<2	<2	<2	-	-	-	-	-	-	<20	<50	<100	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_01 Jan 07_-	BH20	1/01/2007	water	-	-	0.001	-	<0.001	-	-	0.043	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_01 Apr 07_-	BH20	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_16 Apr 13_-	BH20	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_28 Jan 14_-	BH20	28/01/2014	water	<0.005	<0.001	<0.001	-	<0.001	0.31		0.002	<1	<1	<1	<2	<1	-	-	-	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH20_07 Jul 14_-	BH20	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_21 Jan 15_-	BH20	21/01/2015	water	<0.01	<0.001	<0.001	-	<0.001	0.37		<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH20_27 Apr 15_-	BH20	27/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_20 Oct 15_-	BH20	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_10 Mar 16_-	BH20	10/03/2016	water	<0.01	<0.001	<0.001	-	<0.001	0.19		0.057	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH20_19 Apr 16_-	BH20	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_25 Jan 17_-	BH20	25/01/2017	water	<0.005	<0.001	<0.001	-	<0.001	0.006	<0.00005	0.001	<1	<1	<1	<1	-	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH20_02 Jul 19_-	BH20	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_24 Oct 19_-	BH20	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_14 Jan 20_-	BH20	14/01/2020	water	<0.05	0.002	<0.001	-	<0.001	0.23	<0.00005	0.12	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH20_22 Apr 20_-	BH20	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_01 Jul 06_-	BH22	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_01 Oct 06_-	BH22	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22 _01 Jan 07_-	BH22	1/01/2007	water	-	-	-	-	-	-	-	-	<5	<5	<5	<5	<5	-	-	-	-	-	-	<20	<50	<100	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-
BH22_01 Jan 07_-	BH22	1/01/2007	water	-	-	<0.001	-	<0.001	-	-	0.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_01 Apr 07_-	BH22	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_22 Jul 13_-	BH22	22/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_29 Oct 13_-	BH22	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_28 Jan 14_-	BH22	28/01/2014	water	<0.005	<0.001	<0.001	-	<0.001	0.091		0.007	<1	<1	<1	<2	<1	-	-	-	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH22_16 Apr 14_-	BH22	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_07 Jul 14_-	BH22	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_16 Oct 14_-	BH22	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_20 Jan 15_-	BH22	20/01/2015	water	<0.01	<0.001	<0.001	-	<0.001	0.029		<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH22_22 Apr 15_-	BH22	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_22 Jul 15_-	BH22	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_20 Oct 15_-	BH22	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_20 Jan 16_-	BH22	20/01/2016	water	<0.01	<0.001	<0.001	-	<0.001	<0.001		<0.001	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH22_14 Apr 16_-	BH22	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	Phenols - total		
				Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																										
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																										
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)				0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)					0.0014																																					
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)				0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)									0.08						350																												
Sample ID	**Location Code**	**Date**	**Matrix Type**																																									
BH22_13 Jul 16_-	BH22	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_18 Oct 16_-	BH22	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_25 Jan 17_-	BH22	25/01/2017	water	<0.05	<0.001	<0.001	-	<0.001	0.18	<0.00005	0.054	<1	<1	<1	<1	-	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH22_02 Jul 19_-	BH22	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_24 Oct 19_-	BH22	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_14 Jan 20_-	BH22	14/01/2020	water	<0.005	<0.001	0.009	-	<0.001	0.007	<0.00005	0.033	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH22_22 Apr 20_-	BH22	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_01 Jul 06_-	BH23	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_01 Oct 06_-	BH23	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23 _01 Jan 07_-	BH23	1/01/2007	water	-	-	-	-	-	-	-	-	<5	<5	<5	<5	<5	-	-	-	-	-	-	<20	<50	<100	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_01 Jan 07_-	BH23	1/01/2007	water	-	-	<0.001	-	<0.001	-	-	0.033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_01 Apr 07_-	BH23	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_16 Apr 13_-	BH23	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_09 Jul 13_-	BH23	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_29 Oct 13_-	BH23	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_28 Jan 14_-	BH23	28/01/2014	water	<0.005	<0.001	<0.001	-	<0.001	0.031		<0.001	<1	<1	<1	<2	<1	-	-	-	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH23_16 Apr 14_-	BH23	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_07 Jul 14_-	BH23	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_16 Oct 14_-	BH23	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_20 Jan 15_-	BH23	20/01/2015	water	<0.01	0.001	0.001	-	<0.001	0.006		0.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH23_22 Apr 15_-	BH23	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_22 Jul 15_-	BH23	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_20 Oct 15_-	BH23	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_20 Jan 16_-	BH23	20/01/2016	water	<0.01	<0.001	<0.001	-	<0.001	<0.001		<0.001	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH23_14 Apr 16_-	BH23	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_13 Jul 16_-	BH23	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_18 Oct 16_-	BH23	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_25 Jan 17_-	BH23	25/01/2017	water	<0.005	<0.001	<0.001	-	<0.001	0.017	<0.00005	0.001	<1	<1	<1	<1	-	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH23_02 Jul 19_-	BH23	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_24 Oct 19_-	BH23	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_15 Jan 20_-	BH23	15/01/2020	water	<0.005	<0.001	0.006	-	<0.001	0.08	<0.00005	0.17	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	92	180	<100	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH23_22 Apr 20_-	BH23	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_01 Jul 06_-	BH24	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_01 Oct 06_-	BH24	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_01 Jan 07_-	BH24	1/01/2007	water	-	-	<0.001	-	<0.001	-	-	0.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_01 Apr 07_-	BH24	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_16 Apr 13_-	BH24	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_29 Oct 13_-	BH24	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_28 Jan 14_-	BH24	28/01/2014	water	<0.005	<0.001	<0.001	-	<0.001	<0.001		<0.001	<1	<1	<1	<2	<1	-	-	-	-	-	-	<10	<50	160	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH24_16 Apr 14_-	BH24	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_09 Jul 14_-	BH24	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_16 Oct 14_-	BH24	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_21 Jan 15_-	BH24	21/01/2015	water	<0.01	<0.001	<0.001	-	<0.001	0.02		<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH24_22 Apr 15_-	BH24	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_22 Jul 15_-	BH24	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_21 Oct 15_-	BH24	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_20 Jan 16_-	BH24	20/01/2016	water	<0.01	<0.001	<0.001	-	<0.001	0.008		<0.001	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH24_14 Apr 16_-	BH24	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_13 Jul 16_-	BH24	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_18 Oct 16_-	BH24	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_25 Jan 17_-	BH24	25/01/2017	water	<0.005	<0.001	0.002	-	<0.001	0.029	<0.00005	0.047	<1	<1	<1	<1	-	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH24_02 Jul 19_-	BH24	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_25 Oct 19_-	BH24	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_14 Jan 20_-	BH24	14/01/2020	water	<0.005	<0.001	0.001	-	<0.001	<0.005	<0.00005	0.033	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH24_23 Apr 20_-	BH24	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_17 Apr 13_-	BH25	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_09 Jul 13_-	BH25	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_28 Jan 14_-	BH25	28/01/2014	water	<0.005	0.001	<0.001	-	<0.001	1.1		0.003	<1	<1	<1	<2	<1	-	-	-	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH25_16 Apr 14_-	BH25	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_07 Jul 14_-	BH25	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_15 Oct 14_-	BH25	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_21 Jan 15_-	BH25	21/01/2015	water	<0.01	<0.001	<0.001	-	<0.001	0.021		0.028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16														PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																									
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																									
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																							
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75														0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																													

| Sample ID | Location Code | Date | Matrix Type | | | | | | | | | | | | | | | | | | |

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16														PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																									
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																									
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																							
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																													

Sample ID	Location Code	Date	Matrix Type																																									
BH4_01 Jun 95_-	BH4	1/06/1995	water	-	-	0.001	-	0.002	-	-	0.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Sep 95_-	BH4	1/09/1995	water	-	-	0.001	-	0.001	-	-	0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Jan 96_-	BH4	1/01/1996	water	-	-	0.001	-	0.001	-	-	0.043	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Apr 96_-	BH4	1/04/1996	water	-	-	0.001	-	0.001	-	-	0.025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Jul 96_-	BH4	1/07/1996	water	-	-	0.002	-	0.001	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Oct 96_-	BH4	1/10/1996	water	-	-	0.003	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Jan 97_-	BH4	1/01/1997	water	-	-	0.001	-	0.001	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Apr 97_-	BH4	1/04/1997	water	-	-	0.002	-	0.001	-	-	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Jul 97_-	BH4	1/07/1997	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Oct 97_-	BH4	1/10/1997	water	-	-	0.001	-	0.001	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Jan 98_-	BH4	1/01/1998	water	-	-	0.003	-	0.001	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Apr 98_-	BH4	1/04/1998	water	-	-	0.002	-	0.005	-	-	0.006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 98_-	BH4A	1/01/1998	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 98_-	BH4A	1/04/1998	water	-	-	0.001	-	0.005	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 98_-	BH4A	1/07/1998	water	-	-	0.002	-	0.001	-	-	0.035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 98_-	BH4A	1/10/1998	water	-	-	0.002	-	0.001	-	-	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 99_-	BH4A	1/01/1999	water	-	-	0.003	-	0.001	-	-	0.049	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Mar 99_-	BH4A	1/03/1999	water	-	-	0.003	-	0.001	-	-	0.081	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 99_-	BH4A	1/07/1999	water	-	-	0.002	-	0.001	-	-	0.025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 99_-	BH4A	1/10/1999	water	-	-	0.003	-	0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 00_-	BH4A	1/01/2000	water	-	-	0.001	-	0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 00_-	BH4A	1/04/2000	water	-	-	0.002	-	0.001	-	-	0.026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 00_-	BH4A	1/07/2000	water	-	-	0.002	-	0.002	-	-	0.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 00_-	BH4A	1/10/2000	water	-	-	0.002	-	0.001	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 01_-	BH4A	1/01/2001	water	-	-	0.003	-	0.001	-	-	0.034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 01_-	BH4A	1/04/2001	water	-	-	0.003	-	0.001	-	-	0.057	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 01_-	BH4A	1/07/2001	water	-	-	0.001	-	0.001	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 01_-	BH4A	1/10/2001	water	-	-	0.002	-	0.001	-	-	0.025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 02_-	BH4A	1/01/2002	water	-	-	0.001	-	0.001	-	-	0.057	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 02_-	BH4A	1/04/2002	water	-	-	0.001	-	<0.001	-	-	0.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 02_-	BH4A	1/07/2002	water	-	-	0.002	-	<0.001	-	-	0.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 02_-	BH4A	1/10/2002	water	-	-	0.003	-	<0.001	-	-	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 03_-	BH4A	1/01/2003	water	-	-	0.004	-	<0.001	-	-	0.087	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 03_-	BH4A	1/04/2003	water	-	-	0.002	-	0.001	-	-	0.043	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 03_-	BH4A	1/07/2003	water	-	-	0.001	-	0.001	-	-	0.043	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 03_-	BH4A	1/10/2003	water	-	-	0.002	-	0.001	-	-	0.082	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 04_-	BH4A	1/01/2004	water	-	-	0.001	-	0.001	-	-	0.043	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 04_-	BH4A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 04_-	BH4A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 04_-	BH4A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 05_-	BH4A	1/01/2005	water	-	-	0.01	-	0.01	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 05_-	BH4A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 05_-	BH4A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 05_-	BH4A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 06_-	BH4A	1/01/2006	water	-	-	0.003	-	<0.001	-	-	0.045	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 06_-	BH4A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 06_-	BH4A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 06_-	BH4A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 07_-	BH4A	1/01/2007	water	-	-	0.002	-	<0.001	-	-	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 07_-	BH4A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_17 Apr 13_-	BH4A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_22 Jul 13_-	BH4A	22/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_30 Oct 13_-	BH4A	30/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_28 Jan 14_-	BH4A	28/01/2014	water	<0.005	<0.001	<0.001	-	<0.001	0.019		0.001	<1	<1	<1	<2	<1	-	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH4A_14 Apr 14_-	BH4A	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_07 Jul 14_-	BH4A	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_15 Oct 14_-	BH4A	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_21 Jan 15_-	BH4A	21/01/2015	water	<0.01	<0.001	0.002	-	<0.001	0.043		0.023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH4A_27 Apr 15_-	BH4A	27/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_21 Jul 15_-	BH4A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_20 Oct 15_-	BH4A	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_20 Jan 16_-	BH4A	20/01/2016	water	<0.01	<0.001	<0.001	-	<0.001	<0.001		<0.001	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																								
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																								
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																						
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																													
BH4A_14 Apr 16_-	BH4A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_21 Jul 16_-	BH4A	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_18 Oct 16_-	BH4A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_19 Jan 17_-	BH4A	19/01/2017	water	<0.005	<0.001	<0.001	-	<0.001	0.014	<0.00005	0.002	<1	<1	<1	<1	-	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH4A_03 Jul 19_-	BH4A	3/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_25 Oct 19_-	BH4A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_13 Jan 20_-	BH4A	13/01/2020	water	<0.005	<0.001	0.016	-	<0.001	0.023	<0.00005	0.039	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH4A_23 Apr 20_-	BH4A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 00_-	BH5A	1/07/2000	water	-	-	0.001	-	0.002	-	-	0.039	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 00_-	BH5A	1/10/2000	water	-	-	0.001	-	0.001	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 01_-	BH5A	1/01/2001	water	-	-	0.001	-	0.01	-	-	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 01_-	BH5A	1/04/2001	water	-	-	0.002	-	0.001	-	-	0.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 01_-	BH5A	1/07/2001	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 01_-	BH5A	1/10/2001	water	-	-	0.001	-	0.001	-	-	0.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 02_-	BH5A	1/01/2002	water	-	-	0.001	-	0.002	-	-	0.018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 02_-	BH5A	1/04/2002	water	-	-	<0.001	-	<0.001	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 02_-	BH5A	1/07/2002	water	-	-	<0.001	-	<0.001	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 03_-	BH5A	1/01/2003	water	-	-	0.001	-	<0.001	-	-	0.072	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 03_-	BH5A	1/04/2003	water	-	-	0.001	-	0.001	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 03_-	BH5A	1/07/2003	water	-	-	0.001	-	0.001	-	-	0.031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 03_-	BH5A	1/10/2003	water	-	-	<0.001	-	<0.001	-	-	0.035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 04_-	BH5A	1/01/2004	water	-	-	0.001	-	0.001	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 04_-	BH5A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 04_-	BH5A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 04_-	BH5A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 05_-	BH5A	1/01/2005	water	-	-	0.01	-	0.01	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 05_-	BH5A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 05_-	BH5A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 05_-	BH5A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 06_-	BH5A	1/01/2006	water	-	-	<0.001	-	<0.001	-	-	0.006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 06_-	BH5A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 06_-	BH5A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 06_-	BH5A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 07_-	BH5A	1/01/2007	water	-	-	0.001	-	<0.001	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 07_-	BH5A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_17 Apr 13_-	BH5A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_22 Jul 13_-	BH5A	22/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_30 Oct 13_-	BH5A	30/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_28 Jan 14_-	BH5A	28/01/2014	water	<0.005	<0.001	<0.001	-	<0.001	<0.001		0.009	<1	<1	<1	<2	<1	-	-	-	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH5A_14 Apr 14_-	BH5A	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_07 Jul 14_-	BH5A	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_15 Oct 14_-	BH5A	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_21 Jan 15_-	BH5A	21/01/2015	water	<0.01	0.002	0.002	-	<0.001	0.69		0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH5A_22 Apr 15_-	BH5A	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_21 Jul 15_-	BH5A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_20 Oct 15_-	BH5A	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_21 Jan 16_-	BH5A	21/01/2016	water	<0.01	0.002	<0.001	-	<0.001	0.59		0.002	<1	<1	<1	<1	-	<1	-	<10	65	170	<100	<10	65	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH5A_14 Apr 16_-	BH5A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_21 Jul 16_-	BH5A	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_18 Oct 16_-	BH5A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_19 Jan 17_-	BH5A	19/01/2017	water	<0.005	<0.001	<0.001	-	<0.001	0.025	<0.00005	<0.001	<1	<1	<1	<1	-	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH5A_02 Jul 19_-	BH5A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_24 Oct 19_-	BH5A	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_15 Jan 20_-	BH5A	15/01/2020	water	<0.005	0.002	0.003	-	<0.001	0.7	<0.00005	0.022	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	53	190	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH5A_23 Apr 20_-	BH5A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jul 01_-	BH6A	1/07/2001	water	-	-	0.001	-	0.001	-	-	0.107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 01_-	BH6A	1/10/2001	water	-	-	0.001	-	0.001	-	-	0.053	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 02_-	BH6A	1/01/2002	water	-	-	0.001	-	0.001	-	-	0.084	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Apr 02_-	BH6A	1/04/2002	water	-	-	<0.001	-	<0.001	-	-	0.066	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jul 02_-	BH6A	1/07/2002	water	-	-	<0.001	-	<0.001	-	-	0.067	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 02_-	BH6A	1/10/2002	water	-	-	<0.001	-	<0.001	-	-	0.035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 03_-	BH6A	1/01/2003	water	-	-	<0.001	-	<0.001	-	-	0.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16														PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																									
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																									
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																							
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																													

Sample ID	Location Code	Date	Matrix Type																																									
BH6A_01 Apr 03_-	BH6A	1/04/2003	water	-	-	0.002	-	0.001	-	-	0.043	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jul 03_-	BH6A	1/07/2003	water	-	-	0.001	-	0.001	-	-	0.066	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 03_-	BH6A	1/10/2003	water	-	-	0.001	-	0.001	-	-	0.057	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 04_-	BH6A	1/01/2004	water	-	-	0.001	-	0.001	-	-	0.356	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Apr 04_-	BH6A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jul 04_-	BH6A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 04_-	BH6A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 05_-	BH6A	1/01/2005	water	-	-	0.001	-	0.001	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Apr 05_-	BH6A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A _01 Jul 05_-	BH6A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 05_-	BH6A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 06_-	BH6A	1/01/2006	water	-	-	<0.001	-	<0.001	-	-	0.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Apr 06_-	BH6A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jul 06_-	BH6A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 06_-	BH6A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 07_-	BH6A	1/01/2007	water	-	-	<0.001	-	<0.001	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Apr 07_-	BH6A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_17 Apr 13_-	BH6A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_09 Jul 13_-	BH6A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_29 Oct 13_-	BH6A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_28 Jan 14_-	BH6A	28/01/2014	water	0.007	0.001	<0.001	-	<0.001	0.47		0.002	<1	<1	<1	<2	<1	-	-	-	-	-	-	<10	<50	120	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH6A_16 Apr 14_-	BH6A	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_09 Jul 14_-	BH6A	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_16 Oct 14_-	BH6A	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_20 Jan 15_-	BH6A	20/01/2015	water	<0.01	0.002	<0.001	-	<0.001	2.5		0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH6A_27 Apr 15_-	BH6A	27/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_22 Jul 15_-	BH6A	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_21 Oct 15_-	BH6A	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_20 Jan 16_-	BH6A	20/01/2016	water	<0.01	0.002	<0.001	-	<0.001	2		0.003	<1	<1	<1	<1	-	<1	-	<10	280	490	<100	<10	150	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH6A_14 Apr 16_-	BH6A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_20 Sep 16_-	BH6A	20/09/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_18 Oct 16_-	BH6A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_19 Jan 17_-	BH6A	19/01/2017	water	<0.005	0.002	0.001	-	<0.001	0.81	<0.00005	0.004	<1	<1	<1	<1	-	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH6A_25 Jan 17_-	BH6A	25/01/2017	water	<0.05	0.001	<0.001	-	<0.001	1.7	<0.00005	0.002	<1	<1	<1	<1	-	-	<2	<10	170	230	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH6A_02 Jul 19_-	BH6A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_25 Oct 19_-	BH6A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_14 Jan 20_-	BH6A	14/01/2020	water	<0.05	<0.001	0.006	-	<0.001	0.12	<0.00005	0.022	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH6A_23 Apr 20_-	BH6A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Sep 93_-	BH7	1/09/1993	water	-	-	0.0193	-	0.003	-	-	0.0076	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jun 94_-	BH7	1/06/1994	water	-	-	0.005	-	0.003	-	-	0.024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Sep 94_-	BH7	1/09/1994	water	-	-	0.005	-	0.004	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Dec 94_-	BH7	1/12/1994	water	-	-	0.001	-	0.001	-	-	0.073	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Mar 95_-	BH7	1/03/1995	water	-	-	0.001	-	0.001	-	-	0.081	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jun 95_-	BH7	1/06/1995	water	-	-	0.002	-	0.001	-	-	0.034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Sep 95_-	BH7	1/09/1995	water	-	-	0.003	-	0.001	-	-	0.055	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jan 96_-	BH7	1/01/1996	water	-	-	0.001	-	0.001	-	-	0.067	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Apr 96_-	BH7	1/04/1996	water	-	-	0.001	-	0.001	-	-	0.022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jul 96_-	BH7	1/07/1996	water	-	-	0.001	-	0.001	-	-	0.006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Oct 96_-	BH7	1/10/1996	water	-	-	0.001	-	0.001	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jan 97_-	BH7	1/01/1997	water	-	-	0.001	-	0.001	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Apr 97_-	BH7	1/04/1997	water	-	-	0.001	-	0.001	-	-	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jul 97_-	BH7	1/07/1997	water	-	-	0.001	-	0.001	-	-	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Oct 97_-	BH7	1/10/1997	water	-	-	0.001	-	0.001	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jan 98_-	BH7	1/01/1998	water	-	-	0.001	-	0.001	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Apr 98_-	BH7	1/04/1998	water	-	-	0.001	-	0.004	-	-	0.022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 98_-	BH7A	1/01/1998	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 98_-	BH7A	1/04/1998	water	-	-	0.002	-	0.006	-	-	0.025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 98_-	BH7A	1/07/1998	water	-	-	0.001	-	0.002	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 98_-	BH7A	1/10/1998	water	-	-	0.003	-	0.006	-	-	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 99_-	BH7A	1/01/1999	water	-	-	0.002	-	0.001	-	-	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Mar 99_-	BH7A	1/03/1999	water	-	-	0.007	-	0.001	-	-	0.044	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 99_-	BH7A	1/07/1999	water	-	-	0.001	-	0.001	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																								
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																								
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																						
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																												

Sample ID	Location Code	Date	Matrix Type																																								
BH7A_01 Oct 99_-	BH7A	1/10/1999	water	-	-	0.018	-	0.001	-	-	0.018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 00_-	BH7A	1/01/2000	water	-	-	0.002	-	0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 00_-	BH7A	1/04/2000	water	-	-	0.002	-	0.001	-	-	0.158	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 00_-	BH7A	1/07/2000	water	-	-	0.002	-	0.001	-	-	0.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 00_-	BH7A	1/10/2000	water	-	-	0.001	-	0.001	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 01_-	BH7A	1/01/2001	water	-	-	0.002	-	0.001	-	-	0.042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 01_-	BH7A	1/04/2001	water	-	-	0.001	-	0.001	-	-	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 01_-	BH7A	1/07/2001	water	-	-	0.002	-	0.001	-	-	0.047	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 01_-	BH7A	1/10/2001	water	-	-	0.002	-	0.001	-	-	0.042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 02_-	BH7A	1/01/2002	water	-	-	0.001	-	0.001	-	-	0.045	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 02_-	BH7A	1/04/2002	water	-	-	<0.001	-	<0.001	-	-	0.022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 02_-	BH7A	1/07/2002	water	-	-	<0.001	-	<0.001	-	-	0.058	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 02_-	BH7A	1/10/2002	water	-	-	<0.001	-	<0.001	-	-	0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 03_-	BH7A	1/01/2003	water	-	-	<0.001	-	<0.001	-	-	0.073	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 03_-	BH7A	1/04/2003	water	-	-	0.002	-	0.001	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 03_-	BH7A	1/07/2003	water	-	-	0.001	-	0.001	-	-	0.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 03_-	BH7A	1/10/2003	water	-	-	0.001	-	0.001	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 04_-	BH7A	1/01/2004	water	-	-	0.001	-	0.001	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 04_-	BH7A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 04_-	BH7A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 04_-	BH7A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 05_-	BH7A	1/01/2005	water	-	-	0.001	-	0.001	-	-	0.006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 05_-	BH7A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 05_-	BH7A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 05_-	BH7A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 06_-	BH7A	1/01/2006	water	-	-	<0.001	-	<0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 06_-	BH7A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 06_-	BH7A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 06_-	BH7A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 07_-	BH7A	1/01/2007	water	-	-	<0.001	-	<0.001	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 07_-	BH7A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_17 Apr 13_-	BH7A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_09 Jul 13_-	BH7A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_29 Oct 13_-	BH7A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_28 Jan 14_-	BH7A	28/01/2014	water	<0.005	<0.001	<0.001	-	<0.001	0.069		<0.001	<1	<1	<1	<2	<1	-	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH7A_16 Apr 14_-	BH7A	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_09 Jul 14_-	BH7A	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_16 Oct 14_-	BH7A	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_21 Jan 15_-	BH7A	21/01/2015	water	<0.01	<0.001	0.002	-	<0.001	0.098		0.019	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH7A_23 Apr 15_-	BH7A	23/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_21 Jul 15_-	BH7A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_21 Oct 15_-	BH7A	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_21 Jan 16_-	BH7A	21/01/2016	water	<0.01	<0.001	<0.001	-	<0.001	0.16		0.008	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH7A_19 Apr 16_-	BH7A	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_13 Jul 16_-	BH7A	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_18 Oct 16_-	BH7A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_19 Jan 17_-	BH7A	19/01/2017	water	<0.005	<0.001	<0.001	-	<0.001	0.083	<0.00005	0.003	<1	<1	<1	<1	-	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH7A_02 Jul 19_-	BH7A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_25 Oct 19_-	BH7A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_14 Jan 20_-	BH7A	14/01/2020	water	<0.005	<0.001	0.006	-	<0.001	0.038	<0.00005	0.026	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	<2	<50	-	<0.2
BH7A_23 Apr 20_-	BH7A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Sep 93_-	BH8	1/09/1993	water	-	-	0.028	-	0.003	-	-	0.0165	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Jun 94_-	BH8	1/06/1994	water	-	-	0.005	-	0.003	-	-	0.019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Sep 94_-	BH8	1/09/1994	water	-	-	0.005	-	0.003	-	-	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Dec 94_-	BH8	1/12/1994	water	-	-	0.001	-	0.001	-	-	0.094	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Mar 95_-	BH8	1/03/1995	water	-	-	0.002	-	0.001	-	-	0.059	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Jun 95_-	BH8	1/06/1995	water	-	-	0.001	-	0.001	-	-	0.022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Sep 95_-	BH8	1/09/1995	water	-	-	0.002	-	0.001	-	-	0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Jan 96_-	BH8	1/01/1996	water	-	-	0.001	-	0.001	-	-	0.109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Apr 96_-	BH8	1/04/1996	water	-	-	0.001	-	0.002	-	-	0.033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Jul 96_-	BH8	1/07/1996	water	-	-	0.001	-	0.001	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Oct 96_-	BH8	1/10/1996	water	-	-	0.001	-	0.001	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																								
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																								
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																						
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																													

Sample ID	Location Code	Date	Matrix Type																																								
BH8A_01 Jul 96_-	BH8A	1/01/1996	water	-	-	0.001	-	0.001	-	-	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 96_-	BH8A	1/10/1996	water	-	-	0.007	-	0.001	-	-	0.085	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 97_-	BH8A	1/01/1997	water	-	-	0.001	-	0.001	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 97_-	BH8A	1/04/1997	water	-	-	0.001	-	0.001	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 97_-	BH8A	1/07/1997	water	-	-	0.001	-	0.001	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 97_-	BH8A	1/10/1997	water	-	-	0.002	-	0.001	-	-	0.058	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 98_-	BH8A	1/01/1998	water	-	-	0.001	-	0.001	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 98_-	BH8A	1/04/1998	water	-	-	0.001	-	0.001	-	-	0.018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 98_-	BH8A	1/07/1998	water	-	-	0.001	-	0.001	-	-	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 98_-	BH8A	1/10/1998	water	-	-	0.001	-	0.001	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 99_-	BH8A	1/01/1999	water	-	-	0.002	-	0.001	-	-	0.042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Mar 99_-	BH8A	1/03/1999	water	-	-	0.005	-	0.001	-	-	0.031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 99_-	BH8A	1/07/1999	water	-	-	0.001	-	0.001	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 99_-	BH8A	1/10/1999	water	-	-	0.028	-	0.001	-	-	0.024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 00_-	BH8A	1/01/2000	water	-	-	0.001	-	0.001	-	-	0.041	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 00_-	BH8A	1/04/2000	water	-	-	0.001	-	0.001	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 00_-	BH8A	1/07/2000	water	-	-	0.002	-	0.001	-	-	0.049	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 00_-	BH8A	1/10/2000	water	-	-	0.001	-	0.001	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 01_-	BH8A	1/01/2001	water	-	-	0.001	-	0.001	-	-	0.055	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 01_-	BH8A	1/04/2001	water	-	-	0.001	-	0.001	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 01_-	BH8A	1/07/2001	water	-	-	0.001	-	0.001	-	-	0.068	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 01_-	BH8A	1/10/2001	water	-	-	0.001	-	0.001	-	-	0.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 02_-	BH8A	1/01/2002	water	-	-	0.001	-	0.001	-	-	0.045	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 02_-	BH8A	1/04/2002	water	-	-	<0.001	-	<0.001	-	-	0.036	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 02_-	BH8A	1/07/2002	water	-	-	<0.001	-	<0.001	-	-	0.049	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 02_-	BH8A	1/10/2002	water	-	-	<0.001	-	<0.001	-	-	0.063	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 03_-	BH8A	1/01/2003	water	-	-	<0.001	-	<0.001	-	-	<0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 03_-	BH8A	1/04/2003	water	-	-	0.002	-	0.001	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 03_-	BH8A	1/07/2003	water	-	-	0.002	-	0.001	-	-	0.082	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 03_-	BH8A	1/10/2003	water	-	-	0.002	-	0.001	-	-	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 04_-	BH8A	1/01/2004	water	-	-	0.001	-	0.001	-	-	0.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 04_-	BH8A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 04_-	BH8A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 04_-	BH8A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 05_-	BH8A	1/01/2005	water	-	-	0.001	-	<0.001	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 05_-	BH8A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 05_-	BH8A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 05_-	BH8A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 06_-	BH8A	1/01/2006	water	-	-	0.001	-	<0.001	-	-	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 06_-	BH8A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 06_-	BH8A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 06_-	BH8A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 07_-	BH8A	1/01/2007	water	-	-	<0.001	-	<0.001	-	-	0.039	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 07_-	BH8A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_17 Apr 13_-	BH8A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_09 Jul 13_-	BH8A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_29 Oct 13_-	BH8A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_28 Jan 14_-	BH8A	28/01/2014	water	<0.005	<0.001	<0.001	-	<0.001	<0.001		0.002	<1	<1	<1	<2	<1	-	-	-	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH8A_16 Apr 14_-	BH8A	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_09 Jul 14_-	BH8A	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_16 Oct 14_-	BH8A	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_21 Jan 15_-	BH8A	21/01/2015	water	<0.01	<0.001	<0.001	-	<0.001	<0.001		0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH8A_23 Apr 15_-	BH8A	23/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_21 Jul 15_-	BH8A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_21 Oct 15_-	BH8A	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_21 Jan 16_-	BH8A	21/01/2016	water	<0.01	<0.001	<0.001	-	<0.001	<0.001		<0.001	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH8A_19 Apr 16_-	BH8A	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_13 Jul 16_-	BH8A	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_18 Oct 16_-	BH8A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_19 Jan 17_-	BH8A	19/01/2017	water	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.00005	<0.001	<1	<1	<1	<1	-	<2	<10	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH8A_02 Jul 19_-	BH8A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_22 Apr 20_-	BH8A	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthrene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																								
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																								
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																						
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																												

Sample ID	Location Code	Date	Matrix Type																																								
BH9_01 Jun 94_-	BH9	1/06/1994	water	-	-	0.005	-	0.003	-	-	0.034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Sep 94_-	BH9	1/09/1994	water	-	-	0.005	-	0.003	-	-	0.062	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Dec 94_-	BH9	1/12/1994	water	-	-	0.006	-	0.001	-	-	0.052	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Mar 95_-	BH9	1/03/1995	water	-	-	0.005	-	0.001	-	-	0.102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Jun 95_-	BH9	1/06/1995	water	-	-	0.002	-	0.001	-	-	0.026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Sep 95_-	BH9	1/09/1995	water	-	-	0.005	-	0.002	-	-	0.069	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Jan 96_-	BH9	1/01/1996	water	-	-	0.001	-	0.001	-	-	206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Apr 96_-	BH9	1/04/1996	water	-	-	0.011	-	0.028	-	-	0.074	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Jul 96_-	BH9	1/07/1996	water	-	-	0.003	-	0.001	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 96_-	BH9A	1/07/1996	water	-	-	0.001	-	0.001	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 96_-	BH9A	1/10/1996	water	-	-	0.004	-	0.004	-	-	0.258	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 97_-	BH9A	1/01/1997	water	-	-	0.001	-	0.001	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 97_-	BH9A	1/04/1997	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 97_-	BH9A	1/07/1997	water	-	-	0.001	-	0.001	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 97_-	BH9A	1/10/1997	water	-	-	0.001	-	0.001	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 98_-	BH9A	1/01/1998	water	-	-	0.008	-	0.001	-	-	0.019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 98_-	BH9A	1/04/1998	water	-	-	0.001	-	0.001	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Nov 98_-	BH9A	1/11/1998	water	-	-	-	-	0.001	-	-	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 99_-	BH9A	1/01/1999	water	-	-	0.002	-	0.001	-	-	0.039	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Mar 99_-	BH9A	1/03/1999	water	-	-	0.005	-	0.002	-	-	0.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 99_-	BH9A	1/07/1999	water	-	-	0.001	-	0.001	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 99_-	BH9A	1/10/1999	water	-	-	0.003	-	0.001	-	-	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 00_-	BH9A	1/01/2000	water	-	-	0.001	-	0.001	-	-	0.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 00_-	BH9A	1/04/2000	water	-	-	0.001	-	0.002	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 00_-	BH9A	1/07/2000	water	-	-	0.003	-	0.001	-	-	0.033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 00_-	BH9A	1/10/2000	water	-	-	0.001	-	0.001	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 01_-	BH9A	1/01/2001	water	-	-	0.001	-	0.001	-	-	0.036	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 01_-	BH9A	1/04/2001	water	-	-	0.001	-	0.001	-	-	0.033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 01_-	BH9A	1/07/2001	water	-	-	0.001	-	0.001	-	-	0.072	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 02_-	BH9A	1/01/2002	water	-	-	0.003	-	0.001	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 02_-	BH9A	1/04/2002	water	-	-	<0.001	-	0.001	-	-	0.045	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 02_-	BH9A	1/07/2002	water	-	-	<0.001	-	<0.001	-	-	0.045	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 02_-	BH9A	1/10/2002	water	-	-	<0.001	-	<0.001	-	-	0.028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 03_-	BH9A	1/01/2003	water	-	-	<0.001	-	<0.001	-	-	0.073	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 03_-	BH9A	1/04/2003	water	-	-	0.002	-	0.001	-	-	0.019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 03_-	BH9A	1/07/2003	water	-	-	0.001	-	0.001	-	-	0.025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 03_-	BH9A	1/10/2003	water	-	-	0.001	-	0.001	-	-	0.021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 04_-	BH9A	1/01/2004	water	-	-	0.001	-	0.002	-	-	0.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 04_-	BH9A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 04_-	BH9A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 04_-	BH9A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 05_-	BH9A	1/01/2005	water	-	-	0.001	-	0.001	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 05_-	BH9A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 05_-	BH9A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 07_-	BH9A	1/01/2007	water	0.001	0.001	<0.001	0.23	<0.001	0.359	<0.0001	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9B_01 Jul 05_-	BH9B	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9B_01 Oct 06_-	BH9B	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9B_01 Jan 07_-	BH9B	1/01/2007	water	-	-	<0.001	-	<0.001	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9B_01 Apr 07_-	BH9B	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_17 Apr 13_-	BH9C	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_09 Jul 13_-	BH9C	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_29 Oct 13_-	BH9C	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_28 Jan 14_-	BH9C	28/01/2014	water	<0.005	<0.001	<0.001	-	<0.001	0.065		0.006	<1	<1	<1	<2	<1	-	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH9C_16 Apr 14_-	BH9C	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_07 Jul 14_-	BH9C	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_15 Oct 14_-	BH9C	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_20 Jan 15_-	BH9C	20/01/2015	water	<0.01	<0.001	0.003	-	<0.001	0.32		0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH9C_22 Apr 15_-	BH9C	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_21 Jul 15_-	BH9C	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_20 Oct 15_-	BH9C	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_20 Jan 16_-	BH9C	20/01/2016	water	<0.01	<0.001	<0.001	-	<0.001	0.47		0.002	<1	<1	<1	<1	<1	-	<1	-	<10	<10	<100	<100	<10	<10	-	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH9C_14 Apr 16_-	BH9C	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	Metals								BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16														PAHs - extended	Phenols - total		
	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Phenolics Total	Phenols	4,4'-DDE
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																									
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																									
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.001		0.0014		0.0034	1.9	0.0006	0.008	950	180	80	350			75											0.4		0.2				1.4			16	2					
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.0014																																							
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)	0.0044	0.001	0.0013		0.0044		0.0004	0.015	700	180	80				75													0.2				1.4			70	2					
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)						0.08						350																													
Sample ID	**Location Code**	**Date**	**Matrix Type**																																								
BH9C_13 Jul 16_-	BH9C	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_18 Oct 16_-	BH9C	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_19 Jan 17_-	BH9C	19/01/2017	water	<0.005	<0.001	<0.001	-	<0.001	0.22	<0.00005	0.002	<10	<10	<10	<10	-	-	<20	<100	<50	<100	<100	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH9C_02 Jul 19_-	BH9C	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_24 Oct 19_-	BH9C	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_13 Jan 20_-	BH9C	13/01/2020	water	<0.005	<0.001	0.018	-	<0.001	0.046	<0.00005	0.076	<1	<1	<1	<1	-	-	<2	<10	-	-	-	<10	<50	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	-	<0.2
BH9C_23 Apr 20_-	BH9C	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistical Summary																																									
Number of Results	106	106	630	1	632	106	106	632	89	89	89	89	23	22	44	66	43	43	43	68	68	46	68	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	2	105
Number of Detects	2	23	462	1	411	86	1	601	0	1	0	0	0	0	0	0	4	3	0	0	8	7	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0
Minimum Concentration	0.001	<0.001	<0.001	0.23	<0.001	<0.001	<0.00005	<0.001	<1	<1	<1	<1	<1	<1	<2	<10	<10	<100	<100	<10	<10	<100	<50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<50	3	<0.2
Minimum Detect	0.001	0.001	0.001	0.23	0.001	0.006	0.00005	0.001	ND	2	ND	ND	ND	ND	ND	ND	65	170	ND	ND	53	120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	3	ND
Maximum Concentration	<0.5	0.022	0.028	0.23	0.028	2.5	<0.0005	206	<10	<10	<10	<10	<5	<1	<20	<100	280	490	<100	<20	150	300	<100	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	2	<1	<1	<2	<50	8	<0.2
Maximum Detect	0.007	0.022	0.028	0.23	0.028	2.5	0.00005	206	ND	2	ND	ND	ND	ND	ND	ND	280	490	ND	ND	150	300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	8	ND
Average Concentration	0.0076	0.0012	0.0019		0.0011	0.2	0.00015	0.35	0.6	0.62	0.61	0.71	0.72	0.5	1.2	5.7	27	67	50	5.3	26	70	49	0.5	0.5	0.5	0.5	0.54	0.5	0.5	0.5	0.5	0.5	0.5	0.52	0.5	0.5	1	25		0.1
Median Concentration	0.0025	0.0005	0.001	0.23	0.001	0.0375	0.00025	0.018	0.5	0.5	0.5	0.5	0.5	0.5	1	5	25	50	50	5	25	50	50	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	25	5.5	0.1
Standard Deviation	0.024	0.003	0.0028		0.0017	0.39	0.00011	8.2	0.56	0.58	0.56	0.58	0.58	0	1.4	5.5	48	74	0	1.2	24	52	5.9	0	0	0	0	0.27	0	0	0	0	0	0	0.15	0	0	0	0		0
Number of Guideline Exceedances	106	23	198	0	20	46	60	469	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	105	0	105	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)	2	23	198	0	20	46	0	469	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Env Stds Comments
#1:calculated from % Saturation
#2:assumed same as NH4
#3:Measured as NH3-N at pH 8
#4:(pH >6.5)
#5:In absence of total As guideline, As (V) guideline has been adopted.
#6:Guideline for Cr (VI) adopted
#7:Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#8:In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#9:Freshwater DGV adopted (insufficient marine toxicity data)

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008					0.1			0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																												
AB01_01 Jul 01_-	AB01	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Oct 01_-	AB01	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Jan 02_-	AB01	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Apr 02_-	AB01	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Jul 02_-	AB01	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Apr 03_-	AB01	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Jul 04_-	AB01	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Jan 05_-	AB01	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jun 94_-	BH10	1/06/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Sep 94_-	BH10	1/09/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Dec 94_-	BH10	1/12/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Mar 95_-	BH10	1/03/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jun 95_-	BH10	1/06/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Sep 95_-	BH10	1/09/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 96_-	BH10	1/01/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 96_-	BH10	1/04/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 96_-	BH10	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 96_-	BH10	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 97_-	BH10	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 97_-	BH10	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 97_-	BH10	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 97_-	BH10	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 98_-	BH10	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 98_-	BH10	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 98_-	BH10	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 98_-	BH10	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 99_-	BH10	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Mar 99_-	BH10	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 99_-	BH10	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 99_-	BH10	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 00_-	BH10	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 00_-	BH10	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 00_-	BH10	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 00_-	BH10	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 01_-	BH10	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 01_-	BH10	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 01_-	BH10	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 01_-	BH10	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 02_-	BH10	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 02_-	BH10	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 02_-	BH10	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 02_-	BH10	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 03_-	BH10	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 03_-	BH10	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 03_-	BH10	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 03_-	BH10	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 04_-	BH10	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_29 Jul 14_-	BH10	29/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_15 Oct 14_-	BH10	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_20 Jan 15_-	BH10	20/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	<0.2
BH10_22 Apr 15_-	BH10	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_21 Jul 15_-	BH10	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_20 Oct 15_-	BH10	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_20 Jan 16_-	BH10	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	-
BH10_14 Apr 16_-	BH10	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_13 Jul 16_-	BH10	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_18 Oct 16_-	BH10	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 01_-	BH10A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Oct 01_-	BH10A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 02_-	BH10A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 02_-	BH10A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 02_-	BH10A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008					0.1			0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																													
BH10A_01 Oct 02_-	BH10A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 03_-	BH10A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 03_-	BH10A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 03_-	BH10A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Oct 03_-	BH10A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 04_-	BH10A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 04_-	BH10A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 04_-	BH10A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Oct 04_-	BH10A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 05_-	BH10A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 05_-	BH10A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 05_-	BH10A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Oct 05_-	BH10A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 06_-	BH10A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 06_-	BH10A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 06_-	BH10A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Oct 06_-	BH10A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 07_-	BH10A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 07_-	BH10A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_12 Apr 17_-	BH10B	12/04/2017	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_05 Jul 17_-	BH10B	5/07/2017	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_09 Oct 17_-	BH10B	9/10/2017	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_15 Jan 18_-	BH10B	15/01/2018	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH10B_23 Apr 18_-	BH10B	23/04/2018	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_09 Jul 18_-	BH10B	9/07/2018	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_08 Oct 18_-	BH10B	8/10/2018	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_22 Jan 19_-	BH10B	22/01/2019	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH10B_09 Apr 19_-	BH10B	9/04/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_02 Jul 19_-	BH10B	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_24 Oct 19_-	BH10B	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_15 Jan 20_-	BH10B	15/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH10B_22 Apr 20_-	BH10B	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jun 94_-	BH11	1/06/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Sep 94_-	BH11	1/09/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Dec 94_-	BH11	1/12/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Mar 95_-	BH11	1/03/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jun 95_-	BH11	1/06/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Sep 95_-	BH11	1/09/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 96_-	BH11	1/01/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 96_-	BH11	1/04/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 96_-	BH11	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 96_-	BH11	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 97_-	BH11	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 97_-	BH11	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 97_-	BH11	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 97_-	BH11	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 98_-	BH11	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 98_-	BH11	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 98_-	BH11	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 98_-	BH11	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Nov 98_-	BH11	1/11/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 99_-	BH11	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Mar 99_-	BH11	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 99_-	BH11	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 99_-	BH11	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 00_-	BH11	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 00_-	BH11	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 00_-	BH11	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 00_-	BH11	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 01_-	BH11	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 01_-	BH11	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 01_-	BH11	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

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Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008					0.1			0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																													
BH12_01 Jul 99_-	BH12	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Oct 99_-	BH12	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 00_-	BH12A	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 00_-	BH12A	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 00_-	BH12A	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 01_-	BH12A	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 01_-	BH12A	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 01_-	BH12A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 01_-	BH12A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 02_-	BH12A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 02_-	BH12A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 02_-	BH12A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 02_-	BH12A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 03_-	BH12A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 03_-	BH12A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 03_-	BH12A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 03_-	BH12A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 04_-	BH12A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 04_-	BH12A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 04_-	BH12A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 04_-	BH12A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 05_-	BH12A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 05_-	BH12A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 05_-	BH12A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 05_-	BH12A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 06_-	BH12A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 06_-	BH12A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 06_-	BH12A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 06_-	BH12A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 07_-	BH12A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 07_-	BH12A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_17 Apr 13_-	BH12A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_09 Jul 13_-	BH12A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_29 Oct 13_-	BH12A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_28 Jan 14_-	BH12A	28/01/2014	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH12A_14 Apr 14_-	BH12A	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_07 Jul 14_-	BH12A	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_15 Oct 14_-	BH12A	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_21 Jan 15_-	BH12A	21/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	<0.2
BH12A_23 Apr 15_-	BH12A	23/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_21 Jul 15_-	BH12A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_20 Oct 15_-	BH12A	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_21 Jan 16_-	BH12A	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	-
BH12A_14 Apr 16_-	BH12A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_21 Jul 16_-	BH12A	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_18 Oct 16_-	BH12A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_19 Jan 17_-	BH12A	19/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH12A_03 Jul 19_-	BH12A	3/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_25 Oct 19_-	BH12A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_13 Jan 20_-	BH12A	13/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH12A_23 Apr 20_-	BH12A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Dec 94_-	BH13	1/12/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Mar 95_-	BH13	1/03/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jun 95_-	BH13	1/06/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Sep 95_-	BH13	1/09/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jan 96_-	BH13	1/01/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Apr 96_-	BH13	1/04/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jul 96_-	BH13	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Oct 96_-	BH13	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jan 97_-	BH13	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Apr 97_-	BH13	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jul 97_-	BH13	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008					0.1			0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																													
BH13_01 Oct 97_-	BH13	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jan 98_-	BH13	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Apr 98_-	BH13	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jul 98_-	BH13	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Oct 98_-	BH13	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jan 99_-	BH13	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Mar 99_-	BH13	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jul 99_-	BH13	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Oct 99_-	BH13	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jan 00_-	BH13	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 00_-	BH13A	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 00_-	BH13A	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 00_-	BH13A	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 01_-	BH13A	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 01_-	BH13A	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 01_-	BH13A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 01_-	BH13A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 02_-	BH13A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 02_-	BH13A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 02_-	BH13A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 02_-	BH13A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 03_-	BH13A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 03_-	BH13A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 03_-	BH13A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 03_-	BH13A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 04_-	BH13A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 04_-	BH13A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 04_-	BH13A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 04_-	BH13A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 05_-	BH13A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 05_-	BH13A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 05_-	BH13A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 05_-	BH13A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 06_-	BH13A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 06_-	BH13A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 06_-	BH13A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 06_-	BH13A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 07_-	BH13A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 07_-	BH13A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_17 Apr 13_-	BH13A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_09 Jul 13_-	BH13A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_29 Oct 13_-	BH13A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_28 Jan 14_-	BH13A	28/01/2014	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH13A_14 Apr 14_-	BH13A	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_07 Jul 14_-	BH13A	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_15 Oct 14_-	BH13A	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_27 Apr 15_-	BH13A	27/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_21 Jul 15_-	BH13A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_20 Oct 15_-	BH13A	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_21 Jan 16_-	BH13A	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH13A_19 Apr 16_-	BH13A	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_21 Jul 16_-	BH13A	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_18 Oct 16_-	BH13A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_03 Jul 19_-	BH13A	3/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_25 Oct 19_-	BH13A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_13 Jan 20_-	BH13A	13/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH13A_23 Apr 20_-	BH13A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 97_-	BH14	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 97_-	BH14	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 97_-	BH14	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 97_-	BH14	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 98_-	BH14	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008					0.1			0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																													
BH14_01 Apr 98_-	BH14	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 98_-	BH14	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 98_-	BH14	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 99_-	BH14	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Mar 99_-	BH14	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 99_-	BH14	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 99_-	BH14	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 00_-	BH14	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 00_-	BH14	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 00_-	BH14	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 00_-	BH14	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 01_-	BH14	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 01_-	BH14	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 01_-	BH14	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 01_-	BH14	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 02_-	BH14	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 02_-	BH14	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 02_-	BH14	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 02_-	BH14	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 03_-	BH14	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 03_-	BH14	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 03_-	BH14	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 03_-	BH14	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 04_-	BH14	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 04_-	BH14	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 04_-	BH14	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 04_-	BH14	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 05_-	BH14	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 05_-	BH14	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jun 05_-	BH14	1/06/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 05_-	BH14	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 06_-	BH14	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 06_-	BH14	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 06_-	BH14	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 06_-	BH14	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 07_-	BH14	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 07_-	BH14	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_16 Apr 13_-	BH14	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_22 Apr 15_-	BH14	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_22 Jul 15_-	BH14	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_20 Oct 15_-	BH14	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_20 Jan 16_-	BH14	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-
BH14A_29 Jul 14_-	BH14A	29/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_29 Oct 14_-	BH14A	29/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_20 Jan 15_-	BH14A	20/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	<0.2
BH14A_14 Apr 16_-	BH14A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_13 Jul 16_-	BH14A	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_19 Jan 17_-	BH14A	19/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH14A_02 Jul 19_-	BH14A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_24 Oct 19_-	BH14A	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_27 Apr 20_-	BH14A	27/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 97_-	BH15	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 97_-	BH15	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 97_-	BH15	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 97_-	BH15	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 98_-	BH15	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 98_-	BH15	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 98_-	BH15	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 98_-	BH15	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 99_-	BH15	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Mar 99_-	BH15	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 99_-	BH15	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

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Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008					0.1			0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																													
BH16_01 Oct 02_-	BH16	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 03_-	BH16	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 03_-	BH16	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jun 03_-	BH16	1/06/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Oct 03_-	BH16	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 04_-	BH16	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 04_-	BH16	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jul 04_-	BH16	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Oct 04_-	BH16	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 05_-	BH16	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 05_-	BH16	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jul 05_-	BH16	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Oct 05_-	BH16	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 06_-	BH16	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 06_-	BH16	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jul 06_-	BH16	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Oct 06_-	BH16	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 07_-	BH16	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 07_-	BH16	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_16 Apr 13_-	BH16	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_22 Jul 13_-	BH16	22/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_29 Oct 13_-	BH16	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_28 Jan 14_-	BH16	28/01/2014	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH16_16 Apr 14_-	BH16	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_09 Jul 14_-	BH16	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_16 Oct 14_-	BH16	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_20 Jan 15_-	BH16	20/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<0.2
BH16_22 Apr 15_-	BH16	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_22 Jul 15_-	BH16	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_20 Oct 15_-	BH16	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_20 Jan 16_-	BH16	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH16_14 Apr 16_-	BH16	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_13 Jul 16_-	BH16	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_18 Oct 16_-	BH16	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_25 Jan 17_-	BH16	25/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH16_02 Jul 19_-	BH16	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_24 Oct 19_-	BH16	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_14 Jan 20_-	BH16	14/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH16_22 Apr 20_-	BH16	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 00_-	BH17	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 00_-	BH17	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 01_-	BH17	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 01_-	BH17	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jun 01_-	BH17	1/06/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 01_-	BH17	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 02_-	BH17	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 02_-	BH17	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 02_-	BH17	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 02_-	BH17	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 03_-	BH17	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 03_-	BH17	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 03_-	BH17	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 03_-	BH17	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 04_-	BH17	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 04_-	BH17	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 04_-	BH17	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 04_-	BH17	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 05_-	BH17	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 05_-	BH17	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 05_-	BH17	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 05_-	BH17	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 06_-	BH17	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008					0.1			0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																													
BH17_01 Apr 06_-	BH17	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 06_-	BH17	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 06_-	BH17	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 07_-	BH17	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 07_-	BH17	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_17 Apr 13_-	BH17	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_22 Jul 13_-	BH17	22/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_14 Apr 14_-	BH17	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_07 Jul 14_-	BH17	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_22 Apr 15_-	BH17	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_21 Jul 15_-	BH17	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_20 Oct 15_-	BH17	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_21 Jan 16_-	BH17	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-
BH17_14 Apr 16_-	BH17	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_21 Jul 16_-	BH17	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_02 Jul 19_-	BH17	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_24 Oct 19_-	BH17	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_15 Jan 20_-	BH17	15/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH17_23 Apr 20_-	BH17	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jun 01_-	BH18	1/06/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 01_-	BH18	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 02_-	BH18	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 02_-	BH18	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jun 02_-	BH18	1/06/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 02_-	BH18	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 03_-	BH18	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 03_-	BH18	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jul 03_-	BH18	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 03_-	BH18	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 04_-	BH18	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 04_-	BH18	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jul 04_-	BH18	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 04_-	BH18	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 05_-	BH18	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 05_-	BH18	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jul 05_-	BH18	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 05_-	BH18	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 06_-	BH18	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 06_-	BH18	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jul 06_-	BH18	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 06_-	BH18	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 07_-	BH18	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 07_-	BH18	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_16 Apr 13_-	BH18	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_30 Oct 13_-	BH18	30/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_28 Jan 14_-	BH18	28/01/2014	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH18_16 Apr 14_-	BH18	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_29 Oct 14_-	BH18	29/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_21 Jan 15_-	BH18	21/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	<0.2
BH18_23 Apr 15_-	BH18	23/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_21 Jul 15_-	BH18	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_21 Oct 15_-	BH18	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_21 Jan 16_-	BH18	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-
BH18_19 Apr 16_-	BH18	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_18 Oct 16_-	BH18	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_19 Jan 17_-	BH18	19/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH18_03 Jul 19_-	BH18	3/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_25 Oct 19_-	BH18	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_13 Jan 20_-	BH18	13/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH18_23 Apr 20_-	BH18	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_01 Jul 06_-	BH19	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_01 Oct 06_-	BH19	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008					0.1			0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																													
BH19 _01 Jan 07_-	BH19	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-
BH19_01 Jan 07_-	BH19	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_01 Apr 07_-	BH19	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_16 Apr 13_-	BH19	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_09 Jul 13_-	BH19	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_29 Oct 13_-	BH19	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_28 Jan 14_-	BH19	28/01/2014	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH19_16 Apr 14_-	BH19	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_07 Jul 14_-	BH19	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_29 Jul 14_-	BH19	29/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_16 Oct 14_-	BH19	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_20 Jan 15_-	BH19	20/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	<0.2
BH19_22 Apr 15_-	BH19	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_21 Jul 15_-	BH19	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_20 Oct 15_-	BH19	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_20 Jan 16_-	BH19	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-
BH19_14 Apr 16_-	BH19	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_13 Jul 16_-	BH19	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_18 Oct 16_-	BH19	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_19 Jan 17_-	BH19	19/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH19A_02 Jul 19_-	BH19A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19A_24 Oct 19_-	BH19A	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19A_15 Jan 20_-	BH19A	15/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH19A_22 Apr 20_-	BH19A	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19B_18 Nov 19_-	BH19B	18/11/2019	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH19B_15 Jan 20_-	BH19B	15/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH19B_22 Apr 20_-	BH19B	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_01 Jul 06_-	BH20	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_01 Oct 06_-	BH20	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20 _01 Jan 07_-	BH20	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-
BH20_01 Jan 07_-	BH20	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_01 Apr 07_-	BH20	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_16 Apr 13_-	BH20	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_28 Jan 14_-	BH20	28/01/2014	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH20_07 Jul 14_-	BH20	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_21 Jan 15_-	BH20	21/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	<0.2
BH20_27 Apr 15_-	BH20	27/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_20 Oct 15_-	BH20	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_10 Mar 16_-	BH20	10/03/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-
BH20_19 Apr 16_-	BH20	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_25 Jan 17_-	BH20	25/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH20_02 Jul 19_-	BH20	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_24 Oct 19_-	BH20	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_14 Jan 20_-	BH20	14/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH20_22 Apr 20_-	BH20	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_01 Jul 06_-	BH22	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_01 Oct 06_-	BH22	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22 _01 Jan 07_-	BH22	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-
BH22_01 Jan 07_-	BH22	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_01 Apr 07_-	BH22	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_22 Jul 13_-	BH22	22/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_29 Oct 13_-	BH22	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_28 Jan 14_-	BH22	28/01/2014	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH22_16 Apr 14_-	BH22	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_07 Jul 14_-	BH22	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_16 Oct 14_-	BH22	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_20 Jan 15_-	BH22	20/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	<0.2
BH22_22 Apr 15_-	BH22	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_22 Jul 15_-	BH22	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_20 Oct 15_-	BH22	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_20 Jan 16_-	BH22	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-
BH22_14 Apr 16_-	BH22	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008								0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																													
BH22_13 Jul 16_-	BH22	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_18 Oct 16_-	BH22	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_25 Jan 17_-	BH22	25/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH22_02 Jul 19_-	BH22	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_24 Oct 19_-	BH22	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_14 Jan 20_-	BH22	14/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH22_22 Apr 20_-	BH22	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_01 Jul 06_-	BH23	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_01 Oct 06_-	BH23	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23 _01 Jan 07_-	BH23	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	
BH23_01 Jan 07_-	BH23	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_01 Apr 07_-	BH23	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_16 Apr 13_-	BH23	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_09 Jul 13_-	BH23	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_29 Oct 13_-	BH23	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_28 Jan 14_-	BH23	28/01/2014	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH23_16 Apr 14_-	BH23	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_07 Jul 14_-	BH23	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_16 Oct 14_-	BH23	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_20 Jan 15_-	BH23	20/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH23_22 Apr 15_-	BH23	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_22 Jul 15_-	BH23	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_20 Oct 15_-	BH23	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_20 Jan 16_-	BH23	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH23_14 Apr 16_-	BH23	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_13 Jul 16_-	BH23	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_18 Oct 16_-	BH23	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_25 Jan 17_-	BH23	25/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH23_02 Jul 19_-	BH23	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_24 Oct 19_-	BH23	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_15 Jan 20_-	BH23	15/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH23_22 Apr 20_-	BH23	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_01 Jul 06_-	BH24	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_01 Oct 06_-	BH24	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_01 Jan 07_-	BH24	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_01 Apr 07_-	BH24	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_16 Apr 13_-	BH24	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_29 Oct 13_-	BH24	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_28 Jan 14_-	BH24	28/01/2014	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH24_16 Apr 14_-	BH24	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_09 Jul 14_-	BH24	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_16 Oct 14_-	BH24	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_21 Jan 15_-	BH24	21/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-		-	-	<0.2
BH24_22 Apr 15_-	BH24	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_22 Jul 15_-	BH24	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_21 Oct 15_-	BH24	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_20 Jan 16_-	BH24	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH24_14 Apr 16_-	BH24	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_13 Jul 16_-	BH24	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_18 Oct 16_-	BH24	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_25 Jan 17_-	BH24	25/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH24_02 Jul 19_-	BH24	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_25 Oct 19_-	BH24	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_14 Jan 20_-	BH24	14/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH24_23 Apr 20_-	BH24	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_17 Apr 13_-	BH25	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_09 Jul 13_-	BH25	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_28 Jan 14_-	BH25	28/01/2014	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH25_16 Apr 14_-	BH25	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_07 Jul 14_-	BH25	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_15 Oct 14_-	BH25	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_21 Jan 15_-	BH25	21/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-		-	-	<0.2

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008								0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																													
BH25_22 Apr 15_-	BH25	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_21 Jul 15_-	BH25	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_20 Oct 15_-	BH25	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_21 Jan 16_-	BH25	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-
BH25_14 Apr 16_-	BH25	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_21 Jul 16_-	BH25	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_18 Oct 16_-	BH25	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_25 Jan 17_-	BH25	25/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH25_02 Jul 19_-	BH25	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_25 Oct 19_-	BH25	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_13 Jan 20_-	BH25	13/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH25_23 Apr 20_-	BH25	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jul 00_-	BH3A	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Oct 00_-	BH3A	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jan 01_-	BH3A	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Apr 01_-	BH3A	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jul 01_-	BH3A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Oct 01_-	BH3A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jan 02_-	BH3A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Apr 02_-	BH3A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jul 02_-	BH3A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Oct 02_-	BH3A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jan 03_-	BH3A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Apr 03_-	BH3A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jul 03_-	BH3A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Oct 03_-	BH3A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jan 04_-	BH3A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Apr 04_-	BH3A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jul 04_-	BH3A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Oct 04_-	BH3A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jan 05_-	BH3A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Apr 05_-	BH3A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jul 05_-	BH3A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Oct 05_-	BH3A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jan 06_-	BH3A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Apr 06_-	BH3A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jul 06_-	BH3A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Oct 06_-	BH3A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jan 07_-	BH3A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Apr 07_-	BH3A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_16 Apr 13_-	BH3A	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_09 Jul 13_-	BH3A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_30 Oct 13_-	BH3A	30/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_28 Jan 14_-	BH3A	28/01/2014	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH3A_14 Apr 14_-	BH3A	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_07 Jul 14_-	BH3A	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_15 Oct 14_-	BH3A	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_21 Jan 15_-	BH3A	21/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	<0.2
BH3A_22 Apr 15_-	BH3A	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_21 Jul 15_-	BH3A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_20 Oct 15_-	BH3A	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_21 Jan 16_-	BH3A	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-
BH3A_14 Apr 16_-	BH3A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_21 Jul 16_-	BH3A	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_18 Oct 16_-	BH3A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_19 Jan 17_-	BH3A	19/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH3A_02 Jul 19_-	BH3A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_24 Oct 19_-	BH3A	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_27 Apr 20_-	BH3A	27/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Sep 94_-	BH4	1/09/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Dec 94_-	BH4	1/12/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Mar 95_-	BH4	1/03/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008					0.1			0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																													
BH4_01 Jun 95_-	BH4	1/06/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Sep 95_-	BH4	1/09/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Jan 96_-	BH4	1/01/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Apr 96_-	BH4	1/04/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Jul 96_-	BH4	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Oct 96_-	BH4	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Jan 97_-	BH4	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Apr 97_-	BH4	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Jul 97_-	BH4	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Oct 97_-	BH4	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Jan 98_-	BH4	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Apr 98_-	BH4	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 98_-	BH4A	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 98_-	BH4A	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 98_-	BH4A	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 98_-	BH4A	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 99_-	BH4A	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Mar 99_-	BH4A	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 99_-	BH4A	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 99_-	BH4A	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 00_-	BH4A	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 00_-	BH4A	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 00_-	BH4A	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 00_-	BH4A	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 01_-	BH4A	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 01_-	BH4A	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 01_-	BH4A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 01_-	BH4A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 02_-	BH4A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 02_-	BH4A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 02_-	BH4A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 02_-	BH4A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 03_-	BH4A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 03_-	BH4A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 03_-	BH4A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 03_-	BH4A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 04_-	BH4A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 04_-	BH4A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 04_-	BH4A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 04_-	BH4A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 05_-	BH4A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 05_-	BH4A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 05_-	BH4A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 05_-	BH4A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 06_-	BH4A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 06_-	BH4A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 06_-	BH4A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 06_-	BH4A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 07_-	BH4A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 07_-	BH4A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_17 Apr 13_-	BH4A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_22 Jul 13_-	BH4A	22/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_30 Oct 13_-	BH4A	30/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_28 Jan 14_-	BH4A	28/01/2014	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH4A_14 Apr 14_-	BH4A	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_07 Jul 14_-	BH4A	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_15 Oct 14_-	BH4A	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_21 Jan 15_-	BH4A	21/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	<0.2
BH4A_27 Apr 15_-	BH4A	27/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_21 Jul 15_-	BH4A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_20 Oct 15_-	BH4A	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_20 Jan 16_-	BH4A	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008								0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																													
BH4A_14 Apr 16_-	BH4A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_21 Jul 16_-	BH4A	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_18 Oct 16_-	BH4A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_19 Jan 17_-	BH4A	19/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH4A_03 Jul 19_-	BH4A	3/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_25 Oct 19_-	BH4A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_13 Jan 20_-	BH4A	13/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH4A_23 Apr 20_-	BH4A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 00_-	BH5A	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 00_-	BH5A	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 01_-	BH5A	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 01_-	BH5A	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 01_-	BH5A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 01_-	BH5A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 02_-	BH5A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 02_-	BH5A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 02_-	BH5A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 03_-	BH5A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 03_-	BH5A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 03_-	BH5A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 03_-	BH5A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 04_-	BH5A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 04_-	BH5A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 04_-	BH5A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 04_-	BH5A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 05_-	BH5A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 05_-	BH5A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 05_-	BH5A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 05_-	BH5A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 06_-	BH5A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 06_-	BH5A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 06_-	BH5A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 06_-	BH5A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 07_-	BH5A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 07_-	BH5A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_17 Apr 13_-	BH5A	17/04/2013	water	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_22 Jul 13_-	BH5A	22/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_30 Oct 13_-	BH5A	30/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_28 Jan 14_-	BH5A	28/01/2014	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH5A_14 Apr 14_-	BH5A	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_07 Jul 14_-	BH5A	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_15 Oct 14_-	BH5A	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_21 Jan 15_-	BH5A	21/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<0.2
BH5A_22 Apr 15_-	BH5A	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_21 Jul 15_-	BH5A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_20 Oct 15_-	BH5A	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_21 Jan 16_-	BH5A	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH5A_14 Apr 16_-	BH5A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_21 Jul 16_-	BH5A	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_18 Oct 16_-	BH5A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_19 Jan 17_-	BH5A	19/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH5A_02 Jul 19_-	BH5A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_24 Oct 19_-	BH5A	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_15 Jan 20_-	BH5A	15/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH5A_23 Apr 20_-	BH5A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jul 01_-	BH6A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 01_-	BH6A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 02_-	BH6A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Apr 02_-	BH6A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jul 02_-	BH6A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 02_-	BH6A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 03_-	BH6A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008					0.1			0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																													
BH6A_01 Apr 03_-	BH6A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jul 03_-	BH6A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 03_-	BH6A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 04_-	BH6A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Apr 04_-	BH6A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jul 04_-	BH6A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 04_-	BH6A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 05_-	BH6A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Apr 05_-	BH6A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A _01 Jul 05_-	BH6A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 05_-	BH6A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 06_-	BH6A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Apr 06_-	BH6A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jul 06_-	BH6A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 06_-	BH6A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 07_-	BH6A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Apr 07_-	BH6A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Apr 07_-	BH7A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 98_-	BH7A	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 98_-	BH7A	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 99_-	BH7A	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Mar 99_-	BH7A	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 99_-	BH7A	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_17 Apr 13_-	BH6A	17/04/2013	water	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_09 Jul 13_-	BH6A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_29 Oct 13_-	BH6A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_28 Jan 14_-	BH6A	28/01/2014	water	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH6A_16 Apr 14_-	BH6A	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_09 Jul 14_-	BH6A	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_16 Oct 14_-	BH6A	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_20 Jan 15_-	BH6A	20/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	<0.2
BH6A_27 Apr 15_-	BH6A	27/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_22 Jul 15_-	BH6A	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_21 Oct 15_-	BH6A	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_20 Jan 16_-	BH6A	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-
BH6A_14 Apr 16_-	BH6A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_20 Sep 16_-	BH6A	20/09/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_18 Oct 16_-	BH6A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_19 Jan 17_-	BH6A	19/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH6A_25 Jan 17_-	BH6A	25/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH6A_02 Jul 19_-	BH6A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_25 Oct 19_-	BH6A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_14 Jan 20_-	BH6A	14/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2
BH6A_23 Apr 20_-	BH6A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Sep 93_-	BH7	1/09/1993	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jun 94_-	BH7	1/06/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Sep 94_-	BH7	1/09/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Dec 94_-	BH7	1/12/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Mar 95_-	BH7	1/03/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jun 95_-	BH7	1/06/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Sep 95_-	BH7	1/09/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jan 96_-	BH7	1/01/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Apr 96_-	BH7	1/04/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jul 96_-	BH7	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Oct 96_-	BH7	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jan 97_-	BH7	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Apr 97_-	BH7	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jul 97_-	BH7	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Oct 97_-	BH7	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jan 98_-	BH7	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Apr 98_-	BH7	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 98_-	BH7A	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 98_-	BH7A	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008					0.1			0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																													
BH7A_01 Oct 99_-	BH7A	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 00_-	BH7A	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 00_-	BH7A	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 00_-	BH7A	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 00_-	BH7A	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 01_-	BH7A	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 01_-	BH7A	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 01_-	BH7A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 01_-	BH7A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 02_-	BH7A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 02_-	BH7A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 02_-	BH7A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 02_-	BH7A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 03_-	BH7A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 03_-	BH7A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 03_-	BH7A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 03_-	BH7A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 04_-	BH7A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 04_-	BH7A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 04_-	BH7A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 04_-	BH7A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 05_-	BH7A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 05_-	BH7A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 05_-	BH7A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 05_-	BH7A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 06_-	BH7A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 06_-	BH7A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 06_-	BH7A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 06_-	BH7A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 07_-	BH7A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 07_-	BH7A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_17 Apr 13_-	BH7A	17/04/2013	water	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_09 Jul 13_-	BH7A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_29 Oct 13_-	BH7A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_28 Jan 14_-	BH7A	28/01/2014	water	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH7A_16 Apr 14_-	BH7A	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_09 Jul 14_-	BH7A	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_16 Oct 14_-	BH7A	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_21 Jan 15_-	BH7A	21/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	<0.2
BH7A_23 Apr 15_-	BH7A	23/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_21 Jul 15_-	BH7A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_21 Oct 15_-	BH7A	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_21 Jan 16_-	BH7A	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	-
BH7A_19 Apr 16_-	BH7A	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_13 Jul 16_-	BH7A	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_18 Oct 16_-	BH7A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_19 Jan 17_-	BH7A	19/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH7A_02 Jul 19_-	BH7A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_25 Oct 19_-	BH7A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_14 Jan 20_-	BH7A	14/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH7A_23 Apr 20_-	BH7A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Sep 93_-	BH8	1/09/1993	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Jun 94_-	BH8	1/06/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Sep 94_-	BH8	1/09/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Dec 94_-	BH8	1/12/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Mar 95_-	BH8	1/03/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Jun 95_-	BH8	1/06/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Sep 95_-	BH8	1/09/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Jan 96_-	BH8	1/01/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Apr 96_-	BH8	1/04/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Jul 96_-	BH8	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Oct 96_-	BH8	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008					0.1			0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																													
BH8A_01 Jul 96_-	BH8A	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 96_-	BH8A	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 97_-	BH8A	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 97_-	BH8A	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 97_-	BH8A	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 97_-	BH8A	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 98_-	BH8A	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 98_-	BH8A	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 98_-	BH8A	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 98_-	BH8A	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 99_-	BH8A	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Mar 99_-	BH8A	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 99_-	BH8A	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 99_-	BH8A	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 00_-	BH8A	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 00_-	BH8A	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 00_-	BH8A	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 00_-	BH8A	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 01_-	BH8A	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 01_-	BH8A	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 01_-	BH8A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 01_-	BH8A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 02_-	BH8A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 02_-	BH8A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 02_-	BH8A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 02_-	BH8A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 03_-	BH8A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 03_-	BH8A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 03_-	BH8A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 03_-	BH8A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 04_-	BH8A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 04_-	BH8A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 04_-	BH8A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 04_-	BH8A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 05_-	BH8A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 05_-	BH8A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 05_-	BH8A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 05_-	BH8A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 06_-	BH8A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 06_-	BH8A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 06_-	BH8A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 06_-	BH8A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 07_-	BH8A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 07_-	BH8A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_17 Apr 13_-	BH8A	17/04/2013	water	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_09 Jul 13_-	BH8A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_29 Oct 13_-	BH8A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_28 Jan 14_-	BH8A	28/01/2014	water	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH8A_16 Apr 14_-	BH8A	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_09 Jul 14_-	BH8A	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_16 Oct 14_-	BH8A	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_21 Jan 15_-	BH8A	21/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	<0.2
BH8A_23 Apr 15_-	BH8A	23/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_21 Jul 15_-	BH8A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_21 Oct 15_-	BH8A	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_21 Jan 16_-	BH8A	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	-
BH8A_19 Apr 16_-	BH8A	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_13 Jul 16_-	BH8A	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_18 Oct 16_-	BH8A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_19 Jan 17_-	BH8A	19/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH8A_02 Jul 19_-	BH8A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_22 Apr 20_-	BH8A	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008					0.1			0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																													
BH9_01 Jun 94_-	BH9	1/06/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Sep 94_-	BH9	1/09/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Dec 94_-	BH9	1/12/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Mar 95_-	BH9	1/03/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Jun 95_-	BH9	1/06/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Sep 95_-	BH9	1/09/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Jan 96_-	BH9	1/01/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Apr 96_-	BH9	1/04/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Jul 96_-	BH9	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 96_-	BH9A	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 96_-	BH9A	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 97_-	BH9A	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 97_-	BH9A	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 97_-	BH9A	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 97_-	BH9A	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 98_-	BH9A	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 98_-	BH9A	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Nov 98_-	BH9A	1/11/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 99_-	BH9A	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Mar 99_-	BH9A	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 99_-	BH9A	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 99_-	BH9A	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 00_-	BH9A	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 00_-	BH9A	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 00_-	BH9A	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 00_-	BH9A	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 01_-	BH9A	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 01_-	BH9A	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 01_-	BH9A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 02_-	BH9A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 02_-	BH9A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 02_-	BH9A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 02_-	BH9A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 03_-	BH9A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 03_-	BH9A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 03_-	BH9A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 03_-	BH9A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 04_-	BH9A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 04_-	BH9A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 04_-	BH9A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 04_-	BH9A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 05_-	BH9A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 05_-	BH9A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 05_-	BH9A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 07_-	BH9A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9B_01 Jul 05_-	BH9B	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9B_01 Oct 06_-	BH9B	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9B_01 Jan 07_-	BH9B	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9B_01 Apr 07_-	BH9B	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_17 Apr 13_-	BH9C	17/04/2013	water	-	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_09 Jul 13_-	BH9C	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_29 Oct 13_-	BH9C	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_28 Jan 14_-	BH9C	28/01/2014	water	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH9C_16 Apr 14_-	BH9C	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_07 Jul 14_-	BH9C	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_15 Oct 14_-	BH9C	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_20 Jan 15_-	BH9C	20/01/2015	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2			<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	<0.2
BH9C_22 Apr 15_-	BH9C	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_21 Jul 15_-	BH9C	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_20 Oct 15_-	BH9C	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_20 Jan 16_-	BH9C	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	-
BH9C_14 Apr 16_-	BH9C	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G1a - Historical groundwater results - ecological assessment criteria

	OC Pesticides																				OP Pesticides								Chlorinated Hydrocarbons	SVOCs
	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																														
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																														
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.01		0.2				0.02		0.2	0.09		0.1			0.01		0.01	0.15		0.2		55	
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)		0.001							0.01											0.005										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)										0.01				0.008								0.009							55	
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)		0.003						0.0004	0.01[#9]							0.007	0.0004			0.004				0.01	0.15		0.001			

Sample ID	Location Code	Date	Matrix Type																													
BH9C_13 Jul 16_-	BH9C	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_18 Oct 16_-	BH9C	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_19 Jan 17_-	BH9C	19/01/2017	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH9C_02 Jul 19_-	BH9C	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_24 Oct 19_-	BH9C	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_13 Jan 20_-	BH9C	13/01/2020	water	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	-	<0.2
BH9C_23 Apr 20_-	BH9C	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistical Summary																														
Number of Results	22	105	105	105	106	105	105	105	105	83	105	22	105	105	105	105	105	105	105	105	85	85	85	85	85	85	85	85	4	83
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5	<0.2
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5	<0.2
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.5	0.1
Median Concentration	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.5	0.1
Standard Deviation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances	0	105	0	0	0	0	0	105	105	83	0	0	0	105	0	105	105	0	105	105	0	85	0	85	85	0	85	0	0	0
Number of Guideline Exceedances(Detects Only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Env Stds Comments
#1:calculated from % Saturation
#2:assumed same as NH4
#3:Measured as NH3-N at pH 8
#4:(pH >6.5)
#5:In absence of total As guideline, As (V) guideline has been adopted.
#6:Guideline for Cr (VI) adopted
#7:Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#8:In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#9:Freshwater DGV adopted (insufficient marine toxicity data)

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions									Nutrients					Organic Indicators	Metals										
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																			
AB01_01 Jul 01_-	AB01	1/07/2001	water	-	7.4	1000	-	-	-	-	620	-	-	-	12	-	-	-	-	-	-	-	-	-	-	2.8	-	-	3.8	<0.01	-	-	0.055	-	-	0.002	-	-	<0.001	-	<0.001
AB01_01 Oct 01_-	AB01	1/10/2001	water	-	7.5	1000	-	-	-	-	600	-	-	-	12	-	-	-	-	-	-	-	-	-	-	2.83	-	-	3.4	<0.01	-	-	0.078	-	-	<0.001	-	-	<0.001	-	<0.001
AB01_01 Jan 02_-	AB01	1/01/2002	water	-	7.5	1100	-	-	-	-	620	-	-	-	12	-	-	-	-	-	-	-	-	-	-	2.55	-	-	3	<0.01	-	-	0.059	-	-	<0.001	-	-	0.001	-	<0.001
AB01_01 Apr 02_-	AB01	1/04/2002	water	-	7.8	990	-	-	-	-	610	-	-	-	14	-	-	-	-	-	-	-	-	-	-	2.38	-	-	3.6	0.01	-	-	0.109	-	-	0.001	-	-	<0.001	-	<0.001
AB01_01 Jul 02_-	AB01	1/07/2002	water	-	7.9	900	-	-	-	-	570	-	-	-	9	-	-	-	-	-	-	-	-	-	-	1.6	-	-	2	<0.01	-	-	0.064	-	-	<0.001	-	-	<0.001	-	<0.001
AB01_01 Apr 03_-	AB01	1/04/2003	water	-	7.93	1070	-	-	-	-	670	-	-	-	21	-	-	-	-	-	-	-	-	-	-	1.9	-	-	3	0.02	-	-	0.097	-	-	<0.001	-	-	<0.001	-	<0.001
AB01_01 Jul 04_-	AB01	1/07/2004	water	-	7.67	-	-	-	-	-	744	-	-	-	19	-	-	-	-	-	-	-	-	-	-	1.89	-	-	-	<0.01	-	-	0.132	-	-	-	-	-	-	-	-
AB01_01 Jan 05_-	AB01	1/01/2005	water	-	7.89	-	-	-	-	-	930	-	-	-	9	-	-	-	-	-	-	-	-	-	-	2.68	-	-	-	0.117	-	-	0.066	-	-	<0.001	-	-	<0.001	-	<0.001
BH10_01 Jun 94_-	BH10	1/06/1994	water	-	7.8	1077	-	-	-	-	390	-	-	-	11	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	0.0172	-	-	0.008	-	-	0.005	-	0.003
BH10_01 Sep 94_-	BH10	1/09/1994	water	-	7.4	885	-	-	-	-	576	-	-	-	29	-	-	-	-	-	-	-	-	-	-	7.8	-	-	-	-	-	-	0.018	-	-	0.003	-	-	0.006	-	0.003
BH10_01 Dec 94_-	BH10	1/12/1994	water	-	7.6	899	-	-	-	-	616	-	-	-	29	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	0.01	-	-	0.0005	-	-	0.002	-	0.001
BH10_01 Mar 95_-	BH10	1/03/1995	water	-	7.6	1047	-	-	-	-	606	-	-	-	19	-	-	-	-	-	-	-	-	-	-	0.7	-	-	-	-	-	-	0.013	-	-	0.003	-	-	0.003	-	0.001
BH10_01 Jun 95_-	BH10	1/06/1995	water	-	7.44	834	-	-	-	-	408	-	-	-	19	-	-	-	-	-	-	-	-	-	-	0.3	-	-	-	-	-	-	0.023	-	-	0.003	-	-	0.006	-	0.003
BH10_01 Sep 95_-	BH10	1/09/1995	water	-	8.6	852	-	-	-	-	656	-	-	-	21	-	-	-	-	-	-	-	-	-	-	0.1	-	-	1.6	0.17	-	-	0.011	-	-	0.0007	-	-	0.002	-	0.001
BH10_01 Jan 96_-	BH10	1/01/1996	water	-	7.7	721	-	-	-	-	548	-	-	-	18	-	-	-	-	-	-	-	-	-	-	0.63	-	-	1.3	-	-	-	0.01	-	-	0.001	-	-	0.001	-	0.001
BH10_01 Apr 96_-	BH10	1/04/1996	water	-	7.76	595	-	-	-	-	616	-	-	-	22	-	-	-	-	-	-	-	-	-	-	1.31	-	-	1.8	0.08	-	-	0.024	-	-	0.001	-	-	0.002	-	0.001
BH10_01 Jul 96_-	BH10	1/07/1996	water	-	8.79	866	-	-	-	-	628	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.81	-	-	1.9	0.34	-	-	0.014	-	-	0.006	-	-	0.002	-	0.013
BH10_01 Oct 96_-	BH10	1/10/1996	water	-	7.58	1066	-	-	-	-	748	-	-	-	21	-	-	-	-	-	-	-	-	-	-	1.32	-	-	2.2	0.79	-	-	0.03	-	-	0.001	-	-	0.003	-	0.001
BH10_01 Jan 97_-	BH10	1/01/1997	water	-	7.71	1168	-	-	-	-	698	-	-	-	34	-	-	-	-	-	-	-	-	-	-	1.82	-	-	2.8	0.1	-	-	0.04	-	-	0.001	-	-	0.001	-	0.001
BH10_01 Apr 97_-	BH10	1/04/1997	water	-	7.72	1097	-	-	-	-	780	-	-	-	27	-	-	-	-	-	-	-	-	-	-	3.32	-	-	3.8	0.01	-	-	0.029	-	-	0.007	-	-	0.001	-	0.001
BH10_01 Jul 97_-	BH10	1/07/1997	water	-	7.36	1146	-	-	-	-	660	-	-	-	20	-	-	-	-	-	-	-	-	-	-	3.58	-	-	3.6	0.2	-	-	0.015	-	-	0.001	-	-	0.001	-	0.001
BH10_01 Oct 97_-	BH10	1/10/1997	water	-	7.54	1155	-	-	-	-	716	-	-	-	14	-	-	-	-	-	-	-	-	-	-	3.49	-	-	4.6	0.03	-	-	0.022	-	-	0.001	-	-	0.001	-	0.001
BH10_01 Jan 98_-	BH10	1/01/1998	water	-	7.61	1061	-	-	-	-	686	-	-	-	8	-	-	-	-	-	-	-	-	-	-	3.77	-	-	4.8	0.25	-	-	0.017	-	-	0.001	-	-	0.003	-	0.001
BH10_01 Apr 98_-	BH10	1/04/1998	water	-	7.66	1142	-	-	-	-	726	-	-	-	14	-	-	-	-	-	-	-	-	-	-	4.14	-	-	6.7	0.01	-	-	0.017	-	-	0.018	-	-	0.001	-	0.001
BH10_01 Jul 98_-	BH10	1/07/1998	water	-	7.6	1110	-	-	-	-	804	-	-	-	19	-	-	-	-	-	-	-	-	-	-	4.17	-	-	4.9	0.01	-	-	0.01	-	-	0.001	-	-	0.001	-	0.001
BH10_01 Oct 98_-	BH10	1/10/1998	water	-	6.82	1020	-	-	-	-	634	-	-	-	16	-	-	-	-	-	-	-	-	-	-	2.32	-	-	4.2	0.01	-	-	0.01	-	-	0.002	-	-	0.001	-	0.002
BH10_01 Jan 99_-	BH10	1/01/1999	water	-	7.3	1430	-	-	-	-	870	-	-	-	13	-	-	-	-	-	-	-	-	-	-	1.89	-	-	5.1	0.01	-	-	0.019	-	-	0.001	-	-	0.001	-	0.001
BH10_01 Mar 99_-	BH10	1/03/1999	water	-	7.2	1500	-	-	-	-	892	-	-	-	12	-	-	-	-	-	-	-	-	-	-	4.6	-	-	4.6	0.03	-	-	0.015	-	-	0.003	-	-	0.012	-	0.001
BH10_01 Jul 99_-	BH10	1/07/1999	water	-	7.1	964	-	-	-	-	599	-	-	-	6	-	-	-	-	-	-	-	-	-	-	1.32	-	-	2	0.24	-	-	0.004	-	-	0.004	-	-	0.002	-	0.001
BH10_01 Oct 99_-	BH10	1/10/1999	water	-	7.2	1468	-	-	-	-	758	-	-	-	20	-	-	-	-	-	-	-	-	-	-	7.3	-	-	7.3	0.08	-	-	0.011	-	-	0.002	-	-	0.001	-	0.001
BH10_01 Jan 00_-	BH10	1/01/2000	water	-	7.1	1200	-	-	-	-	790	-	-	-	14	-	-	-	-	-	-	-	-	-	-	4.24	-	-	4.4	0.04	-	-	0.015	-	-	0.002	-	-	0.001	-	0.001
BH10_01 Apr 00_-	BH10	1/04/2000	water	-	7	890	-	-	-	-	580	-	-	-	9	-	-	-	-	-	-	-	-	-	-	2.97	-	-	3.2	0.11	-	-	0.01	-	-	0.011	-	-	0.003	-	0.001
BH10_01 Jul 00_-	BH10	1/07/2000	water	-	6.9	1100	-	-	-	-	700	-	-	-	14	-	-	-	-	-	-	-	-	-	-	3.87	-	-	6	0.03	-	-	0.009	-	-	0.006	-	-	0.001	-	0.001
BH10_01 Oct 00_-	BH10	1/10/2000	water	-	7	1000	-	-	-	-	630	-	-	-	14	-	-	-	-	-	-	-	-	-	-	3.51	-	-	4.4	0.08	-	-	0.004	-	-	0.002	-	-	0.001	-	0.001
BH10_01 Jan 01_-	BH10	1/01/2001	water	-	7.3	860	-	-	-	-	580	-	-	-	16	-	-	-	-	-	-	-	-	-	-	2.47	-	-	4	0.04	-	-	0.01	-	-	0.014	-	-	0.001	-	0.001
BH10_01 Apr 01_-	BH10	1/04/2001	water	-	7.3	780	-	-	-	-	520	-	-	-	10	-	-	-	-	-	-	-	-	-	-	2.09	-	-	3.8	0.18	-	-	0.008	-	-	0.002	-	-	0.001	-	0.001
BH10_01 Jul 01_-	BH10	1/07/2001	water	-	7.2	1100	-	-	-	-	660	-	-	-	10	-	-	-	-	-	-	-	-	-	-	1.73	-	-	3.2	0.01	-	-	0.015	-	-	0.002	-	-	0.002	-	0.001
BH10_01 Oct 01_-	BH10	1/10/2001	water	-	7	1200	-	-	-	-	800	-	-	-	10	-	-	-	-	-	-	-	-	-	-	1.44	-	-	2.4	0.24	-	-	0.009	-	-	0.001	-	-	0.002	-	0.001
BH10_01 Jan 02_-	BH10	1/01/2002	water	-	7.1	1200	-	-	-	-	680	-	-	-	10	-	-	-	-	-	-	-	-	-	-	2.74	-	-	2.8	0.01	-	-	0.006	-	-	0.001	-	-	0.001	-	0.001
BH10_01 Apr 02_-	BH10	1/04/2002	water	-	7.5	1300	-	-	-	-	860	-	-	-	14	-	-	-	-	-	-	-	-	-	-	1.24	-	-	2.8	0.19	-	-	0.009	-	-	0.002	-	-	0.002	-	<0.001
BH10_01 Jul 02_-	BH10	1/07/2002	water	-	7.6	1300	-	-	-	-	910	-	-	-	15	-	-	-	-	-	-	-	-	-	-	4.61	-	-	6.6	0.06	-	-	0.017	-	-	<0.001	-	-	0.001	-	<0.001
BH10_01 Oct 02_-	BH10	1/10/2002	water	-	7.6	1300	-	-	-	-	860	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.015	-	-	0.002	-	-	<0.001	-	<0.001
BH10_01 Jan 03_-	BH10	1/01/2003	water	-	7.83	1200	-	-	-	-	710	-	-	-	17	-	-	-	-	-	-	-	-	-	-	7.3	-	-	6.9	0.97	-	-	0.012	-	-	0.005	-	-	<0.001	-	<0.001
BH10_01 Apr 03_-	BH10	1/04/2003	water	-	7.58	1340	-	-	-	-	850	-	-	-	38	-	-	-	-	-	-	-	-	-	-	3.2	-	-	8	0.01	-	-	0.014	-	-	0.001	-	-	0.002	-	0.001
BH10_01 Jul 03_-	BH10	1/07/2003	water	-	7.83	397	-	-	-	-	330	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.11	-	-	0.4	0.01	-	-	0.008	-	-	0.001	-	-	0.001	-	0.001
BH10_01 Oct 03_-	BH10	1/10/2003	water	-	7.91	1000	-	-	-	-	692	-	-	-	20	-	-	-	-	-	-	-	-	-	-	1.49	-	-	6.3	0.01	-	-	0.007	-	-	0.001	-	-	0.001	-	0.001
BH10_01 Jan 04_-	BH10	1/01/2004	water	-	8.08	1400	-	-	-	-	996	-	-	-	22	-	-	-	-	-	-	-	-	-	-	5.39	-	-	11.9	0.01	-	-	0.008	-	-	0.005	-	-	0.001	-	0.001
BH10_29 Jul 14_-	BH10	29/07/2014	water	3.45	5.44	1126	1.46	175	15.7	6.7	1400	-	460	<1	-	-	340	37	11	100	76	480	<0.1	-	-	0.23	-	-	-	-	130	-	-	-	-	-	-	-	-	-	-	-
BH10_15 Oct 14_-	BH10	15/10/2014	water	2.24	7	912	0.66	8	16.5	7.1	660	-	360	<1	-	-	180	19	9.2	81	45	140	<0.1	-	-	0.32	-	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-
BH10_20 Jan 15_-	BH10	20/01/2015	water	2.83	6.19	859	0.77	-12	19.6	6.8	660	-	340	<1	-	-	190	21	14	51	58	88	0.1	-	-	0.34	0.018	0.013	-	-	200	<0.005	0.008	0.089	<0.0001	-	<0.01	<0.001	<0.001	-	<0.001
BH10_22 Apr 15_-	BH10	22/04/2015	water	2.18	6.75	926	2.67	87	17.9	6.8	850	-	410	<1	-	-	210	21	8.5	88	74	150	<0.1	-	-	0.075	-	-	-	-	120	-	-	-	-	-	-	-	-	-	-	-
BH10_21 Jul 15_-	BH10	21/07/2015	water	2.1	6.88	336	2.36	-5	16.6	6.9	750	-	430	<1	-	-	230	19	8.6	55	61	110	0.1	-	-	0.29	-	-	-	-	99	-	-	-	-	-	-	-	-	-	-	-
BH10_20 Oct 15_-	BH10	20/10/2015	water	2.9	6.87	8300	1.84	89	20.4	7.5	890	-	500	<1	-	-	220	18	9.2	56	70	130	0.2	-	-	0.43	-	-	-	-	33	-	-	-	-	-	-	-	-	-	-	-
BH10_20 Jan 16_-	BH10	20/01/2016	water	2.4	7.11	1041	2.73	-46	28.2	7.1	830	-	440	<1	-	-	220	20	11	81	55	160	0.3	-	-	0.45	0.079	0.05	-	-	61	<0.005	0.001	0.13	<0.0001	<0.001	<0.01	<0.001	0.001	-	<0.001
BH10_14 Apr 16_-	BH10	14/04/2016	water	3.21	7.38	1219	1.3	-68	21.1	7.2	860	-	550	<5	-	-	230	20	11	63	48	120	0.2	-	-	0.53	-	-	-	-	77	-	-	-	-	-	-	-	-	-	-	-
BH10_13 Jul 16_-	BH10	13/07/2016	water	2.55	7.04	1090	2.36	71	14.9	7	760	-	430	<5	-	-	220	19	5.7	53	44	200	0.1	-	-	0.11	-	-	-	-	130	-	-	-	-	-	-	-	-	-	-	-
BH10_18 Oct 16_-	BH10	18/10/2016	water	2.45	7.29	841	1.41	-42	18	7.3	570	-	360	<5	-	-	180	14	7.5	34	26	91	0.2	-	-	0.16	-	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 01_-	BH10A	1/07/2001	water	-	6.6	1700	-	-	-	-	1100	-	-	-	21	-	-	-	-	-	-	-	-	-	-	2.15	-	-	4	0.01	-	-	0.019	-	-	0.004	-	-	0.001	-	0.001
BH10A_01 Oct 01_-	BH10A	1/10/2001	water	-	6.9	1200	-	-	-	-	680	-	-	-	23	-	-	-	-	-	-	-	-	-	-	3.2	-	-	4	0.01	-	-	0.022	-	-	0.004	-	-	0.001	-	0.001
BH10A_01 Jan 02_-	BH10A	1/01/2002	water	-	6.8	1700	-	-	-	-	930	-	-	-	19	-	-	-	-	-	-	-	-	-	-	4.4	-	-	7.4	0.01	-	-	0.016	-	-	0.002	-	-	0.001	-	0.001
BH10A_01 Apr 02_-	BH10A	1/04/2002	water	-	7.4	1000	-	-	-	-	590	-	-	-	16	-	-	-	-	-	-	-	-	-	-	3.61	-	-	6.2	<0.01	-	-	0.035	-	-	0.003	-	-	<0.001	-	<0.001
BH10A_01 Jul 02_-	BH10A	1/07/2002	water	-	7.4	1200	-	-	-	-	760	-	-	-	16	-	-	-	-	-	-	-	-	-	-	10.5	-	-	7.8	<0.01	-	-	0.002	-	-	0.003	-	-	<0.001	-	<0.001

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions										Nutrients					Organic Indicators	Metals										
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																			
BH10A_01 Oct 02_-_	BH10A	1/10/2002	water	-	7.3	1400	-	-	-	-	850	-	-	-	19	-	-	-	-	-	-	-	-	-	-	9.22	-	-	12	<0.01	-	-	0.047	-	-	0.003	-	-	<0.001	-	<0.001
BH10A_01 Jan 03_-_	BH10A	1/01/2003	water	-	7.59	950	-	-	-	-	560	-	-	-	21	-	-	-	-	-	-	-	-	-	-	13.1	-	-	14	0.03	-	-	0.04	-	-	0.006	-	-	<0.001	-	<0.001
BH10A_01 Apr 03_-_	BH10A	1/04/2003	water	-	7.34	1330	-	-	-	-	858	-	-	-	44	-	-	-	-	-	-	-	-	-	-	5.21	-	-	10.2	0.01	-	-	0.037	-	-	0.001	-	-	0.003	-	0.001
BH10A_01 Jul 03_-_	BH10A	1/07/2003	water	-	7.54	1720	-	-	-	-	1260	-	-	-	36	-	-	-	-	-	-	-	-	-	-	3.27	-	-	4	0.01	-	-	0.015	-	-	0.005	-	-	0.001	-	0.001
BH10A_01 Oct 03_-_	BH10A	1/10/2003	water	-	7.58	1430	-	-	-	-	934	-	-	-	28	-	-	-	-	-	-	-	-	-	-	2.93	-	-	6.4	0.01	-	-	0.024	-	-	0.001	-	-	0.001	-	0.001
BH10A_01 Jan 04_-_	BH10A	1/01/2004	water	-	7.98	1610	-	-	-	-	1100	-	-	-	27	-	-	-	-	-	-	-	-	-	-	5.95	-	-	8.3	0.01	-	-	0.02	-	-	0.005	-	-	0.001	-	0.001
BH10A_01 Apr 04_-_	BH10A	1/04/2004	water	-	7.43	-	-	-	-	-	956	-	-	-	42	-	-	-	-	-	-	-	-	-	-	4.98	-	-	-	0.01	-	-	0.025	-	-	-	-	-	-	-	-
BH10A_01 Jul 04_-_	BH10A	1/07/2004	water	-	7.62	-	-	-	-	-	814	-	-	-	24	-	-	-	-	-	-	-	-	-	-	4.27	-	-	-	0.01	-	-	0.009	-	-	-	-	-	-	-	-
BH10A_01 Oct 04_-_	BH10A	1/10/2004	water	-	7.5	-	-	-	-	-	1540	-	-	-	24	-	-	-	-	-	-	-	-	-	-	1.25	-	-	-	0.01	-	-	0.016	-	-	-	-	-	-	-	-
BH10A_01 Jan 05_-_	BH10A	1/01/2005	water	-	7.58	-	-	-	-	-	936	-	-	-	55	-	-	-	-	-	-	-	-	-	-	8.38	-	-	-	0.015	-	-	0.028	-	-	0.001	-	-	0.001	-	0.001
BH10A_01 Apr 05_-_	BH10A	1/04/2005	water	-	7.09	-	-	-	-	-	822	-	-	-	16	-	-	-	-	-	-	-	-	-	-	3.97	-	-	-	0.01	-	-	0.01	-	-	-	-	-	-	-	-
BH10A_01 Jul 05_-_	BH10A	1/07/2005	water	-	7.84	-	-	-	-	-	2790	-	-	-	23	-	-	-	-	-	-	-	-	-	-	1.07	-	-	-	0.012	-	-	0.006	-	-	-	-	-	-	-	-
BH10A_01 Oct 05_-_	BH10A	1/10/2005	water	-	6.95	-	-	-	-	-	894	-	-	-	18	-	-	-	-	-	-	-	-	-	-	3.52	-	-	-	0.038	-	-	0.008	-	-	-	-	-	-	-	-
BH10A_01 Jan 06_-_	BH10A	1/01/2006	water	-	7.26	-	-	-	-	-	978	-	-	-	19	-	-	-	-	-	-	-	-	-	-	3.17	-	-	-	0.014	-	-	0.018	-	-	<0.005	-	-	<0.001	-	<0.001
BH10A_01 Apr 06_-_	BH10A	1/04/2006	water	-	7.01	-	-	-	-	-	806	-	-	-	21	-	-	-	-	-	-	-	-	-	-	5.67	-	-	-	0.019	-	-	0.031	-	-	-	-	-	-	-	-
BH10A_01 Jul 06_-_	BH10A	1/07/2006	water	-	7.3	-	-	-	-	-	1720	-	-	-	24	-	-	-	-	-	-	-	-	-	-	0.223	-	-	-	<0.01	-	-	0.009	-	-	-	-	-	-	-	-
BH10A_01 Oct 06_-_	BH10A	1/10/2006	water	-	7.24	-	-	-	-	-	1140	-	-	-	22	-	-	-	-	-	-	-	-	-	-	3.17	-	-	-	<0.01	-	-	0.012	-	-	-	-	-	-	-	-
BH10A_01 Jan 07_-_	BH10A	1/01/2007	water	-	7.08	-	-	-	-	-	910	-	-	-	22	-	-	-	-	-	-	-	-	-	-	7.69	-	-	-	<0.01	-	-	0.113	-	-	<0.005	-	-	<0.001	-	<0.001
BH10A_01 Apr 07_-_	BH10A	1/04/2007	water	-	6.76	-	-	-	-	-	848	-	-	-	25	686	193	31	12	71	118	2	-	15.6	17.1	12.3	0.031	<0.01	-	-	-	-	-	0.022	-	-	-	-	-	-	-
BH10B_12 Apr 17_-_	BH10B	12/04/2017	water	2.61	6.84	1341	0.5	-36	20.3	6.9	880	-	450	<5	-	-	220	20	9	48	55	250	0.1	-	-	0.52	-	-	-	-	71	-	-	-	-	-	-	-	-	-	-	-
BH10B_05 Jul 17_-_	BH10B	5/07/2017	water	3.8	7.1	1130	1.73	-42	18.3	7.4	710	-	370	<5	-	-	190	17	9.5	49	44	170	0.2	-	-	0.66	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-
BH10B_09 Oct 17_-_	BH10B	9/10/2017	water	2.89	7.06	1041	1.35	-98	20.7	7.2	710	-	350	<5	-	-	200	20	12	47	53	160	0.1	-	-	0.71	-	-	-	-	25	-	-	-	-	-	-	-	-	-	-	-
BH10B_15 Jan 18_-_	BH10B	15/01/2018	water	3.01	6.3	1006	0.53	-1.2	20.8	6.2	700	-	370	<5	-	-	200	19	11	48	54	160	0.2	-	-	0.76	0.01	<0.005	-	-	34	<0.01	0.008	0.12	<0.0001	<0.001	<0.05	<0.001	0.001	-	<0.001
BH10B_23 Apr 18_-_	BH10B	23/04/2018	water	3.08	7.01	1068	1.02	-48	22.7	6.8	820	-	400	<5	-	-	220	22	14	43	50	130	0.1	-	-	0.81	-	-	-	-	26	-	-	-	-	-	-	-	-	-	-	-
BH10B_09 Jul 18_-_	BH10B	9/07/2018	water	2.92	6.95	1486	1.41	-112	17.5	7.1	970	-	470	<5	-	-	280	26	14	69	76	270	0.1	-	-	1.1	-	-	-	-	33	-	-	-	-	-	-	-	-	-	-	-
BH10B_08 Oct 18_-_	BH10B	8/10/2018	water	2.98	6.92	1306	0.61	-86.3	18.6	7	1000	-	530	<5	-	-	260	23	13	68	70	240	0.2	-	-	0.83	-	-	-	-	37	-	-	-	-	-	-	-	-	-	-	-
BH10B_22 Jan 19_-_	BH10B	22/01/2019	water	3.3	7.03	1526	2.3	-100.6	24.2	7.3	1100	1100	550	<5	-	-	270	26	14	51	77	170	0.2	-	-	0.96	<0.005	0.006	-	-	35	0.01	0.009	0.16	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH10B_09 Apr 19_-_	BH10B	9/04/2019	water	2.89	7.13	1346	0.13	-137.6	22.4	7.2	940	-	560	<5	-	-	260	26	15	66	87	170	0.2	-	-	1.4	-	-	-	-	140	-	-	-	-	-	-	-	-	-	-	-
BH10B_02 Jul 19_-_	BH10B	2/07/2019	water	2.88	7.13	1506	3.18	-98.8	18.1	7.1	1300	-	670	<5	-	-	320	32	15	62	99	250	0.2	-	-	1.7	-	-	-	-	120	-	-	-	-	-	-	-	-	-	-	-
BH10B_24 Oct 19_-_	BH10B	24/10/2019	water	3	6.95	1730	2.52	-68.4	20.4	7	1400	-	730	<5	-	-	380	36	16	83	120	210	0.1	-	-	1.7	-	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-
BH10B_15 Jan 20_-_	BH10B	15/01/2020	water	3.1	7.09	2019	1.37	-23.1	22.2	7.1	1300	-	750	<5	-	-	290	27	19	140	98	200	0.2	-	-	13	0.02	<0.005	-	-	27	0.01	0.01	0.24	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH10B_22 Apr 20_-_	BH10B	22/04/2020	water	2.82	7.39	2037	0.4	-117.2	22.1	7.1	1300	-	760	<5	-	-	280	28	24	160	230	110	0.2	-	-	18	-	-	-	-	30	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jun 94_-_	BH11	1/06/1994	water	-	7.9	940	-	-	-	-	480	-	-	-	17	-	-	-	-	-	-	-	-	-	-	7.5	-	-	-	-	-	-	0.0659	-	-	0.005	-	-	0.005	-	0.003
BH11_01 Sep 94_-_	BH11	1/09/1994	water	-	7.5	950	-	-	-	-	520	-	-	-	39	-	-	-	-	-	-	-	-	-	-	4.3	-	-	-	-	-	-	0.105	-	-	0.003	-	-	0.005	-	0.003
BH11_01 Dec 94_-_	BH11	1/12/1994	water	-	7	895	-	-	-	-	698	-	-	-	55	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	0.129	-	-	0.001	-	-	0.001	-	0.001
BH11_01 Mar 95_-_	BH11	1/03/1995	water	-	7.2	1264	-	-	-	-	528	-	-	-	31	-	-	-	-	-	-	-	-	-	-	4.4	-	-	-	-	-	-	0.153	-	-	0.001	-	-	0.002	-	0.001
BH11_01 Jun 95_-_	BH11	1/06/1995	water	-	7.47	933	-	-	-	-	576	-	-	-	27	-	-	-	-	-	-	-	-	-	-	3.8	-	-	-	-	-	-	0.162	-	-	0.001	-	-	0.001	-	0.001
BH11_01 Sep 95_-_	BH11	1/09/1995	water	-	7.91	819	-	-	-	-	668	-	-	-	26	-	-	-	-	-	-	-	-	-	-	4.8	-	-	7.3	0.05	-	-	0.186	-	-	0.005	-	-	0.002	-	0.001
BH11_01 Jan 96_-_	BH11	1/01/1996	water	-	7.53	979	-	-	-	-	505	-	-	-	10	-	-	-	-	-	-	-	-	-	-	5.92	-	-	7.9	-	-	-	0.143	-	-	0.001	-	-	0.001	-	0.001
BH11_01 Apr 96_-_	BH11	1/04/1996	water	-	7.16	970	-	-	-	-	656	-	-	-	25	-	-	-	-	-	-	-	-	-	-	3.63	-	-	5.4	0.04	-	-	0.171	-	-	0.001	-	-	0.002	-	0.004
BH11_01 Jul 96_-_	BH11	1/07/1996	water	-	8.98	1139	-	-	-	-	733	-	-	-	37	-	-	-	-	-	-	-	-	-	-	5.93	-	-	9.7	0.03	-	-	0.18	-	-	0.003	-	-	0.001	-	0.001
BH11_01 Oct 96_-_	BH11	1/10/1996	water	-	7.26	1219	-	-	-	-	828	-	-	-	42	-	-	-	-	-	-	-	-	-	-	4.73	-	-	7.2	0.38	-	-	0.15	-	-	0.008	-	-	0.001	-	0.001
BH11_01 Jan 97_-_	BH11	1/01/1997	water	-	7.42	1436	-	-	-	-	792	-	-	-	54	-	-	-	-	-	-	-	-	-	-	5.99	-	-	6.9	0.06	-	-	0.137	-	-	0.001	-	-	0.002	-	0.001
BH11_01 Apr 97_-_	BH11	1/04/1997	water	-	7.62	1176	-	-	-	-	828	-	-	-	32	-	-	-	-	-	-	-	-	-	-	5.93	-	-	12.5	0.01	-	-	0.165	-	-	0.006	-	-	0.001	-	0.001
BH11_01 Jul 97_-_	BH11	1/07/1997	water	-	7.43	921	-	-	-	-	532	-	-	-	14	-	-	-	-	-	-	-	-	-	-	0.14	-	-	4.4	0.05	-	-	0.158	-	-	0.001	-	-	0.001	-	0.001
BH11_01 Oct 97_-_	BH11	1/10/1997	water	-	7.37	1133	-	-	-	-	722	-	-	-	33	-	-	-	-	-	-	-	-	-	-	3.31	-	-	4.5	0.01	-	-	0.164	-	-	0.001	-	-	0.001	-	0.001
BH11_01 Jan 98_-_	BH11	1/01/1998	water	-	7.35	1345	-	-	-	-	848	-	-	-	21	-	-	-	-	-	-	-	-	-	-	7.74	-	-	9.9	0.06	-	-	0.169	-	-	0.001	-	-	0.002	-	0.001
BH11_01 Apr 98_-_	BH11	1/04/1998	water	-	7.36	1167	-	-	-	-	706	-	-	-	11	-	-	-	-	-	-	-	-	-	-	7.43	-	-	11.4	0.01	-	-	0.183	-	-	0.018	-	-	0.001	-	0.001
BH11_01 Jul 98_-_	BH11	1/07/1998	water	-	7.5	963	-	-	-	-	648	-	-	-	33	-	-	-	-	-	-	-	-	-	-	7.48	-	-	8.4	0.01	-	-	0.13	-	-	0.005	-	-	0.001	-	0.001
BH11_01 Oct 98_-_	BH11	1/10/1998	water	-	7.24	1400	-	-	-	-	864	-	-	-	62	-	-	-	-	-	-	-	-	-	-	5.41	-	-	11	0.09	-	-	0.06	-	-	0.005	-	-	0.005	-	0.003
BH11_01 Nov 98_-_	BH11	1/11/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.002
BH11_01 Jan 99_-_	BH11	1/01/1999	water	-	7.2	1440	-	-	-	-	876	-	-	-	32	-	-	-	-	-	-	-	-	-	-	2.57	-	-	6.5	0.01	-	-	0.138	-	-	0.001	-	-	0.002	-	0.001
BH11_01 Mar 99_-_	BH11	1/03/1999	water	-	7.2	1200	-	-	-	-	689	-	-	-	26	-	-	-	-	-	-	-	-	-	-	7.5	-	-	7.5	0.03	-	-	0.12	-	-	0.002	-	-	0.007	-	0.001
BH11_01 Jul 99_-_	BH11	1/07/1999	water	-	7.2	1040	-	-	-	-	573	-	-	-	11	-	-	-	-	-	-	-	-	-	-	5.25	-	-	6.7	0.01	-	-	0.022	-	-	0.005	-	-	0.001	-	0.001
BH11_01 Oct 99_-_	BH11	1/10/1999	water	-	7.3	1006	-	-	-	-	570	-	-	-	21	-	-	-	-	-	-	-	-	-	-	10	-	-	10.3	0.01	-	-	0.084	-	-	0.003	-	-	0.004	-	0.001
BH11_01 Jan 00_-_	BH11	1/01/2000	water	-	7.2	1100	-	-	-	-	680	-	-	-	27	-	-	-	-	-	-	-	-	-	-	8.97	-	-	10	0.01	-	-	0.163	-	-	0.002	-	-	0.001	-	0.001
BH11_01 Apr 00_-_	BH11	1/04/2000	water	-	7.2	1100	-	-	-	-	670	-	-	-	19	-	-	-	-	-	-	-	-	-	-	8.63	-	-	8.4	0.01	-	-	0.083	-	-	0.012	-	-	0.001	-	0.001
BH11_01 Jul 00_-_	BH11	1/07/2000	water	-	7	1200	-	-	-	-	700	-	-	-	22	-	-	-	-	-	-	-	-	-	-	7.9	-	-	11	0.01	-	-	0.144	-	-	0.006	-	-	0.001	-	0.001
BH11_01 Oct 00_-_	BH11	1/10/2000	water	-	7.1	1100	-	-	-	-	620	-	-	-	16	-	-	-	-	-	-	-	-	-	-	5.09	-	-	7.4	0.01	-	-	0.023	-	-	0.003	-	-	0.001	-	0.001
BH11_01 Jan 01_-_	BH11	1/01/2001	water	-	7.4	1100	-	-	-	-	660	-	-	-	27	-	-	-	-	-	-	-	-	-	-	6.48	-	-	8	0.01	-	-	0.154	-	-	0.016	-	-	0.001	-	0.001
BH11_01 Apr 01_-_	BH11	1/04/2001	water	-	7.2	1200	-	-	-	-	720	-	-	-	24	-	-	-	-	-	-	-	-	-	-	7.9	-	-	8	0.02	-	-	0.163	-	-	0.004	-	-	0.001	-	0.001
BH11_01 Jul 01_-_	BH11	1/07/2001	water	-	7.1	1100	-	-	-	-	660	-	-	-	20	-	-	-	-	-	-	-	-	-	-	4.21	-	-	8.4	0.03	-	-	0.112	-	-	0.003	-	-	0.001	-	0.001

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions										Nutrients					Organic Indicators	Metals										
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																						
2-4m																																						
4-8m																																						
>8m																																						
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																						
2-4m																																						
4-8m																																						
>8m																																						
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																						
2-4m																																						
4-8m																																						
>8m																																						

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																				
BH11_01 Oct 01_-	BH11	1/10/2001	water	-	7.2	1200	-	-	-	-	710	-	-	-	30	-	-	-	-	-	-	-	-	-	-	8.9	-	-	9.6	0.01	-	-	0.108	-	-	0.002	-	-	0.001	-	0.001
BH11_01 Jan 02_-	BH11	1/01/2002	water	-	7	1400	-	-	-	-	830	-	-	-	38	-	-	-	-	-	-	-	-	-	-	11.2	-	-	13	0.01	-	-	0.102	-	-	0.003	-	-	0.001	-	0.001
BH11_01 Apr 02_-	BH11	1/04/2002	water	-	7.5	1500	-	-	-	-	910	-	-	-	33	-	-	-	-	-	-	-	-	-	-	10.7	-	-	0.6	<0.01	-	-	0.14	-	-	0.005	-	-	<0.001	-	<0.001
BH11_01 Jul 02_-	BH11	1/07/2002	water	-	7.5	1200	-	-	-	-	700	-	-	-	20	-	-	-	-	-	-	-	-	-	-	10.4	-	-	10	<0.01	-	-	0.144	-	-	0.004	-	-	<0.001	-	<0.001
BH11_01 Oct 02_-	BH11	1/10/2002	water	-	7.5	1300	-	-	-	-	730	-	-	-	24	-	-	-	-	-	-	-	-	-	-	13.4	-	-	17	<0.01	-	-	0.064	-	-	0.001	-	-	<0.001	-	<0.001
BH11_01 Jan 03_-	BH11	1/01/2003	water	-	7.61	970	-	-	-	-	710	-	-	-	22	-	-	-	-	-	-	-	-	-	-	11.1	-	-	11	0.02	-	-	0.134	-	-	0.004	-	-	<0.001	-	<0.001
BH11_01 Apr 03_-	BH11	1/04/2003	water	-	7.48	1210	-	-	-	-	742	-	-	-	37	-	-	-	-	-	-	-	-	-	-	6.87	-	-	14.2	0.01	-	-	0.154	-	-	0.001	-	-	0.002	-	0.001
BH11_01 Jul 03_-	BH11	1/07/2003	water	-	7.59	1370	-	-	-	-	824	-	-	-	38	-	-	-	-	-	-	-	-	-	-	14.6	-	-	13.9	0.01	-	-	0.067	-	-	0.005	-	-	0.001	-	0.001
BH11_01 Oct 03_-	BH11	1/10/2003	water	-	7.65	1250	-	-	-	-	750	-	-	-	29	-	-	-	-	-	-	-	-	-	-	6.68	-	-	15.7	0.02	-	-	0.083	-	-	0.001	-	-	0.001	-	0.001
BH11_01 Jan 04_-	BH11	1/01/2004	water	-	8	1170	-	-	-	-	792	-	-	-	30	-	-	-	-	-	-	-	-	-	-	9.3	-	-	14.1	0.01	-	-	0.099	-	-	0.005	-	-	0.001	-	0.001
BH11_01 Apr 04_-	BH11	1/04/2004	water	-	7.43	-	-	-	-	-	650	-	-	-	24	-	-	-	-	-	-	-	-	-	-	9.99	-	-	-	0.01	-	-	0.082	-	-	-	-	-	-	-	-
BH11_01 Jul 04_-	BH11	1/07/2004	water	-	7.43	-	-	-	-	-	596	-	-	-	19	-	-	-	-	-	-	-	-	-	-	8.68	-	-	-	0.01	-	-	0.087	-	-	-	-	-	-	-	-
BH11_01 Jan 05_-	BH11	1/01/2005	water	-	7.54	-	-	-	-	-	634	-	-	-	8	-	-	-	-	-	-	-	-	-	-	9.82	-	-	-	0.013	-	-	0.089	-	-	0.001	-	-	<0.001	-	0.001
BH11_01 Apr 05_-	BH11	1/04/2005	water	-	6.88	-	-	-	-	-	682	-	-	-	16	-	-	-	-	-	-	-	-	-	-	3.8	-	-	-	0.012	-	-	0.024	-	-	-	-	-	-	-	-
BH11_01 Jul 05_-	BH11	1/07/2005	water	-	8.1	-	-	-	-	-	1080	-	-	-	21	-	-	-	-	-	-	-	-	-	-	5.92	-	-	-	0.024	-	-	0.119	-	-	<0.005	-	-	<0.001	-	<0.001
BH11_01 Apr 06_-	BH11	1/04/2006	water	-	7.32	-	-	-	-	-	764	-	-	-	29	-	-	-	-	-	-	-	-	-	-	1.01	-	-	-	0.01	-	-	0.074	-	-	-	-	-	-	-	-
BH11_01 Jul 06_-	BH11	1/07/2006	water	-	7.34	-	-	-	-	-	700	-	-	-	28	-	-	-	-	-	-	-	-	-	-	4.93	-	-	-	<0.01	-	-	0.059	-	-	-	-	-	-	-	-
BH11_01 Oct 06_-	BH11	1/10/2006	water	-	7.27	-	-	-	-	-	1400	-	-	-	22	-	-	-	-	-	-	-	-	-	-	7.22	-	-	-	<0.01	-	-	0.081	-	-	-	-	-	-	-	-
BH11_01 Jan 07_-	BH11	1/01/2007	water	-	7.04	-	-	-	-	-	760	-	-	-	18	-	-	-	-	-	-	-	-	-	-	7.36	-	-	-	<0.01	-	-	<0.001	-	-	<0.001	-	-	<0.001	-	<0.001
BH11_01 Apr 07_-	BH11	1/04/2007	water	-	6.94	-	-	-	-	-	530	-	-	-	15	464	117	28	11	48	79.7	4	-	10.5	11.6	7.65	0.014	<0.01	-	-	-	-	0.093	-	-	-	-	-	-	-	-
BH11A_01 Jan 06_-	BH11A	1/01/2006	water	-	7.36	-	-	-	-	-	796	-	-	-	22	-	-	-	-	-	-	-	-	-	-	4.01	-	-	-	0.01	-	-	0.119	-	-	<0.005	-	-	<0.001	-	<0.001
BH11A_16 Apr 13_-	BH11A	16/04/2013	water	24.49	7.29	698	0.83	-95	18.7	8.1	490	-	400	<1	-	-	83	14	2.6	56	72	23	0.11	-	-	0.76	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-
BH11A_09 Jul 13_-	BH11A	9/07/2013	water	22.94	7.05	537	4.9	-95	18.2	7.7	470	-	300	<1	-	-	98	17	3.3	61	59	16	-	-	-	0.54	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
BH11A_29 Oct 13_-	BH11A	29/10/2013	water	23.28	8.26	640	1.78	-134	20	7.3	540	-	340	<1	-	-	120	18	2.9	66	66	41	-	-	-	0.96	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-
BH11A_28 Jan 14_-	BH11A	28/01/2014	water	23.72	7.12	562	3.53	-96	19.6	7.1	520	-	330	<1	-	-	120	22	2.9	53	64	57	0.1	-	-	0.71	0.009	<0.01	-	-	4	<0.005	0.025	0.013	<0.0001	<0.001	<0.005	0.02	<0.001	-	<0.001
BH11A_16 Apr 14_-	BH11A	16/04/2014	water	16.7	6.99	596	1.61	-63	21.3	6.7	620	-	350	<1	-	-	130	24	3.2	65	64	75	<0.1	-	-	0.64	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-
BH11A_16 Apr 14_-2	BH11A	16/04/2014	water	16.7	6.99	596	1.61	-63	21.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_09 Jul 14_-	BH11A	9/07/2014	water	-	-	891	7.37	45	20	7.3	590	-	330	<1	-	-	130	27	3.5	64	81	53	<0.1	-	-	0.6	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
BH11A_16 Oct 14_-	BH11A	16/10/2014	water	23.01	7.13	1042	1.74	-103	19.5	7.3	650	-	310	<1	-	-	130	31	3	69	98	100	<0.1	-	-	0.42	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
BH11A_21 Jan 15_-	BH11A	21/01/2015	water	23.49	6.56	1005	0.3	-103	18.6	7.1	720	-	440	<1	-	-	150	29	4.5	76	99	32	0.12	-	-	1.4	<0.1	<0.01	-	-	6	<0.005	0.004	0.022	<0.0001	-	<0.01	0.006	<0.001	-	<0.001
BH11A_23 Apr 15_-	BH11A	23/04/2015	water	23.78	6.8	622	1.43	-69	21.1	7.1	860	-	460	<1	-	-	140	38	3.4	100	120	47	<0.1	-	-	0.32	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-
BH11A_21 Jul 15_-	BH11A	21/07/2015	water	23.02	6.9	969	2.54	-97	17	6.8	770	-	360	<1	-	-	130	33	2.9	95	120	83	0.1	-	-	0.36	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-
BH11A_21 Oct 15_-	BH11A	21/10/2015	water	23.4	6.88	535	2.23	-78	21	7.1	910	-	480	<1	-	-	170	39	3.9	100	140	77	0.1	-	-	2	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-
BH11A_21 Jan 16_-	BH11A	21/01/2016	water	23.22	6.95	1332	3.73	-90	22.6	7.1	900	-	440	<1	-	-	180	36	5.3	110	130	100	0.1	-	-	0.5	<0.1	<0.01	-	-	13	<0.005	0.006	0.025	<0.0001	<0.001	<0.01	0.009	<0.001	-	<0.001
BH11A_19 Apr 16_-	BH11A	19/04/2016	water	23.34	7.88	1309	1.27	-91	20.1	7.2	870	-	440	<5	-	-	170	35	4.5	91	100	100	<0.1	-	-	0.62	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-
BH11A_13 Jul 16_-	BH11A	13/07/2016	water	23.81	7.1	1351	3.28	-75	14.6	7.2	910	-	430	<5	-	-	180	32	3.9	110	130	140	0.1	-	-	0.46	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-
BH11A_18 Oct 16_-	BH11A	18/10/2016	water	23.56	6.7	1281	2.2	-51	17	6.9	970	-	650	<5	-	-	210	43	5.9	110	130	60	0.1	-	-	3.8	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-
BH11A_19 Jan 17_-	BH11A	19/01/2017	water	23.03	6.81	1387	1.81	-70	21.1	7	950	-	610	<5	-	-	190	35	5.5	110	140	88	0.1	-	-	2.5	<0.005	<0.005	-	-	22	<0.01	0.005	0.027	<0.0001	<0.001	<0.005	0.022	<0.001	-	<0.001
BH11A_25 Jan 17_-	BH11A	25/01/2017	water	2.94	6.21	1249	0.38	72	20.4	6.9	880	-	400	<5	-	-	220	19	9.3	55	45	230	0.2	-	-	0.42	0.01	0.022	-	-	12	<0.01	0.001	0.14	<0.0001	<0.001	<0.05	<0.001	<0.001	-	<0.001
BH11A_02 Jul 19_-	BH11A	2/07/2019	water	23.74	6.79	1263	3.78	-132.7	18.3	7	1400	-	540	<5	-	-	240	36	25	120	130	300	0.2	-	-	0.97	-	-	-	-	28	-	-	-	-	-	-	-	-	-	-	-
BH11A_25 Oct 19_-	BH11A	25/10/2019	water	23.71	6.84	1430	3.01	-64.8	19.8	7.4	1000	-	540	<5	-	-	210	36	5.9	100	110	120	0.2	-	-	1.4	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-
BH11A_14 Jan 20_-	BH11A	14/01/2020	water	23.86	7.16	1564	2.4	-110.8	20.2	6.8	970	-	560	<5	-	-	190	33	4.5	97	120	120	0.1	-	-	0.87	<0.05	<0.005	-	-	12	<0.01	0.2	0.029	<0.0001	<0.001	<0.5	<0.001	0.002	-	<0.001
BH11A_22 Apr 20_-	BH11A	22/04/2020	water	23.5	6.95	1487	3.03	-88.2	20	6.9	970	-	620	<5	-	-	200	34	5.8	92	130	110	0.1	-	-	2.8	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Sep 94_-	BH12	1/09/1994	water	-	7.3	990	-	-	-	-	580	-	-	-	35	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	0.002	-	-	0.003	-	-	0.005	-	0.003
BH12_01 Dec 94_-	BH12	1/12/1994	water	-	6.8	1115	-	-	-	-	502	-	-	-	19	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	0.003	-	-	0.001	-	-	0.003	-	0.001
BH12_01 Mar 95_-	BH12	1/03/1995	water	-	7.3	982	-	-	-	-	456	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	0.002	-	-	0.001	-	-	0.002	-	0.001
BH12_01 Jun 95_-	BH12	1/06/1995	water	-	7.15	975	-	-	-	-	500	-	-	-	13	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	0.002	-	-	0.001	-	-	0.001	-	0.001
BH12_01 Sep 95_-	BH12	1/09/1995	water	-	8	958	-	-	-	-	720	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.1	-	-	0.6	3.58	-	-	0.002	-	-	0.003	-	-	0.005	-	0.001
BH12_01 Jan 96_-	BH12	1/01/1996	water	-	7.37	848	-	-	-	-	580	-	-	-	23	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.3	-	-	-	0.002	-	-	0.001	-	-	0.001	-	0.001
BH12_01 Apr 96_-	BH12	1/04/1996	water	-	7.28	920	-	-	-	-	632	-	-	-	13	-	-	-	-	-	-	-	-	-	-	0.27	-	-	0.7	7.68	-	-	0.003	-	-	0.001	-	-	0.002	-	0.002
BH12_01 Jul 96_-	BH12	1/07/1996	water	-	8.52	1135	-	-	-	-	784	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	12.2	-	-	0	-	-	0.001	-	-	0.001	-	0.001
BH12_01 Oct 96_-	BH12	1/10/1996	water	-	6.89	1316	-	-	-	-	870	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.23	-	-	0.5	7.97	-	-	0.002	-	-	0.008	-	-	0.003	-	0.002
BH12_01 Jan 97_-	BH12	1/01/1997	water	-	7.18	1193	-	-	-	-	612	-	-	-	34	-	-	-	-	-	-	-	-	-	-	0.29	-	-	2.6	0.19	-	-	0.003	-	-	0.001	-	-	0.002	-	0.001
BH12_01 Apr 97_-	BH12	1/04/1997	water	-	7.13	1158	-	-	-	-	852	-	-	-	10	-	-	-	-	-	-	-	-	-	-	0.25	-	-	2.4	3.16	-	-	0.006	-	-	0.008	-	-	0.003	-	0.001
BH12_01 Jul 97_-	BH12	1/07/1997	water	-	7	1245	-	-	-	-	712	-	-	-	13	-	-	-	-	-	-	-	-	-	-	1.32	-	-	2.2	2.8	-	-	0.002	-	-	0.002	-	-	0.001	-	0.001
BH12_01 Oct 97_-	BH12	1/10/1997	water	-	6.99	1085	-	-	-	-	646	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.92	-	-	1.6	1.46	-	-	0.01	-	-	0.001	-	-	0.002	-	0.001
BH12_01 Jan 98_-	BH12	1/01/1998	water	-	6.96	1370	-	-	-	-	772	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.7	-	-	1.3	4.15	-	-	0.001	-	-	0.001	-	-	0.002	-	0.001
BH12_01 Apr 98_-	BH12	1/04/1998	water	-	6.97	1970	-	-	-	-	1210	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.11	-	-	1.6	3.1	-	-	0.002	-	-	0.002	-	-	0.003	-	0.001
BH12_01 Jul 98_-	BH12	1/07/1998	water	-	7	1040	-	-	-	-	718	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.06	-	-	0.8	1.84	-	-	0.004	-	-	0.001	-	-	0.001	-	0.002
BH12_01 Oct 98_-	BH12	1/10/1998	water	-	6.92	1160	-	-	-	-	714	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.1	-	-	0.8	1.47	-	-	0.01	-	-	0.001	-	-	0.005	-	0.001
BH12_01 Jan 99_-	BH12	1/01/1999	water	-	6.9	1580	-	-	-	-	1008	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.5	-	-	1.4	7.19	-	-	0.004	-	-	0.004	-	-	0.002	-	0.001
BH12_01 Mar 99_-	BH12	1/03/1999	water	-	6.8	1600	-	-	-	-	946	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.54	-	-	1.2	0.67	-	-	0.004	-	-	0.003	-	-	0.006	-	0.001

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions									Nutrients					Organic Indicators	Metals										
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																			
BH12_01 Jul 99_-_	BH12	1/07/1999	water	-	6.9	1410	-	-	-	-	769	-	-	-	93	-	-	-	-	-	-	-	-	-	-	2.72	-	-	3.1	0.16	-	-	0.005	-	-	0.006	-	-	0.001	-	0.001
BH12_01 Oct 99_-_	BH12	1/10/1999	water	-	7	1203	-	-	-	-	633	-	-	-	2	-	-	-	-	-	-	-	-	-	-	1.98	-	-	2.6	0.01	-	-	0.005	-	-	0.003	-	-	0.003	-	0.001
BH12A_01 Apr 00_-_	BH12A	1/04/2000	water	-	6.9	1100	-	-	-	-	700	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.2	7.7	-	-	0.003	-	-	0.01	-	-	0.002	-	0.001
BH12A_01 Jul 00_-_	BH12A	1/07/2000	water	-	6.9	1100	-	-	-	-	660	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.3	4.77	-	-	0.003	-	-	0.006	-	-	0.002	-	0.001
BH12A_01 Oct 00_-_	BH12A	1/10/2000	water	-	6.9	1200	-	-	-	-	690	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	5.81	-	-	0.003	-	-	0.003	-	-	0.001	-	0.001
BH12A_01 Jan 01_-_	BH12A	1/01/2001	water	-	7.1	1100	-	-	-	-	660	-	-	-	10	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.5	4.82	-	-	0.003	-	-	0.014	-	-	0.001	-	0.001
BH12A_01 Apr 01_-_	BH12A	1/04/2001	water	-	7	1100	-	-	-	-	660	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.02	-	-	0.2	4.87	-	-	0.003	-	-	0.003	-	-	0.001	-	0.001
BH12A_01 Jul 01_-_	BH12A	1/07/2001	water	-	7	1100	-	-	-	-	750	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.3	3.73	-	-	0.003	-	-	0.003	-	-	0.001	-	0.001
BH12A_01 Oct 01_-_	BH12A	1/10/2001	water	-	7	1200	-	-	-	-	710	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.01	14.6	-	-	0.002	-	-	0.001	-	-	0.001	-	0.001
BH12A_01 Jan 02_-_	BH12A	1/01/2002	water	-	6.8	1500	-	-	-	-	820	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	23.8	-	-	0.001	-	-	0.001	-	-	0.001	-	0.001
BH12A_01 Apr 02_-_	BH12A	1/04/2002	water	-	7.3	1400	-	-	-	-	960	-	-	-	6	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	<0.1	32	-	-	0.004	-	-	0.003	-	-	<0.001	-	<0.001
BH12A_01 Jul 02_-_	BH12A	1/07/2002	water	-	7.4	1100	-	-	-	-	740	-	-	-	3	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	<0.1	20.7	-	-	0.003	-	-	0.002	-	-	<0.001	-	<0.001
BH12A_01 Oct 02_-_	BH12A	1/10/2002	water	-	7.5	1200	-	-	-	-	700	-	-	-	3	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	<0.1	13.2	-	-	0.003	-	-	<0.001	-	-	<0.001	-	<0.001
BH12A_01 Jan 03_-_	BH12A	1/01/2003	water	-	7.52	810	-	-	-	-	670	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.03	-	-	0.5	6.91	-	-	0.003	-	-	0.001	-	-	<0.001	-	<0.001
BH12A_01 Apr 03_-_	BH12A	1/04/2003	water	-	7.37	965	-	-	-	-	684	-	-	-	11	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.7	7.28	-	-	0.002	-	-	0.001	-	-	0.001	-	0.003
BH12A_01 Jul 03_-_	BH12A	1/07/2003	water	-	7.46	1040	-	-	-	-	634	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.01	-	-	1.1	7.76	-	-	0.014	-	-	0.001	-	-	0.001	-	0.001
BH12A_01 Oct 03_-_	BH12A	1/10/2003	water	-	7.23	1040	-	-	-	-	558	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.4	13.8	-	-	0.002	-	-	0.001	-	-	0.001	-	0.001
BH12A_01 Jan 04_-_	BH12A	1/01/2004	water	-	7.8	1120	-	-	-	-	910	-	-	-	10	-	-	-	-	-	-	-	-	-	-	0.03	-	-	0.4	19.6	-	-	0.002	-	-	0.005	-	-	0.001	-	0.001
BH12A_01 Apr 04_-_	BH12A	1/04/2004	water	-	7.51	-	-	-	-	-	764	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.15	-	-	-	11.9	-	-	0.003	-	-	-	-	-	-	-	-
BH12A_01 Jul 04_-_	BH12A	1/07/2004	water	-	7.32	-	-	-	-	-	682	-	-	-	16	-	-	-	-	-	-	-	-	-	-	0.04	-	-	-	9.31	-	-	0.002	-	-	-	-	-	-	-	-
BH12A_01 Oct 04_-_	BH12A	1/10/2004	water	-	7.43	-	-	-	-	-	796	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	9.49	-	-	0.002	-	-	-	-	-	-	-	-
BH12A_01 Jan 05_-_	BH12A	1/01/2005	water	-	7.43	-	-	-	-	-	976	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.059	-	-	-	12.4	-	-	0.03	-	-	0.01	-	-	0.01	-	0.01
BH12A_01 Apr 05_-_	BH12A	1/04/2005	water	-	6.95	-	-	-	-	-	916	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.02	-	-	-	6.82	-	-	0.002	-	-	-	-	-	-	-	-
BH12A_01 Jul 05_-_	BH12A	1/07/2005	water	-	7.96	-	-	-	-	-	756	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.032	-	-	-	2.95	-	-	0.003	-	-	-	-	-	-	-	-
BH12A_01 Oct 05_-_	BH12A	1/10/2005	water	-	7.08	-	-	-	-	-	764	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.105	-	-	-	1.57	-	-	0.002	-	-	-	-	-	-	-	-
BH12A_01 Jan 06_-_	BH12A	1/01/2006	water	-	7.19	-	-	-	-	-	866	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.053	-	-	-	2.22	-	-	0.002	-	-	<0.005	-	-	<0.001	-	<0.001
BH12A_01 Apr 06_-_	BH12A	1/04/2006	water	-	7.02	-	-	-	-	-	748	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.02	-	-	-	4.62	-	-	0.002	-	-	-	-	-	-	-	-
BH12A_01 Jul 06_-_	BH12A	1/07/2006	water	-	7.12	-	-	-	-	-	744	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.033	-	-	-	4.53	-	-	0.002	-	-	-	-	-	-	-	-
BH12A_01 Oct 06_-_	BH12A	1/10/2006	water	-	6.99	-	-	-	-	-	732	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.155	-	-	-	20.3	-	-	0.002	-	-	-	-	-	-	-	-
BH12A_01 Jan 07_-_	BH12A	1/01/2007	water	-	7.06	-	-	-	-	-	686	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.137	-	-	-	20.2	-	-	0.002	-	-	<0.001	-	-	0.001	-	<0.001
BH12A_01 Apr 07_-_	BH12A	1/04/2007	water	-	6.89	-	-	-	-	-	748	-	-	-	7	463	185	19	9	23	48.7	34	-	12	11.3	0.418	18.5	<0.01	-	-	-	-	0.002	-	-	-	-	-	-	-	-
BH12A_17 Apr 13_-_	BH12A	17/04/2013	water	10.09	6.88	5.1	0.44	40	18.1	7.7	840	-	510	<1	-	-	190	20	11	98	100	67	<0.1	-	-	0.38	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-
BH12A_09 Jul 13_-_	BH12A	9/07/2013	water	9.16	7.04	965	2.83	19	18.8	7.9	610	-	390	<1	-	-	160	16	5.8	54	55	34	-	-	-	0.1	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
BH12A_29 Oct 13_-_	BH12A	29/10/2013	water	10	7.96	1218	4.34	-18	18.4	7.4	860	-	460	<1	-	-	200	22	10	87	97	75	-	-	-	1.1	-	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-
BH12A_28 Jan 14_-_	BH12A	28/01/2014	water	10.2	6.91	974	4.2	39	21.1	7.2	790	-	460	<1	-	-	210	27	12	110	86	66	<0.1	-	-	0.5	13	0.025	-	-	11	<0.005	0.002	0.063	<0.0001	<0.001	<0.005	<0.001	0.003	-	<0.001
BH12A_14 Apr 14_-_	BH12A	14/04/2014	water	4.23	6.97	1550	3.18	117	21	7.3	910	-	530	<1	-	-	200	25	11	120	120	72	<0.1	-	-	1.9	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-
BH12A_07 Jul 14_-_	BH12A	7/07/2014	water	-	7.3	1373	2.67	52	20.2	7	960	-	560	<1	-	-	200	29	15	130	160	140	<0.1	-	-	4.8	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-
BH12A_15 Oct 14_-_	BH12A	15/10/2014	water	9.96	7.17	1106	3.47	56	17.5	7	970	-	550	<1	-	-	210	33	17	130	200	<5	<0.1	-	-	5.9	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-
BH12A_21 Jan 15_-_	BH12A	21/01/2015	water	10.07	6.54	1538	1.26	-53	22.3	7.2	1200	-	570	<1	-	-	220	34	20	160	190	130	<0.1	-	-	5.7	4.6	0.018	-	-	19	<0.005	0.003	0.13	<0.0001	-	<0.01	0.002	0.003	-	<0.001
BH12A_23 Apr 15_-_	BH12A	23/04/2015	water	10.04	6.9	1706	1.35	63	20.2	7.1	1200	-	620	<1	-	-	200	35	19	180	180	120	<0.1	-	-	8.3	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-
BH12A_21 Jul 15_-_	BH12A	21/07/2015	water	9.8	6.9	1236	2.73	3	20	6.9	930	-	490	<1	-	-	170	21	11	110	120	73	0.2	-	-	2	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-
BH12A_20 Oct 15_-_	BH12A	20/10/2015	water	10.12	6.83	529	2.69	112	20.4	7.4	1000	-	510	<1	-	-	170	23	18	90	140	76	<0.1	-	-	5.3	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-
BH12A_21 Jan 16_-_	BH12A	21/01/2016	water	9.87	6.99	1154	2.54	41	24.6	7.2	970	-	530	<1	-	-	190	31	22	120	140	88	<0.1	-	-	4.1	5.4	0.18	-	-	12	<0.005	0.003	0.1	<0.0001	<0.001	<0.01	0.001	0.002	-	<0.001
BH12A_14 Apr 16_-_	BH12A	14/04/2016	water	10.1	6.91	1489	1.07	-212	20.4	7.3	910	-	530	<5	-	-	180	26	16	100	130	78	0.1	-	-	3.4	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-
BH12A_21 Jul 16_-_	BH12A	21/07/2016	water	9.9	7.14	1316	1.49	-94	16.9	7	770	-	500	<5	-	-	160	27	16	90	85	63	0.4	-	-	3.1	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-
BH12A_18 Oct 16_-_	BH12A	18/10/2016	water	10.02	6.97	1365	2.44	57	21.3	7.3	910	-	560	<5	-	-	210	29	16	95	130	58	0.1	-	-	1.9	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-
BH12A_19 Jan 17_-_	BH12A	19/01/2017	water	10.18	6.85	1535	1.81	39	21	7.5	920	-	560	<5	-	-	200	31	18	150	150	74	<0.1	-	-	1.5	7	0.01	-	-	16	<0.01	0.003	0.074	<0.0001	<0.001	<0.005	0.001	0.001	-	<0.001
BH12A_03 Jul 19_-_	BH12A	3/07/2019	water	10.13	6.99	1713	1.3	-82.2	19.8	7.3	1100	-	650	<5	-	-	220	41	23	140	200	92	<0.1	-	-	5.1	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-
BH12A_25 Oct 19_-_	BH12A	25/10/2019	water	10.2	6.99	1860	4.13	75.8	21.4	7.5	1300	-	590	<5	-	-	200	39	26	170	210	110	<0.1	-	-	5.6	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-
BH12A_13 Jan 20_-_	BH12A	13/01/2020	water	10.29	7.05	1788	1.96	-227.8	21.5	7	1200	-	650	<5	-	-	180	35	26	170	230	88	<0.1	-	-	9.1	0.58	<0.005	-	-	23	0.01	0.003	0.11	<0.0001	<0.001	<0.005	0.003	0.009	-	<0.001
BH12A_23 Apr 20_-_	BH12A	23/04/2020	water	10.08	6.95	1653	3.39	11.2	21.2	7.2	1100	-	580	<5	-	-	180	30	28	130	180	110	<0.1	-	-	8.7	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Dec 94_-_	BH13	1/12/1994	water	-	6.8	984	-	-	-	-	726	-	-	-	31	-	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	0.004	-	-	0.001	-	-	0.009	-	0.001
BH13_01 Mar 95_-_	BH13	1/03/1995	water	-	7.1	1093	-	-	-	-	576	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	-	-	0.0015	-	-	0.003	-	-	0.002	-	0.001
BH13_01 Jun 95_-_	BH13	1/06/1995	water	-	7.24	961	-	-	-	-	572	-	-	-	17	-	-	-	-	-	-	-	-	-	-	0.3	-	-	-	-	-	-	0.018	-	-	0.001	-	-	0.001	-	0.001
BH13_01 Sep 95_-_	BH13	1/09/1995	water	-	7.51	1004	-	-	-	-	768	-	-	-	11	-	-	-	-	-	-	-	-	-	-	0.1	-	-	0.5	3.59	-	-	0.014	-	-	0.002	-	-	0.002	-	0.001
BH13_01 Jan 96_-_	BH13	1/01/1996	water	-	7.04	995	-	-	-	-	652	-	-	-	18	-	-	-	-	-	-	-	-	-	-	0.03	-	-	0.9	-	-	-	0.003	-	-	0.001	-	-	0.001	-	0.001
BH13_01 Apr 96_-_	BH13	1/04/1996	water	-	6.99	1034	-	-	-	-	628	-	-	-	16	-	-	-	-	-	-	-	-	-	-	0.51	-	-	1.5	5.15	-	-	0.003	-	-	0.001	-	-	0.002	-	0.002
BH13_01 Jul 96_-_	BH13	1/07/1996	water	-	6.92	934	-	-	-	-	684	-	-	-	26	-	-	-	-	-	-	-	-	-	-	0.19	-	-	1.4	0.57	-	-	0.013	-	-	0.001	-	-	0.001	-	0.001
BH13_01 Oct 96_-_	BH13	1/10/1996	water	-	6.96	1127	-	-	-	-	744	-	-	-	19	-	-	-	-	-	-	-	-	-	-	0.1	-	-	0.6	1.02	-	-	0.004	-	-	0.001	-	-	0.002	-	0.002
BH13_01 Jan 97_-_	BH13	1/01/1997	water	-	6.89	1284	-	-	-	-	734	-	-	-	25	-	-	-	-	-	-	-	-	-	-	1.61	-	-	2.8	1	-	-	0.008	-	-	0.001	-	-	0.002	-	0.001
BH13_01 Apr 97_-_	BH13	1/04/1997	water	-	6.93	905	-	-	-	-	616	-	-	-	15	-	-	-	-	-	-	-	-	-	-	2.3	-	-	2.3	0.63	-	-	0.008	-	-	0.004	-	-	0.001	-	0.001
BH13_01 Jul 97_-_	BH13	1/07/1997	water	-	6.99	1013	-	-	-	-	600	-	-	-	15	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.9	0.55	-	-	0.008	-	-	0.002	-	-	0.001	-	0.001

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions										Nutrients					Organic Indicators	Metals											
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																						
2-4m																																						
4-8m																																						
>8m																																						
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																						
2-4m																																						
4-8m																																						
>8m																																						
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																						
2-4m																																						
4-8m																																						
>8m																																						

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																				
BH13_01 Oct 97_-	BH13	1/10/1997	water	-	6.83	1021	-	-	-	-	608	-	-	-	13	-	-	-	-	-	-	-	-	-	-	0.9	-	-	1.7	0.55	-	-	0.01	-	-	0.001	-	-	0.001	-	0.001
BH13_01 Jan 98_-	BH13	1/01/1998	water	-	6.69	1108	-	-	-	-	722	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.92	-	-	1.8	0.27	-	-	0.02	-	-	0.001	-	-	0.001	-	0.001
BH13_01 Apr 98_-	BH13	1/04/1998	water	-	7.03	1141	-	-	-	-	580	-	-	-	17	-	-	-	-	-	-	-	-	-	-	5.21	-	-	6.8	0.23	-	-	0.019	-	-	0.001	-	-	0.001	-	0.007
BH13_01 Jul 98_-	BH13	1/07/1998	water	-	6.97	1106	-	-	-	-	640	-	-	-	22	-	-	-	-	-	-	-	-	-	-	4.61	-	-	4.6	0.29	-	-	0.007	-	-	0.001	-	-	0.008	-	0.002
BH13_01 Oct 98_-	BH13	1/10/1998	water	-	7.07	925	-	-	-	-	554	-	-	-	17	-	-	-	-	-	-	-	-	-	-	0.19	-	-	1.1	3.16	-	-	0.01	-	-	0.001	-	-	0.002	-	0.001
BH13_01 Jan 99_-	BH13	1/01/1999	water	-	6.9	1211	-	-	-	-	760	-	-	-	36	-	-	-	-	-	-	-	-	-	-	3.3	-	-	4.8	0.35	-	-	0.049	-	-	0.003	-	-	0.009	-	0.001
BH13_01 Mar 99_-	BH13	1/03/1999	water	-	6.9	980	-	-	-	-	630	-	-	-	12	-	-	-	-	-	-	-	-	-	-	1.3	-	-	2.3	0.37	-	-	0.02	-	-	0.011	-	-	0.001	-	0.001
BH13_01 Jul 99_-	BH13	1/07/1999	water	-	7	917	-	-	-	-	547	-	-	-	14	-	-	-	-	-	-	-	-	-	-	0.93	-	-	2.9	0.2	-	-	0.007	-	-	0.005	-	-	0.001	-	0.001
BH13_01 Oct 99_-	BH13	1/10/1999	water	-	6.8	-	-	-	-	-	551	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.69	-	-	1.4	3.41	-	-	0.064	-	-	0.002	-	-	0.002	-	0.001
BH13_01 Jan 00_-	BH13	1/01/2000	water	-	7	1100	-	-	-	-	660	-	-	-	12	-	-	-	-	-	-	-	-	-	-	1.66	-	-	3.2	0.47	-	-	0.103	-	-	0.002	-	-	0.001	-	0.001
BH13A_01 Apr 00_-	BH13A	1/04/2000	water	-	7.3	820	-	-	-	-	500	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.04	-	-	0.2	0.12	-	-	0.017	-	-	0.006	-	-	0.001	-	0.001
BH13A_01 Jul 00_-	BH13A	1/07/2000	water	-	7.1	880	-	-	-	-	520	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.04	-	-	0.5	0.21	-	-	0.011	-	-	0.005	-	-	0.002	-	0.001
BH13A_01 Oct 00_-	BH13A	1/10/2000	water	-	7.1	910	-	-	-	-	530	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.5	0.72	-	-	0.006	-	-	0.002	-	-	0.001	-	0.001
BH13A_01 Jan 01_-	BH13A	1/01/2001	water	-	7.3	840	-	-	-	-	500	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.3	2.03	-	-	0.004	-	-	0.011	-	-	0.002	-	0.001
BH13A_01 Apr 01_-	BH13A	1/04/2001	water	-	7.2	890	-	-	-	-	520	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	4.23	-	-	0.006	-	-	0.002	-	-	0.002	-	0.001
BH13A_01 Jul 01_-	BH13A	1/07/2001	water	-	7.2	760	-	-	-	-	420	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	6.4	-	-	0.009	-	-	0.003	-	-	0.001	-	0.001
BH13A_01 Oct 01_-	BH13A	1/10/2001	water	-	7.1	1100	-	-	-	-	630	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.03	-	-	0.7	1.53	-	-	0.006	-	-	0.001	-	-	0.001	-	0.001
BH13A_01 Jan 02_-	BH13A	1/01/2002	water	-	7	1500	-	-	-	-	890	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.5	1.79	-	-	0.001	-	-	0.001	-	-	0.001	-	0.001
BH13A_01 Apr 02_-	BH13A	1/04/2002	water	-	7.6	690	-	-	-	-	430	-	-	-	2	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.2	0.91	-	-	0.004	-	-	0.002	-	-	<0.001	-	<0.001
BH13A_01 Jul 02_-	BH13A	1/07/2002	water	-	7.6	1100	-	-	-	-	730	-	-	-	3	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.2	0.93	-	-	0.004	-	-	<0.001	-	-	<0.001	-	<0.001
BH13A_01 Oct 02_-	BH13A	1/10/2002	water	-	7.7	1100	-	-	-	-	720	-	-	-	4	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.2	1.25	-	-	0.005	-	-	0.025	-	-	0.001	-	<0.001
BH13A_01 Jan 03_-	BH13A	1/01/2003	water	-	7.72	890	-	-	-	-	660	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.03	-	-	0.3	0.27	-	-	0.008	-	-	<0.001	-	-	0.002	-	<0.001
BH13A_01 Apr 03_-	BH13A	1/04/2003	water	-	7.59	955	-	-	-	-	676	-	-	-	10	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.8	1.69	-	-	0.004	-	-	0.001	-	-	0.001	-	0.001
BH13A_01 Jul 03_-	BH13A	1/07/2003	water	-	7.69	881	-	-	-	-	560	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.9	1.51	-	-	0.014	-	-	0.001	-	-	0.001	-	0.001
BH13A_01 Oct 03_-	BH13A	1/10/2003	water	-	7.44	1120	-	-	-	-	770	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.6	3.02	-	-	0.005	-	-	0.001	-	-	0.001	-	0.001
BH13A_01 Jan 04_-	BH13A	1/01/2004	water	-	8.15	955	-	-	-	-	742	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.6	1.22	-	-	0.004	-	-	0.005	-	-	0.001	-	0.001
BH13A_01 Apr 04_-	BH13A	1/04/2004	water	-	7.75	-	-	-	-	-	480	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.06	-	-	-	1	-	-	0.003	-	-	-	-	-	-	-	-
BH13A_01 Jul 04_-	BH13A	1/07/2004	water	-	7.7	-	-	-	-	-	458	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	0.53	-	-	0.003	-	-	-	-	-	-	-	-
BH13A_01 Oct 04_-	BH13A	1/10/2004	water	-	7.78	-	-	-	-	-	518	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.07	-	-	-	1.28	-	-	0.003	-	-	-	-	-	-	-	-
BH13A_01 Jan 05_-	BH13A	1/01/2005	water	-	7.8	-	-	-	-	-	518	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.057	-	-	-	5.96	-	-	0.02	-	-	0.01	-	-	0.01	-	0.01
BH13A_01 Apr 05_-	BH13A	1/04/2005	water	-	7.23	-	-	-	-	-	440	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.034	-	-	-	3.7	-	-	0.003	-	-	-	-	-	-	-	-
BH13A_01 Jul 05_-	BH13A	1/07/2005	water	-	8.17	-	-	-	-	-	452	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.198	-	-	-	5.53	-	-	0.002	-	-	-	-	-	-	-	-
BH13A_01 Oct 05_-	BH13A	1/10/2005	water	-	7.38	-	-	-	-	-	494	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.091	-	-	-	2.82	-	-	0.002	-	-	-	-	-	-	-	-
BH13A_01 Jan 06_-	BH13A	1/01/2006	water	-	7.52	-	-	-	-	-	456	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.062	-	-	-	3.84	-	-	0.002	-	-	0.001	-	-	<0.001	-	<0.001
BH13A_01 Apr 06_-	BH13A	1/04/2006	water	-	7.34	-	-	-	-	-	474	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.02	-	-	-	2.91	-	-	0.002	-	-	-	-	-	-	-	-
BH13A_01 Jul 06_-	BH13A	1/07/2006	water	-	7.5	-	-	-	-	-	504	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.052	-	-	-	3.79	-	-	0.002	-	-	-	-	-	-	-	-
BH13A_01 Oct 06_-	BH13A	1/10/2006	water	-	7.38	-	-	-	-	-	456	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.011	-	-	-	1.16	-	-	0.002	-	-	-	-	-	-	-	-
BH13A_01 Jan 07_-	BH13A	1/01/2007	water	-	7.37	-	-	-	-	-	460	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.024	-	-	-	3.42	-	-	0.003	-	-	<0.001	-	-	<0.001	-	<0.001
BH13A_01 Apr 07_-	BH13A	1/04/2007	water	-	7.2	-	-	-	-	-	498	-	-	-	6	305	119	10	6	32	44.7	58	-	8.33	8.56	0.118	2.97	0.011	-	-	-	-	0.003	-	-	-	-	-	-	-	-
BH13A_17 Apr 13_-	BH13A	17/04/2013	water	3.8	6.93	2.4	0.36	18	18.2	7.8	800	-	390	<1	-	-	160	18	8.7	60	59	140	0.16	-	-	0.01	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-
BH13A_09 Jul 13_-	BH13A	9/07/2013	water	3.48	7.13	182	4.43	6	16.7	7.7	660	-	270	<1	-	-	160	15	9.4	71	82	100	-	-	-	<0.1	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-
BH13A_29 Oct 13_-	BH13A	29/10/2013	water	3.72	8.23	16.8	3.74	-39	17.7	7.6	610	-	370	<1	-	-	160	13	5.8	55	41	83	-	-	-	0.01	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
BH13A_28 Jan 14_-	BH13A	28/01/2014	water	3.94	7.12	907	5.81	29	19.8	7.6	760	-	450	<1	-	-	200	23	4.9	60	58	140	0.14	-	-	<0.1	1.4	<0.01	-	-	3	<0.005	0.003	0.018	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH13A_14 Apr 14_-	BH13A	14/04/2014	water	3.68	7.01	688	3.72	183	20.1	7.6	760	-	440	<1	-	-	190	17	8.8	80	56	130	0.14	-	-	<0.1	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-
BH13A_07 Jul 14_-	BH13A	7/07/2014	water	-	7.54	928	3.38	75	19.4	7.2	650	-	400	<1	-	-	150	13	9.5	78	58	97	0.13	-	-	<0.1	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
BH13A_15 Oct 14_-	BH13A	15/10/2014	water	3.17	7.22	917	2.85	70	17.2	7.3	620	-	410	<1	-	-	150	18	8.8	89	60	55	0.19	-	-	0.079	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-
BH13A_27 Apr 15_-	BH13A	27/04/2015	water	3.25	7.13	917	4.1	58	18.4	7.3	880	-	570	<1	-	-	170	31	16	120	66	90	0.27	-	-	1.8	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-
BH13A_21 Jul 15_-	BH13A	21/07/2015	water	3.7	6.23	878	3.82	57	17.6	7.1	620	-	330	<1	-	-	140	13	4.8	59	69	67	0.2	-	-	<0.1	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-
BH13A_20 Oct 15_-	BH13A	20/10/2015	water	3.9	6.89	441	4.9	85	24.4	7.6	840	-	380	<1	-	-	180	18	7.4	62	68	210	0.2	-	-	<0.1	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
BH13A_21 Jan 16_-	BH13A	21/01/2016	water	3.47	7.12	1102	2.27	57	26.6	7.9	940	-	530	<1	-	-	210	21	13	120	90	120	0.1	-	-	<0.1	0.4	<0.01	-	-	8	<0.005	0.004	0.025	<0.0001	<0.001	<0.01	<0.001	<0.001	-	<0.001
BH13A_19 Apr 16_-	BH13A	19/04/2016	water	3.43	6.89	1081	1.75	-49	20	7.5	820	-	470	<5	-	-	170	14	11	120	80	83	0.2	-	-	<0.1	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-
BH13A_21 Jul 16_-	BH13A	21/07/2016	water	3.61	7.8	805	3.12	120	17.5	7.4	480	-	320	<5	-	-	110	11	5.9	46	40	42	0.2	-	-	0.006	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-
BH13A_18 Oct 16_-	BH13A	18/10/2016	water	3.81	7.36	1145	2.12	38	20.3	7.5	820	-	470	<5	-	-	190	17	7.1	97	80	110	0.2	-	-	0.006	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-
BH13A_03 Jul 19_-	BH13A	3/07/2019	water	3.78	7.33	1093	2.6	63.4	18.6	7.6	1100	-	650	<5	-	-	220	46	17	130	120	200	0.2	-	-	3.8	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-
BH13A_25 Oct 19_-	BH13A	25/10/2019	water	3.85	7.18	1619	3.02	59.8	20.1	7.8	1200	-	610	<5	-	-	240	42	16	140	120	180	0.2	-	-	2.7	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-
BH13A_13 Jan 20_-	BH13A	13/01/2020	water	3.87	7.29	1850	0.9	-225.9	21.1	7.1	1200	-	710	<5	-	-	220	42	16	150	130	160	0.2	-	-	3.6	0.068	0.006	-	-	16	0.01	0.01	0.034	<0.0001	<0.001	<0.005	0.002	0.008	-	<0.001
BH13A_23 Apr 20_-	BH13A	23/04/2020	water	2.78	7.37	1167	3.79	115.3	20.2	7.4	1000	-	400	<5	-	-	180	29	9.7	74	100	260	0.2	-	-	2	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 97_-	BH14	1/01/1997	water	-	6.7	758	-	-	-	-	520	-	-	-	27	-	-	-	-	-	-	-	-	-	-	0.45	-	-	3.2	0.45	-	-	0.013	-	-	0.001	-	-	0.001	-	0.001
BH14_01 Apr 97_-	BH14	1/04/1997	water	-	6.76	750	-	-	-	-	664	-	-	-	33	-	-	-	-	-	-	-	-	-	-	0.16	-	-	1.4	2.8	-	-	0.003	-	-	0.005	-	-	0.002	-	0.001
BH14_01 Jul 97_-	BH14	1/07/1997	water	-	6.72	987	-	-	-	-	630	-	-	-	32	-	-	-	-	-	-	-	-	-	-	0.04	-	-	1.1	3.48	-	-	0.001	-	-	0.003	-	-	0.001	-	0.001
BH14_01 Oct 97_-	BH14	1/10/1997	water	-	6.8	1080	-	-	-	-	688	-	-	-	16	-	-	-	-	-	-	-	-	-	-	0.1	-	-	1.6	3.28	-	-	0.002	-	-	0.002	-	-	0.001	-	0.001
BH14_01 Jan 98_-	BH14	1/01/1998	water	-	6.74	757	-	-	-	-	484	-	-	-	27	-	-	-	-	-	-	-	-	-	-	0.61	-	-	1.1	0.02	-	-	0.001	-	-	0.001	-	-	0.001	-	0.001

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions										Nutrients					Organic Indicators	Metals											
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																						
2-4m																																						
4-8m																																						
>8m																																						
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																						
2-4m																																						
4-8m																																						
>8m																																						
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																						
2-4m																																						
4-8m																																						
>8m																																						

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																				
BH14_01 Apr 98_-	BH14	1/04/1998	water	-	6.58	778	-	-	-	-	430	-	-	-	26	-	-	-	-	-	-	-	-	-	-	0.99	-	-	1.5	0.01	-	0.01	-	-	0.001	-	-	0.001	-	0.004
BH14_01 Jul 98_-	BH14	1/07/1998	water	-	6.82	1076	-	-	-	-	722	-	-	-	32	-	-	-	-	-	-	-	-	-	-	0.13	-	-	2.8	4.95	-	0.003	-	-	0.001	-	-	0.001	-	0.002
BH14_01 Oct 98_-	BH14	1/10/1998	water	-	7.02	-	-	-	-	-	772	-	-	-	21	-	-	-	-	-	-	-	-	-	-	0.05	-	-	3.2	18.4	-	0.01	-	-	0.001	-	-	0.015	-	0.001
BH14_01 Jan 99_-	BH14	1/01/1999	water	-	6.9	941	-	-	-	-	646	-	-	-	86	-	-	-	-	-	-	-	-	-	-	0.2	-	-	1.2	0.21	-	0.005	-	-	0.003	-	-	0.002	-	0.001
BH14_01 Mar 99_-	BH14	1/03/1999	water	-	6.9	612	-	-	-	-	525	-	-	-	26	-	-	-	-	-	-	-	-	-	-	0.26	-	-	1.5	2.6	-	0.005	-	-	0.008	-	-	0.002	-	0.001
BH14_01 Jul 99_-	BH14	1/07/1999	water	-	7.1	894	-	-	-	-	510	-	-	-	18	-	-	-	-	-	-	-	-	-	-	0.19	-	-	2	3.24	-	0.003	-	-	0.006	-	-	0.003	-	0.001
BH14_01 Oct 99_-	BH14	1/10/1999	water	-	7	-	-	-	-	-	414	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.18	-	-	1.5	0.15	-	0.003	-	-	0.002	-	-	0.001	-	0.001
BH14_01 Jan 00_-	BH14	1/01/2000	water	-	7.1	730	-	-	-	-	480	-	-	-	26	-	-	-	-	-	-	-	-	-	-	0.25	-	-	1.6	0.1	-	0.005	-	-	0.002	-	-	0.001	-	0.001
BH14_01 Apr 00_-	BH14	1/04/2000	water	-	6.9	840	-	-	-	-	560	-	-	-	22	-	-	-	-	-	-	-	-	-	-	0.05	-	-	1.8	7.33	-	0.003	-	-	0.008	-	-	0.001	-	0.001
BH14_01 Jul 00_-	BH14	1/07/2000	water	-	6.8	650	-	-	-	-	390	-	-	-	26	-	-	-	-	-	-	-	-	-	-	0.04	-	-	1.6	0.09	-	0.004	-	-	0.005	-	-	0.002	-	0.001
BH14_01 Oct 00_-	BH14	1/10/2000	water	-	6.7	870	-	-	-	-	590	-	-	-	19	-	-	-	-	-	-	-	-	-	-	0.12	-	-	1.6	0.62	-	0.002	-	-	0.002	-	-	0.001	-	0.001
BH14_01 Jan 01_-	BH14	1/01/2001	water	-	6.9	1200	-	-	-	-	850	-	-	-	30	-	-	-	-	-	-	-	-	-	-	0.01	-	-	2	8.2	-	0.003	-	-	0.009	-	-	0.002	-	0.001
BH14_01 Apr 01_-	BH14	1/04/2001	water	-	6.7	1200	-	-	-	-	790	-	-	-	22	-	-	-	-	-	-	-	-	-	-	0.03	-	-	1.8	7.44	-	0.004	-	-	0.003	-	-	0.002	-	0.001
BH14_01 Jul 01_-	BH14	1/07/2001	water	-	6.8	2500	-	-	-	-	1500	-	-	-	27	-	-	-	-	-	-	-	-	-	-	0.01	-	-	2.6	18.9	-	0.005	-	-	0.005	-	-	0.003	-	0.001
BH14_01 Oct 01_-	BH14	1/10/2001	water	-	6.9	1500	-	-	-	-	850	-	-	-	16	-	-	-	-	-	-	-	-	-	-	0.06	-	-	1.4	3.79	-	0.005	-	-	0.001	-	-	0.002	-	0.001
BH14_01 Jan 02_-	BH14	1/01/2002	water	-	6.6	1000	-	-	-	-	630	-	-	-	18	-	-	-	-	-	-	-	-	-	-	0.05	-	-	1.2	0.21	-	0.01	-	-	0.001	-	-	0.001	-	0.001
BH14_01 Apr 02_-	BH14	1/04/2002	water	-	7.2	1700	-	-	-	-	1200	-	-	-	17	-	-	-	-	-	-	-	-	-	-	0.02	-	-	1.8	8	-	0.005	-	-	0.003	-	-	0.002	-	<0.001
BH14_01 Jul 02_-	BH14	1/07/2002	water	-	7.3	950	-	-	-	-	590	-	-	-	11	-	-	-	-	-	-	-	-	-	-	0.11	-	-	1	2.07	-	0.004	-	-	<0.001	-	-	<0.001	-	<0.001
BH14_01 Oct 02_-	BH14	1/10/2002	water	-	7.3	750	-	-	-	-	480	-	-	-	11	-	-	-	-	-	-	-	-	-	-	0.11	-	-	0.7	0.1	-	0.005	-	-	0.002	-	-	<0.001	-	<0.001
BH14_01 Jan 03_-	BH14	1/01/2003	water	-	7.72	850	-	-	-	-	530	-	-	-	13	-	-	-	-	-	-	-	-	-	-	0.08	-	-	0.6	0.14	-	0.005	-	-	0.001	-	-	0.001	-	<0.001
BH14_01 Apr 03_-	BH14	1/04/2003	water	-	7.22	1110	-	-	-	-	750	-	-	-	22	-	-	-	-	-	-	-	-	-	-	0.16	-	-	0.8	0.11	-	0.002	-	-	0.001	-	-	0.001	-	0.001
BH14_01 Jul 03_-	BH14	1/07/2003	water	-	7.43	1200	-	-	-	-	830	-	-	-	18	-	-	-	-	-	-	-	-	-	-	0.01	-	-	1.1	7.08	-	0.004	-	-	0.001	-	-	0.001	-	0.001
BH14_01 Oct 03_-	BH14	1/10/2003	water	-	7.23	945	-	-	-	-	842	-	-	-	14	-	-	-	-	-	-	-	-	-	-	0.1	-	-	1.7	0.21	-	0.004	-	-	0.001	-	-	0.001	-	0.001
BH14_01 Jan 04_-	BH14	1/01/2004	water	-	7.98	690	-	-	-	-	690	-	-	-	16	-	-	-	-	-	-	-	-	-	-	0.03	-	-	0.6	0.05	-	0.003	-	-	0.005	-	-	0.001	-	0.001
BH14_01 Apr 04_-	BH14	1/04/2004	water	-	7.35	-	-	-	-	-	638	-	-	-	17	-	-	-	-	-	-	-	-	-	-	0.22	-	-	-	1.25	-	0.003	-	-	-	-	-	-	-	-
BH14_01 Jul 04_-	BH14	1/07/2004	water	-	7.21	-	-	-	-	-	520	-	-	-	23	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	0.01	-	0.003	-	-	-	-	-	-	-	-
BH14_01 Oct 04_-	BH14	1/10/2004	water	-	7.31	-	-	-	-	-	664	-	-	-	24	-	-	-	-	-	-	-	-	-	-	0.22	-	-	-	3.89	-	0.003	-	-	-	-	-	-	-	-
BH14_01 Jan 05_-	BH14	1/01/2005	water	-	7.22	-	-	-	-	-	498	-	-	-	20	-	-	-	-	-	-	-	-	-	-	3.37	-	-	-	0.172	-	0.008	-	-	0.001	-	-	0.001	-	0.001
BH14_01 Apr 05_-	BH14	1/04/2005	water	-	6.5	-	-	-	-	-	512	-	-	-	25	-	-	-	-	-	-	-	-	-	-	0.731	-	-	-	0.01	-	0.014	-	-	-	-	-	-	-	-
BH14_01 Jun 05_-	BH14	1/06/2005	water	-	8.1	-	-	-	-	-	456	-	-	-	17	-	-	-	-	-	-	-	-	-	-	0.397	-	-	-	0.031	-	0.004	-	-	-	-	-	-	-	-
BH14_01 Oct 05_-	BH14	1/10/2005	water	-	6.52	-	-	-	-	-	436	-	-	-	21	-	-	-	-	-	-	-	-	-	-	0.533	-	-	-	0.025	-	0.016	-	-	-	-	-	-	-	-
BH14_01 Jan 06_-	BH14	1/01/2006	water	-	6.55	-	-	-	-	-	500	-	-	-	25	-	-	-	-	-	-	-	-	-	-	0.266	-	-	-	0.055	-	0.032	-	-	0.002	-	-	<0.001	-	<0.001
BH14_01 Apr 06_-	BH14	1/04/2006	water	-	6.29	-	-	-	-	-	470	-	-	-	25	-	-	-	-	-	-	-	-	-	-	0.166	-	-	-	0.036	-	0.032	-	-	-	-	-	-	-	-
BH14_01 Jul 06_-	BH14	1/07/2006	water	-	6.67	-	-	-	-	-	622	-	-	-	26	-	-	-	-	-	-	-	-	-	-	0.338	-	-	-	0.01	-	0.016	-	-	-	-	-	-	-	-
BH14_01 Oct 06_-	BH14	1/10/2006	water	-	6.57	-	-	-	-	-	1600	-	-	-	33	-	-	-	-	-	-	-	-	-	-	0.384	-	-	-	0.039	-	0.009	-	-	-	-	-	-	-	-
BH14_01 Jan 07_-	BH14	1/01/2007	water	-	6.64	-	-	-	-	-	666	-	-	-	23	-	-	-	-	-	-	-	-	-	-	0.398	-	-	-	0.023	-	0.022	-	-	<0.001	-	-	<0.001	-	<0.001
BH14_01 Apr 07_-	BH14	1/04/2007	water	-	6.52	-	-	-	-	-	846	-	-	-	34	232	133	25	7	47	83.8	224	-	10.9	11.6	0.594	0.02	0.012	-	-	-	0.036	-	-	-	-	-	-	-	-
BH14_16 Apr 13_-	BH14	16/04/2013	water	2.84	10.4	36,800	1.1	-939	25	7.4	640	-	300	<1	-	-	-	14	20	64	120	55	<0.1	-	-	0.1	-	-	-	-	21	-	-	-	-	-	-	-	-	-	-
BH14_22 Apr 15_-	BH14	22/04/2015	water	1.95	7.28	842	2.28	-1	18.9	7.2	660	-	300	<1	-	-	160	23	10	110	86	140	0.18	-	-	0.13	-	-	-	-	82	-	-	-	-	-	-	-	-	-	-
BH14_22 Jul 15_-	BH14	22/07/2015	water	2.2	6.15	1182	4.2	33	15.4	6.8	1000	-	400	<1	-	-	210	38	7.6	120	110	250	0.2	-	-	0.018	-	-	-	-	28	-	-	-	-	-	-	-	-	-	-
BH14_20 Oct 15_-	BH14	20/10/2015	water	3	6.52	5100	1.54	17	23.3	7.2	1200	-	410	<1	-	-	210	40	6.9	160	170	370	0.1	-	-	0.19	-	-	-	-	28	-	-	-	-	-	-	-	-	-	-
BH14_20 Jan 16_-	BH14	20/01/2016	water	2.12	6.85	1078	3.5	-14	23.8	6.9	940	-	360	<1	-	-	180	32	8.7	120	91	170	0.1	-	-	0.027	6.5	0.017	-	-	31	<0.005	<0.001	0.08	<0.0001	<0.001	<0.01	0.001	0.003	-	<0.001
BH14A_29 Jul 14_-	BH14A	29/07/2014	water	2.24	5.86	995	2.39	201	16	7.5	670	-	700	<1	-	-	280	35	15	88	70	12	0.24	-	-	1.5	-	-	-	-	170	-	-	-	-	-	-	-	-	-	-
BH14A_29 Oct 14_-	BH14A	29/10/2014	water	2.1	6.98	1996	0.92	115	17.9	6.9	1400	-	500	<1	-	-	230	44	10	260	140	400	0.16	-	-	0.91	-	-	-	-	39	-	-	-	-	-	-	-	-	-	-
BH14A_20 Jan 15_-	BH14A	20/01/2015	water	2.1	6.81	1301	0.22	-134	21	7.3	1000	-	590	<1	-	-	330	48	17	160	110	150	0.14	-	-	1.4	<0.1	<0.01	-	-	230	0.01	0.006	0.14	<0.0001	-	<0.01	<0.001	<0.001	-	<0.001
BH14A_14 Apr 16_-	BH14A	14/04/2016	water	3.01	8.09	1094	2.51	-7	21.2	6.9	860	-	360	<5	-	-	170	28	8	96	67	140	0.2	-	-	0.039	-	-	-	-	41	-	-	-	-	-	-	-	-	-	-
BH14A_13 Jul 16_-	BH14A	13/07/2016	water	2.61	6.17	1273	4.82	105	13.6	7	1000	-	400	<5	-	-	220	37	7.2	94	100	250	0.1	-	-	0.012	-	-	-	-	68	-	-	-	-	-	-	-	-	-	-
BH14A_19 Jan 17_-	BH14A	19/01/2017	water	3.83	7.18	1105	2.95	19	21	7	830	-	290	<5	-	-	180	17	6.4	82	75	200	0.1	-	-	0.008	2	<0.005	-	-	6	<0.01	0.003	0.02	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH14A_02 Jul 19_-	BH14A	2/07/2019	water	3.88	6.88	486.9	3.95	-78.6	17.4	7	700	-	430	<5	-	-	150	27	9.3	68	82	59	0.2	-	-	0.98	-	-	-	-	26	-	-	-	-	-	-	-	-	-	-
BH14A_24 Oct 19_-	BH14A	24/10/2019	water	3.22	6.87	976	3.52	-33.2	19.5	7.1	640	-	390	<5	-	-	190	34	12	62	70	44	0.2	-	-	1.3	-	-	-	-	21	-	-	-	-	-	-	-	-	-	-
BH14A_27 Apr 20_-	BH14A	27/04/2020	water	3.98	7.01	1128	0.31	-110.9	20.9	6.8	790	-	390	<5	-	-	200	37	11	85	110	88	0.2	-	-	2.2	-	-	-	-	25	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 97_-	BH15	1/01/1997	water	-	7.45	493	-	-	-	-	270	-	-	-	7	-	-	-	-	-	-	-	-	-	-	1.1	-	-	0.4	1.1	-	0.002	-	-	0.001	-	-	0.001	-	0.001
BH15_01 Apr 97_-	BH15	1/04/1997	water	-	6.16	490	-	-	-	-	320	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	0.23	-	0.002	-	-	0.002	-	-	0.001	-	0.001
BH15_01 Jul 97_-	BH15	1/07/1997	water	-	7.43	609	-	-	-	-	336	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.2	0.25	-	0.006	-	-	0.001	-	-	0.001	-	0.001
BH15_01 Oct 97_-	BH15	1/10/1997	water	-	7.51	530	-	-	-	-	314	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.19	-	-	0.6	0.01	-	0.01	-	-	0.001	-	-	0.002	-	0.001
BH15_01 Jan 98_-	BH15	1/01/1998	water	-	7.54	576	-	-	-	-	306	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.05	-	-	0.3	0.01	-	0.001	-	-	0.001	-	-	0.001	-	0.001
BH15_01 Apr 98_-	BH15	1/04/1998	water	-	7.48	636	-	-	-	-	310	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.3	0.02	-	0.004	-	-	0.001	-	-	0.001	-	0.003
BH15_01 Jul 98_-	BH15	1/07/1998	water	-	7.4	675	-	-	-	-	448	-	-	-	10	-	-	-	-	-	-	-	-	-	-	0.08	-	-	0.6	0.11	-	0.014	-	-	0.001	-	-	0.001	-	0.001
BH15_01 Oct 98_-	BH15	1/10/1998	water	-	7.45	-	-	-	-	-	578	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.3	0.19	-	0.02	-	-	0.001	-	-	0.001	-	0.001
BH15_01 Jan 99_-	BH15	1/01/1999	water	-	7.6	518	-	-	-	-	286	-	-	-	11	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	0.02	-	0.009	-	-	0.002	-	-	0.001	-	0.001
BH15_01 Mar 99_-	BH15	1/03/1999	water	-	7.6	449	-	-	-	-	293	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.3	0.01	-	0.009	-	-	0.004	-	-	0.001	-	0.001
BH15_01 Jul 99_-	BH15	1/07/1999	water	-	7.7	584	-	-	-	-	290	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.54	-	-	0.6	0.01	-	0.003	-	-	0.004	-	-	0.003	-	0.001

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions										Nutrients					Organic Indicators	Metals										
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																				
BH15_01 Oct 99_-_	BH15	1/10/1999	water	-	7.5	-	-	-	-	-	296	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.13	-	-	0.5	0.01	-	-	0.01	-	-	0.001	-	-	0.005	-	0.001
BH15_01 Jan 00_-_	BH15	1/01/2000	water	-	7.4	540	-	-	-	-	320	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.09	-	-	0.2	0.02	-	-	0.005	-	-	0.001	-	-	0.001	-	0.001
BH15_01 Apr 00_-_	BH15	1/04/2000	water	-	7.2	650	-	-	-	-	380	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.05	-	-	0.1	0.01	-	-	0.009	-	-	0.006	-	-	0.001	-	0.001
BH15_01 Jul 00_-_	BH15	1/07/2000	water	-	7.2	630	-	-	-	-	350	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.14	-	-	0.4	0.01	-	-	0.003	-	-	0.004	-	-	0.002	-	0.001
BH15_01 Oct 00_-_	BH15	1/10/2000	water	-	7.3	650	-	-	-	-	370	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.09	-	-	0.7	0.01	-	-	0.001	-	-	0.001	-	-	0.001	-	0.001
BH15_01 Jan 01_-_	BH15	1/01/2001	water	-	7.7	660	-	-	-	-	400	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.32	-	-	0.3	0.01	-	-	0.004	-	-	0.009	-	-	0.002	-	0.001
BH15_01 Apr 01_-_	BH15	1/04/2001	water	-	7.4	660	-	-	-	-	390	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.19	-	-	0.3	0.01	-	-	0.005	-	-	0.002	-	-	0.003	-	0.001
BH15_01 Jun 01_-_	BH15	1/06/2001	water	-	7.3	1300	-	-	-	-	770	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.04	-	-	0.3	0.03	-	-	0.022	-	-	0.004	-	-	0.001	-	0.001
BH15_01 Oct 01_-_	BH15	1/10/2001	water	-	7.4	730	-	-	-	-	420	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.04	-	-	0.3	0.02	-	-	0.013	-	-	0.001	-	-	0.001	-	0.001
BH15_01 Jan 02_-_	BH15	1/01/2002	water	-	7.3	740	-	-	-	-	430	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.1	-	-	0.4	0.01	-	-	0.001	-	-	0.001	-	-	0.001	-	0.001
BH15_01 Apr 02_-_	BH15	1/04/2002	water	-	7.7	940	-	-	-	-	620	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.07	-	-	0.3	0.08	-	-	0.012	-	-	0.002	-	-	<0.001	-	<0.001
BH15_01 Jul 02_-_	BH15	1/07/2002	water	-	7.8	770	-	-	-	-	440	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.05	-	-	0.3	0.02	-	-	0.004	-	-	<0.001	-	-	<0.001	-	<0.001
BH15_01 Oct 02_-_	BH15	1/10/2002	water	-	7.8	640	-	-	-	-	350	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.07	-	-	0.3	0.1	-	-	0.004	-	-	0.002	-	-	<0.001	-	<0.001
BH15_01 Jan 03_-_	BH15	1/01/2003	water	-	8.07	580	-	-	-	-	340	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.25	-	-	0.2	0.02	-	-	0.003	-	-	0.004	-	-	<0.001	-	<0.001
BH15_01 Apr 03_-_	BH15	1/04/2003	water	-	7.7	758	-	-	-	-	420	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.15	-	-	0.5	0.01	-	-	0.001	-	-	0.001	-	-	0.001	-	0.001
BH15_01 Jul 03_-_	BH15	1/07/2003	water	-	7.66	1340	-	-	-	-	744	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.2	0.02	-	-	0.021	-	-	0.001	-	-	0.001	-	0.001
BH15_01 Oct 03_-_	BH15	1/10/2003	water	-	7.62	866	-	-	-	-	542	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.2	0.01	-	-	0.003	-	-	0.001	-	-	0.002	-	0.001
BH15_01 Jan 04_-_	BH15	1/01/2004	water	-	8.28	886	-	-	-	-	674	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.27	-	-	0.5	0.01	-	-	0.003	-	-	0.005	-	-	0.001	-	0.001
BH15_01 Apr 04_-_	BH15	1/04/2004	water	-	7.79	-	-	-	-	-	542	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.18	-	-	-	0.06	-	-	0.003	-	-	-	-	-	-	-	-
BH15_01 Jul 04_-_	BH15	1/07/2004	water	-	7.72	-	-	-	-	-	766	-	-	-	11	-	-	-	-	-	-	-	-	-	-	0.03	-	-	-	0.01	-	-	0.003	-	-	-	-	-	-	-	-
BH15_01 Oct 04_-_	BH15	1/10/2004	water	-	7.78	-	-	-	-	-	484	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.11	-	-	-	0.74	-	-	0.002	-	-	-	-	-	-	-	-
BH15_01 Jan 05_-_	BH15	1/01/2005	water	-	7.86	-	-	-	-	-	416	-	-	-	3	-	-	-	-	-	-	-	-	-	-	2.36	-	-	-	0.06	-	-	0.002	-	-	0.001	-	-	0.001	-	0.001
BH15_01 Apr 05_-_	BH15	1/04/2005	water	-	7.31	-	-	-	-	-	498	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.221	-	-	-	0.034	-	-	0.002	-	-	-	-	-	-	-	-
BH15_01 Jun 05_-_	BH15	1/06/2005	water	-	8.47	-	-	-	-	-	388	-	-	-	2	-	-	-	-	-	-	-	-	-	-	1.33	-	-	-	0.011	-	-	0.002	-	-	-	-	-	-	-	-
BH15_01 Oct 05_-_	BH15	1/10/2005	water	-	7.29	-	-	-	-	-	470	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.813	-	-	-	0.017	-	-	0.001	-	-	-	-	-	-	-	-
BH15_01 Feb 06_-_	BH15	1/02/2006	water	-	7.45	-	-	-	-	-	478	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.55	-	-	-	0.028	-	-	0.001	-	-	<0.001	-	-	<0.001	-	<0.001
BH15_01 Apr 06_-_	BH15	1/04/2006	water	-	7.3	-	-	-	-	-	288	-	-	-	16	-	-	-	-	-	-	-	-	-	-	0.306	-	-	-	0.01	-	-	<0.001	-	-	-	-	-	-	-	-
BH15_01 Jul 06_-_	BH15	1/07/2006	water	-	7.4	-	-	-	-	-	834	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.02	-	-	-	0.947	-	-	0.001	-	-	-	-	-	-	-	-
BH15_01 Oct 06_-_	BH15	1/10/2006	water	-	7.42	-	-	-	-	-	400	-	-	-	5	-	-	-	-	-	-	-	-	-	-	5	-	-	-	1.46	-	-	0.002	-	-	-	-	-	-	-	-
BH15_01 Jan 07_-_	BH15	1/01/2007	water	-	7.41	-	-	-	-	-	598	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.542	-	-	-	<0.01	-	-	0.004	-	-	<0.001	-	-	<0.001	-	<0.001
BH15_01 Apr 07_-_	BH15	1/04/2007	water	-	7.23	-	-	-	-	-	486	-	-	-	8	249	99	19	3	46	77.7	84	-	8.6	8.92	0.975	<0.01	<0.01	-	-	-	-	0.005	-	-	-	-	-	-	-	-
BH15_16 Apr 13_-_	BH15	16/04/2013	water	4.65	7.72	910	1.41	-67	20.2	7.8	700	-	420	<1	-	-	130	23	3.2	83	94	49	0.31	-	-	0.035	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-
BH15_09 Jul 13_-_	BH15	9/07/2013	water	3.94	7.42	401	5.07	-41	16.8	7.7	630	-	290	<1	-	-	135	22	5	63	65	86	-	-	-	0.015	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-
BH15_29 Oct 13_-_	BH15	29/10/2013	water	4.88	7.81	846	4.98	-78	17.8	7.5	490	-	370	<1	-	-	120	19	2.5	48	25	67	-	-	-	0.037	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-
BH15_28 Jan 14_-_	BH15	28/01/2014	water	4.96	7.41	922	2.3	-23	19.9	7.3	500	-	370	<1	-	-	130	25	3.6	54	63	48	0.36	-	-	0.21	0.22	<0.01	-	-	4	<0.005	0.003	0.006	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH15_16 Apr 14_-_	BH15	16/04/2014	water	2.86	7.4	919	1.6	-1	19.3	7.2	610	-	370	<1	-	-	150	27	3.4	44	74	46	0.35	-	-	0.13	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-
BH15_07 Jul 14_-_	BH15	7/07/2014	water	-	7.9	548	4.8	13	15.7	7.5	630	-	400	<1	-	-	140	28	4	63	53	63	0.32	-	-	0.009	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-
BH15_07 Jul 14_-2	BH15	7/07/2014	water	-	7.9	548	4.8	13	15.7	7.3	500	-	420	<1	-	-	150	28	3.9	63	53	64	0.31	-	-	<0.1	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-
BH15_16 Oct 14_-_	BH15	16/10/2014	water	4.26	7.38	878	0.84	77	18.3	7.4	470	-	380	<1	-	-	120	27	4.4	49	55	38	0.35	-	-	0.66	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-
BH15_20 Jan 15_-_	BH15	20/01/2015	water	4.96	6.57	612	1.3	59	24.9	6.9	450	-	420	<1	-	-	160	21	8.5	31	15	36	0.4	-	-	<0.1	0.21	<0.01	-	-	14	<0.005	0.003	0.008	<0.0001	-	<0.01	<0.001	<0.001	-	<0.001
BH15_22 Apr 15_-_	BH15	22/04/2015	water	4.53	7.26	818	0.6	-67	18.2	7.3	580	-	400	<1	-	-	130	26	4.2	56	63	62	0.3	-	-	0.98	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-
BH15_22 Jul 15_-_	BH15	22/07/2015	water	4.24	7.31	749	2.38	-47	15.9	7.2	450	-	330	<1	-	-	110	20	8.4	32	31	32	0.4	-	-	0.029	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-
BH15_20 Oct 15_-_	BH15	20/10/2015	water	4.07	7.07	1403	3.31	68	22.8	7.6	430	-	360	<1	-	-	160	20	12	31	27	26	0.4	-	-	0.034	-	-	-	-	21	-	-	-	-	-	-	-	-	-	-
BH15_20 Jan 16_-_	BH15	20/01/2016	water	3.5	7.44	739	2.29	79	22.5	7.4	430	-	440	<1	-	-	190	25	13	120	29	20	0.4	-	-	0.009	0.79	0.01	-	-	24	<0.005	0.002	0.01	<0.0001	<0.001	<0.01	<0.001	<0.001	-	<0.001
BH15_14 Apr 16_-_	BH15	14/04/2016	water	4.47	7.45	620	2.26	34	20.4	7.2	430	-	440	<5	-	-	180	21	10	30	16	15	0.4	-	-	0.009	-	-	-	-	27	-	-	-	-	-	-	-	-	-	-
BH15_13 Jul 16_-_	BH15	13/07/2016	water	4.23	7.31	774	4.35	-67	15.1	7.5	340	-	340	<5	-	-	110	23	7.4	34	34	19	0.4	-	-	0.096	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-
BH15_18 Oct 16_-_	BH15	18/10/2016	water	2.95	6.87	1522	6.87	-28	17.2	6.9	1200	-	460	<5	-	-	230	41	6.6	140	130	240	0.1	-	-	0.14	-	-	-	-	42	-	-	-	-	-	-	-	-	-	-
BH15_25 Jan 17_-_	BH15	25/01/2017	water	2.25	6.06	1884	0.25	14	21.4	6.7	1200	-	400	<5	-	-	220	41	8.1	160	130	320	0.2	-	-	0.53	0.02	<0.005	-	-	26	<0.01	0.003	0.008	<0.0001	<0.001	<0.05	<0.001	<0.001	-	<0.001
BH15_02 Jul 19_-_	BH15	2/07/2019	water	4.5	7.33	381.7	2.99	-134.3	19.1	7.6	510	-	340	<5	-	-	110	20	7	28	67	12	0.4	-	-	0.1	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-
BH15_24 Oct 19_-_	BH15	24/10/2019	water	4.79	7.46	774	4.26	55.2	19.6	7.6	510	-	310	<5	-	-	120	20	7	29	65	19	0.4	-	-	0.038	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-
BH15_14 Jan 20_-_	BH15	14/01/2020	water	5.09	7.45	742	2.65	-6.5	20.2	7.5	480	-	350	<5	-	-	120	20	6.9	34	61	28	0.4	-	-	0.19	<0.005	<0.005	-	-	5	<0.01	0.003	0.006	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH15_22 Apr 20_-_	BH15	22/04/2020	water	4.7	8.03	705	1.27	-26.8	21.1	7.6	410	-	290	<5	-	-	130	15	5.8	38	49	71	0.4	-	-	0.019	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 00_-_	BH16	1/04/2000	water	-	7.5	370	-	-	-	-	250	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	0.71	-	-	0.003	-	-	0.003	-	-	0.002	-	0.001
BH16_01 Jul 00_-_	BH16	1/07/2000	water	-	7.3	520	-	-	-	-	290	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.01	-	-	1.2	0.16	-	-	0.002	-	-	0.002	-	-	0.001	-	0.001
BH16_01 Oct 00_-_	BH16	1/10/2000	water	-	7.2	560	-	-	-	-	340	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.2	0.12	-	-	0.002	-	-	0.002	-	-	0.001	-	0.001
BH16_01 Jan 01_-_	BH16	1/01/2001	water	-	7.4	490	-	-	-	-	280	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.4	0.06	-	-	0.002	-	-	0.005	-	-	0.003	-	0.001
BH16_01 Apr 01_-_	BH16	1/04/2001	water	-	7.2	400	-	-	-	-	250	-	-	-	16	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.4	0.18	-	-	0.003	-	-	0.001	-	-	0.001	-	0.001
BH16_01 Jun 01_-_	BH16	1/06/2001	water	-	7.2	320	-	-	-	-	180	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.6	0.1	-	-	0.004	-	-	0.001	-	-	0.002	-	0.001
BH16_01 Oct 01_-_	BH16	1/10/2001	water	-	6.7	320	-	-	-	-	150	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.2	0.03	-	-	0.011	-	-	0.001	-	-	0.001	-	0.001
BH16_01 Jan 02_-_	BH16	1/01/2002	water	-	6.9	830	-	-	-	-	470	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.04	-	-	0.6	0.12	-	-	0.018	-	-	0.001	-	-	0.001	-	0.001
BH16_01 Apr 02_-_	BH16	1/04/2002	water	-	7.1	330	-	-	-	-	230	-	-	-	7	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.3	0.01	-	-	0.025	-	-	<0.001	-	-	<0.001	-	<0.001
BH16_01 Jul 02_-_	BH16	1/07/2002	water	-	7.2	340	-	-	-	-	190	-	-	-	2	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.2	<0.01	-	-	0.021	-	-	<0.001	-	-	<0.001	-	<0.001

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions									Nutrients					Organic Indicators	Metals										
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																			
BH16_01 Oct 02_-	BH16	1/10/2002	water	-	7.4	340	-	-	-	-	190	-	-	-	26	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.1	0.01	-	-	0.017	-	-	0.007	-	-	<0.001	-	<0.001
BH16_01 Jan 03_-	BH16	1/01/2003	water	-	7.94	310	-	-	-	-	210	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.05	-	-	0.2	0.08	-	-	0.02	-	-	<0.001	-	-	<0.001	-	<0.001
BH16_01 Apr 03_-	BH16	1/04/2003	water	-	7.41	414	-	-	-	-	228	-	-	-	11	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	0.01	-	-	0.03	-	-	0.001	-	-	0.002	-	0.001
BH16_01 Jun 03_-	BH16	1/06/2003	water	-	7.37	202	-	-	-	-	126	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.2	0.03	-	-	0.009	-	-	0.001	-	-	0.002	-	0.001
BH16_01 Oct 03_-	BH16	1/10/2003	water	-	7.27	232	-	-	-	-	182	-	-	-	10	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.2	0.03	-	-	0.009	-	-	0.001	-	-	0.001	-	0.001
BH16_01 Jan 04_-	BH16	1/01/2004	water	-	7.95	322	-	-	-	-	306	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.02	-	-	0.3	0.03	-	-	0.009	-	-	0.005	-	-	0.001	-	0.001
BH16_01 Apr 04_-	BH16	1/04/2004	water	-	7.49	-	-	-	-	-	156	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.07	-	-	-	0.02	-	-	0.006	-	-	-	-	-	-	-	-
BH16_01 Jul 04_-	BH16	1/07/2004	water	-	7.25	-	-	-	-	-	170	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	0.01	-	-	0.006	-	-	-	-	-	-	-	-
BH16_01 Oct 04_-	BH16	1/10/2004	water	-	7.21	-	-	-	-	-	103	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.07	-	-	-	0.01	-	-	0.008	-	-	-	-	-	-	-	-
BH16_01 Jan 05_-	BH16	1/01/2005	water	-	7.44	-	-	-	-	-	130	-	-	-	2	-	-	-	-	-	-	-	-	-	-	1.75	-	-	-	0.017	-	-	0.01	-	-	0.001	-	-	0.001	-	0.001
BH16_01 Apr 05_-	BH16	1/04/2005	water	-	7.2	-	-	-	-	-	102	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.063	-	-	-	0.01	-	-	0.012	-	-	-	-	-	-	-	-
BH16_01 Jul 05_-	BH16	1/07/2005	water	-	8.1	-	-	-	-	-	114	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.026	-	-	-	0.019	-	-	0.009	-	-	-	-	-	-	-	-
BH16_01 Oct 05_-	BH16	1/10/2005	water	-	6.9	-	-	-	-	-	131	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.101	-	-	-	0.01	-	-	0.005	-	-	-	-	-	-	-	-
BH16_01 Jan 06_-	BH16	1/01/2006	water	-	6.95	-	-	-	-	-	130	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.012	-	-	-	0.017	-	-	0.008	-	-	<0.001	-	-	<0.001	-	<0.001
BH16_01 Apr 06_-	BH16	1/04/2006	water	-	7.02	-	-	-	-	-	94	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.012	-	-	-	0.047	-	-	0.005	-	-	-	-	-	-	-	-
BH16_01 Jul 06_-	BH16	1/07/2006	water	-	7.61	-	-	-	-	-	170	-	-	-	2	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.148	-	-	0.001	-	-	-	-	-	-	-	-
BH16_01 Oct 06_-	BH16	1/10/2006	water	-	7.6	-	-	-	-	-	900	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	0.185	-	-	0.002	-	-	-	-	-	-	-	-
BH16_01 Jan 07_-	BH16	1/01/2007	water	-	7.51	-	-	-	-	-	232	-	-	-	3	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.323	-	-	0.002	-	-	<0.001	-	-	<0.001	-	<0.001
BH16_01 Apr 07_-	BH16	1/04/2007	water	-	7.25	-	-	-	-	-	232	-	-	-	7	106	39	5	2	19	31.4	16	-	3.25	3.34	0.017	0.465	0.036	-	-	-	-	0.002	-	-	-	-	-	-	-	-
BH16_16 Apr 13_-	BH16	16/04/2013	water	2.05	7.2	231	1.08	-1	13.3	7	150	-	110	<1	-	-	28	6.4	1.4	13	21	5	<0.1	-	-	<0.1	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
BH16_22 Jul 13_-	BH16	22/07/2013	water	1.08	7.16	334	1.79	-9	15	6.9	110	-	70	<1	-	-	23	4.3	1.4	12	15	4	-	-	-	0.016	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-
BH16_29 Oct 13_-	BH16	29/10/2013	water	1.02	8.47	245	5.08	55	18.9	7.3	150	-	92	<1	-	-	34	5	1.7	11	15	9	-	-	-	0.005	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-
BH16_28 Jan 14_-	BH16	28/01/2014	water	1.2	7.67	257	2.29	-73	19.6	7.1	140	-	100	<1	-	-	36	4.8	2	12	18	7	<0.1	-	-	0.008	0.036	0.006	-	-	2	<0.005	0.003	0.005	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH16_16 Apr 14_-	BH16	16/04/2014	water	1.18	7.14	135	2.67	-8	22.2	6.8	140	-	80	<1	-	-	24	4.6	1.5	12	15	5	<0.1	-	-	0.021	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-
BH16_09 Jul 14_-	BH16	9/07/2014	water	-	8.05	142.3	3.85	-133	19.7	7.1	140	-	76	<1	-	-	26	5.1	1.8	12	14	5	<0.1	-	-	<0.1	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-
BH16_16 Oct 14_-	BH16	16/10/2014	water	0.6	7.97	303	1.8	44	16.8	6.9	130	-	74	<1	-	-	33	5.5	2.4	16	32	5	<0.1	-	-	<0.1	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-
BH16_20 Jan 15_-	BH16	20/01/2015	water	1.2	6.85	334	0.93	-5	20.4	7.3	210	-	110	<1	-	-	41	6.8	2.3	19	37	7	<0.1	-	-	<0.1	0.062	<0.01	-	-	4	<0.005	0.002	0.008	<0.0001	-	<0.01	<0.001	<0.001	-	<0.001
BH16_22 Apr 15_-	BH16	22/04/2015	water	0.56	7.26	218	3.49	-18	17.7	6.7	210	-	100	<1	-	-	18	5.2	1.9	17	31	4	<0.1	-	-	0.007	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
BH16_22 Jul 15_-	BH16	22/07/2015	water	0.92	6.82	291	5.93	-61	14.5	6.4	170	-	47	<1	-	-	17	5.1	1.7	29	52	6	<0.1	-	-	<0.1	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-
BH16_20 Oct 15_-	BH16	20/10/2015	water	1.22	6.75	2130	3.9	29	19.1	6.7	230	-	75	<1	-	-	23	6	1.5	44	65	13	<0.1	-	-	0.015	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-
BH16_20 Jan 16_-	BH16	20/01/2016	water	0.87	7.03	312	3.21	10	23.9	7.2	160	-	57	<1	-	-	15	4.3	2.3	36	44	8	<0.1	-	-	0.013	0.03	<0.01	-	-	8	<0.005	0.002	0.006	<0.0001	<0.001	<0.01	<0.001	<0.001	-	<0.001
BH16_14 Apr 16_-	BH16	14/04/2016	water	0.87	7.96	436	2.12	-5	20	6.4	230	-	89	<5	-	-	36	7.4	2.4	40	42	6	0.1	-	-	<0.1	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-
BH16_13 Jul 16_-	BH16	13/07/2016	water	0.43	7.77	249	4.29	-6	13.6	6.7	250	-	45	<5	-	-	18	4.7	2.6	28	40	13	<0.1	-	-	<0.1	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-
BH16_18 Oct 16_-	BH16	18/10/2016	water	0.92	7.82	256	3.49	2	19.3	6.9	210	-	60	<5	-	-	24	4.9	2.2	47	62	10	<0.1	-	-	<0.1	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-
BH16_25 Jan 17_-	BH16	25/01/2017	water	1.19	6.27	434	0.28	7	19	6.5	250	-	130	<5	-	-	40	4.6	2	55	57	12	0.1	-	-	<0.005	0.49	0.1	-	-	3	<0.01	0.002	0.008	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH16_02 Jul 19_-	BH16	2/07/2019	water	1.05	7.12	378.1	2.7	-71.9	17	6.6	240	-	59	<5	-	-	25	6.6	2.9	47	84	16	<0.1	-	-	0.03	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-
BH16_24 Oct 19_-	BH16	24/10/2019	water	1.17	7	467	4.23	-9.3	17.8	6.9	320	-	73	<5	-	-	30	6.1	2.6	47	89	14	<0.1	-	-	0.026	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-
BH16_14 Jan 20_-	BH16	14/01/2020	water	1.41	6.23	667	2.41	-51.4	19.4	6	430	-	130	<5	-	-	63	6.4	3	69	120	21	0.1	-	-	0.038	0.14	0.086	-	-	6	0.01	0.004	0.023	<0.0001	<0.001	<0.005	0.001	0.01	-	<0.001
BH16_22 Apr 20_-	BH16	22/04/2020	water	1.05	7.7	462.5	3.14	-73.3	19.2	7.2	260	-	110	<5	-	-	43	5.2	2.7	45	77	18	0.1	-	-	0.009	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 00_-	BH17	1/07/2000	water	-	7	890	-	-	-	-	530	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.01	-	-	1.4	2.44	-	-	0.001	-	-	0.004	-	-	0.001	-	0.004
BH17_01 Oct 00_-	BH17	1/10/2000	water	-	7.1	900	-	-	-	-	550	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.5	1.25	-	-	0.001	-	-	0.002	-	-	0.002	-	0.002
BH17_01 Jan 01_-	BH17	1/01/2001	water	-	7.1	790	-	-	-	-	480	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.5	2.11	-	-	0.001	-	-	0.007	-	-	0.001	-	0.001
BH17_01 Apr 01_-	BH17	1/04/2001	water	-	7.1	720	-	-	-	-	470	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.7	2.26	-	-	0.001	-	-	0.002	-	-	0.001	-	0.001
BH17_01 Jun 01_-	BH17	1/06/2001	water	-	6.9	830	-	-	-	-	520	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.02	-	-	0.3	2.24	-	-	0.003	-	-	0.002	-	-	0.001	-	0.001
BH17_01 Oct 01_-	BH17	1/10/2001	water	-	6.9	930	-	-	-	-	540	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.5	4.51	-	-	0.001	-	-	0.001	-	-	0.001	-	0.001
BH17_01 Jan 02_-	BH17	1/01/2002	water	-	6.8	1100	-	-	-	-	650	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.17	-	-	0.5	9.25	-	-	0.001	-	-	0.001	-	-	0.001	-	0.001
BH17_01 Apr 02_-	BH17	1/04/2002	water	-	7.4	880	-	-	-	-	560	-	-	-	7	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.4	5.27	-	-	0.001	-	-	0.001	-	-	<0.001	-	<0.001
BH17_01 Jul 02_-	BH17	1/07/2002	water	-	7.4	830	-	-	-	-	520	-	-	-	5	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.3	2.49	-	-	0.001	-	-	0.001	-	-	<0.001	-	<0.001
BH17_01 Oct 02_-	BH17	1/10/2002	water	-	7.4	870	-	-	-	-	520	-	-	-	5	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.2	5	-	-	<0.001	-	-	0.03	-	-	<0.001	-	<0.001
BH17_01 Jan 03_-	BH17	1/01/2003	water	-	7.65	770	-	-	-	-	560	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.02	-	-	0.2	4.34	-	-	0.001	-	-	0.004	-	-	<0.001	-	<0.001
BH17_01 Apr 03_-	BH17	1/04/2003	water	-	7.79	1000	-	-	-	-	694	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.5	3.12	-	-	0.001	-	-	0.001	-	-	0.001	-	0.001
BH17_01 Jul 03_-	BH17	1/07/2003	water	-	7.44	1120	-	-	-	-	750	-	-	-	10	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.6	3.7	-	-	0.003	-	-	0.001	-	-	0.001	-	0.001
BH17_01 Oct 03_-	BH17	1/10/2003	water	-	7.5	844	-	-	-	-	564	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.8	4.71	-	-	0.001	-	-	0.001	-	-	0.002	-	0.001
BH17_01 Jan 04_-	BH17	1/01/2004	water	-	8.15	858	-	-	-	-	636	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.04	-	-	0.8	6.7	-	-	0.001	-	-	0.005	-	-	0.001	-	0.001
BH17_01 Apr 04_-	BH17	1/04/2004	water	-	7.57	-	-	-	-	-	402	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.06	-	-	-	6	-	-	0.001	-	-	-	-	-	-	-	-
BH17_01 Jul 04_-	BH17	1/07/2004	water	-	7.41	-	-	-	-	-	452	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	0.24	-	-	0.001	-	-	-	-	-	-	-	-
BH17_01 Oct 04_-	BH17	1/10/2004	water	-	7.48	-	-	-	-	-	432	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.08	-	-	-	3.97	-	-	0.001	-	-	-	-	-	-	-	-
BH17_01 Jan 05_-	BH17	1/01/2005	water	-	7.6	-	-	-	-	-	546	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.077	-	-	-	5.17	-	-	0.01	-	-	0.01	-	-	0.01	-	0.01
BH17_01 Apr 05_-	BH17	1/04/2005	water	-	6.96	-	-	-	-	-	578	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.055	-	-	-	2.97	-	-	0.001	-	-	-	-	-	-	-	-
BH17_01 Jul 05_-	BH17	1/07/2005	water	-	8.4	-	-	-	-	-	454	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.525	-	-	-	7.42	-	-	<0.001	-	-	-	-	-	-	-	-
BH17_01 Oct 05_-	BH17	1/10/2005	water	-	7.05	-	-	-	-	-	472	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.218	-	-	-	6.02	-	-	<0.001	-	-	-	-	-	-	-	-
BH17_01 Jan 06_-	BH17	1/01/2006	water	-	7.26	-	-	-	-	-	588	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.557	-	-	-	2.92	-	-	<0.001	-	-	0.001	-	-	<0.001	-	<0.001

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions										Nutrients					Organic Indicators	Metals										
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																						
2-4m																																						
4-8m																																						
>8m																																						
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																						
2-4m																																						
4-8m																																						
>8m																																						
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																						
2-4m																																						
4-8m																																						
>8m																																						

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																				
BH17_01 Apr 06_-	BH17	1/04/2006	water	-	6.99	-	-	-	-	-	670	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.13	-	-	-	0.886	-	-	<0.001	-	-	-	-	-	-	-
BH17_01 Jul 06_-	BH17	1/07/2006	water	-	7.17	-	-	-	-	-	572	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.39	-	-	-	2.32	-	-	<0.001	-	-	-	-	-	-	-
BH17_01 Oct 06_-	BH17	1/10/2006	water	-	7.18	-	-	-	-	-	542	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.241	-	-	-	1.91	-	-	<0.001	-	-	-	-	-	-	-
BH17_01 Jan 07_-	BH17	1/01/2007	water	-	7.09	-	-	-	-	-	512	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.129	-	-	-	2.55	-	-	<0.001	-	-	<0.001	-	<0.001	-	<0.001
BH17_01 Apr 07_-	BH17	1/04/2007	water	-	6.98	-	-	-	-	-	596	-	-	-	10	301	128	15	16	38	60.7	111	-	9.67	10	1.16	1.1	0.023	-	-	-	-	<0.001	-	-	-	-	-	-	-
BH17_17 Apr 13_-	BH17	17/04/2013	water	5.31	7.03	656	0.22	4	15.6	7.9	510	-	240	<1	-	-	96	7.9	6	42	44	95	0.13	-	-	0.036	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH17_22 Jul 13_-	BH17	22/07/2013	water	5.3	7.01	553	0.78	27	15	7.2	470	-	300	<1	-	-	160	11	4.9	42	39	85	-	-	-	<0.1	-	-	-	-	4	-	-	-	-	-	-	-	-	-
BH17_14 Apr 14_-	BH17	14/04/2014	water	5.87	7.15	868	2.44	82	19.3	7.5	560	-	310	<1	-	-	170	12	6.2	54	51	75	0.1	-	-	<0.1	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH17_07 Jul 14_-	BH17	7/07/2014	water	5.19	8.66	866	3.52	109	16.5	7.2	530	-	270	<1	-	-	140	12	5	55	52	120	<0.1	-	-	<0.1	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH17_22 Apr 15_-	BH17	22/04/2015	water	7.17	7.09	918	0.93	-25	17.9	7.3	680	-	400	<1	-	-	160	14	14	66	56	110	0.13	-	-	<0.1	-	-	-	-	7	-	-	-	-	-	-	-	-	-
BH17_21 Jul 15_-	BH17	21/07/2015	water	5.48	6.98	781	2.78	-4	17.6	7	610	-	300	<1	-	-	120	12	10	57	49	100	0.1	-	-	<0.1	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH17_20 Oct 15_-	BH17	20/10/2015	water	5.44	6.17	1187	3.4	24	24.7	7.4	740	-	430	<1	-	-	160	14	13	75	70	120	0.1	-	-	0.044	-	-	-	-	6	-	-	-	-	-	-	-	-	-
BH17_21 Jan 16_-	BH17	21/01/2016	water	5.21	7.21	929	0.95	16	23	7.3	800	-	490	<1	-	-	210	17	19	540	62	120	0.1	-	-	0.021	0.03	<0.01	-	-	10	<0.005	<0.001	0.088	<0.0001	<0.001	<0.01	<0.001	<0.001	-	<0.001
BH17_14 Apr 16_-	BH17	14/04/2016	water	6.41	8.21	575	2.56	103	19	7.1	700	-	420	<5	-	-	150	12	11	95	61	85	0.1	-	-	0.033	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-
BH17_21 Jul 16_-	BH17	21/07/2016	water	5.22	7.73	924	2.97	144	17.2	7	670	-	370	<5	-	-	140	13	12	83	51	99	0.1	-	-	0.019	-	-	-	-	7	-	-	-	-	-	-	-	-	-
BH17_02 Jul 19_-	BH17	2/07/2019	water	5.4	7.08	677	3.49	-33.6	18.5	7.3	820	-	420	<5	-	-	190	19	21	43	54	180	<0.1	-	-	0.54	-	-	-	-	8	-	-	-	-	-	-	-	-	-
BH17_24 Oct 19_-	BH17	24/10/2019	water	5.45	7.08	1220	2.13	72.3	19.1	7	870	-	520	<5	-	-	230	22	19	40	59	120	0.1	-	-	0.9	-	-	-	-	9	-	-	-	-	-	-	-	-	-
BH17_15 Jan 20_-	BH17	15/01/2020	water	5.47	7.06	1231	1.13	-2.3	19.7	7	810	-	600	<5	-	-	220	20	20	56	83	66	0.1	-	-	0.95	0.03	<0.005	-	-	11	0.01	0.004	0.1	<0.0001	<0.001	<0.005	<0.001	0.01	-	<0.001
BH17_23 Apr 20_-	BH17	23/04/2020	water	5.36	7.06	1201	0.7	-12.1	20.1	7	840	-	550	<5	-	-	190	17	15	60	80	63	0.1	-	-	0.52	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-
BH18_01 Jun 01_-	BH18	1/06/2001	water	-	6.9	830	-	-	-	-	570	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	0.53	-	-	0.003	-	-	0.002	-	-	0.001	-	0.001
BH18_01 Oct 01_-	BH18	1/10/2001	water	-	6.8	760	-	-	-	-	410	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.5	0.96	-	-	0.002	-	-	0.001	-	-	0.001	-	0.001
BH18_01 Jan 02_-	BH18	1/01/2002	water	-	6.7	820	-	-	-	-	480	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.7	1.22	-	-	0.001	-	-	0.001	-	-	0.001	-	0.001
BH18_01 Apr 02_-	BH18	1/04/2002	water	-	7.2	850	-	-	-	-	510	-	-	-	3	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.2	1.1	-	-	0.002	-	-	0.001	-	-	<0.001	-	<0.001
BH18_01 Jun 02_-	BH18	1/06/2002	water	-	7.3	750	-	-	-	-	440	-	-	-	1	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.1	1.42	-	-	0.002	-	-	0.001	-	-	<0.001	-	<0.001
BH18_01 Oct 02_-	BH18	1/10/2002	water	-	7.4	710	-	-	-	-	410	-	-	-	1	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	<0.1	1.86	-	-	0.002	-	-	0.026	-	-	<0.001	-	<0.001
BH18_01 Jan 03_-	BH18	1/01/2003	water	-	7.67	590	-	-	-	-	420	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.03	-	-	<0.1	1.91	-	-	0.002	-	-	0.002	-	-	<0.001	-	0.002
BH18_01 Apr 03_-	BH18	1/04/2003	water	-	7.39	687	-	-	-	-	452	-	-	-	12	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.3	2.14	-	-	0.002	-	-	<0.001	-	-	0.001	-	<0.001
BH18_01 Jul 03_-	BH18	1/07/2003	water	-	7.43	1470	-	-	-	-	1010	-	-	-	21	-	-	-	-	-	-	-	-	-	-	0.11	-	-	3.1	15.9	-	-	0.004	-	-	<0.005	-	-	0.003	-	<0.001
BH18_01 Oct 03_-	BH18	1/10/2003	water	-	7.37	947	-	-	-	-	606	-	-	-	9	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	1.1	4.58	-	-	0.003	-	-	<0.001	-	-	<0.001	-	<0.001
BH18_01 Jan 04_-	BH18	1/01/2004	water	-	7.91	895	-	-	-	-	642	-	-	-	7	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.3	2.17	-	-	0.002	-	-	<0.005	-	-	<0.001	-	<0.001
BH18_01 Apr 04_-	BH18	1/04/2004	water	-	7.34	-	-	-	-	-	516	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.02	-	-	-	1.01	-	-	0.002	-	-	-	-	-	-	-
BH18_01 Jul 04_-	BH18	1/07/2004	water	-	7.41	-	-	-	-	-	450	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	2.9	-	-	0.002	-	-	-	-	-	-	-
BH18_01 Oct 04_-	BH18	1/10/2004	water	-	7.38	-	-	-	-	-	744	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.08	-	-	-	5.92	-	-	0.003	-	-	-	-	-	-	-
BH18_01 Jan 05_-	BH18	1/01/2005	water	-	7.48	-	-	-	-	-	654	-	-	-	3	-	-	-	-	-	-	-	-	-	-	1.43	-	-	-	3.35	-	-	0.002	-	-	<0.001	-	-	<0.001	-	<0.001
BH18_01 Apr 05_-	BH18	1/04/2005	water	-	6.82	-	-	-	-	-	634	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	0.053	-	-	-	2.52	-	-	0.002	-	-	-	-	-	-	-
BH18_01 Jul 05_-	BH18	1/07/2005	water	-	7.96	-	-	-	-	-	534	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	0.033	-	-	-	3.78	-	-	0.002	-	-	-	-	-	-	-
BH18_01 Oct 05_-	BH18	1/10/2005	water	-	6.97	-	-	-	-	-	540	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	0.062	-	-	-	4.11	-	-	0.002	-	-	-	-	-	-	-
BH18_01 Jan 06_-	BH18	1/01/2006	water	-	7.16	-	-	-	-	-	606	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.021	-	-	-	4.38	-	-	0.002	-	-	0.002	-	-	0.001	-	<0.001
BH18_01 Apr 06_-	BH18	1/04/2006	water	-	6.9	-	-	-	-	-	618	-	-	-	2	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	3.93	-	-	0.002	-	-	-	-	-	-	-
BH18_01 Jul 06_-	BH18	1/07/2006	water	-	7.02	-	-	-	-	-	602	-	-	-	2	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	4	-	-	0.002	-	-	-	-	-	-	-
BH18_01 Oct 06_-	BH18	1/10/2006	water	-	6.88	-	-	-	-	-	676	-	-	-	4	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	8.51	-	-	0.002	-	-	-	-	-	-	-
BH18_01 Jan 07_-	BH18	1/01/2007	water	-	6.94	-	-	-	-	-	664	-	-	-	1	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	6.85	-	-	0.002	-	-	<0.001	-	-	<0.001	-	<0.001
BH18_01 Apr 07_-	BH18	1/04/2007	water	-	6.78	-	-	-	-	-	730	-	-	-	6	458	166	19	2	44	106	37	-	11.8	12.9	0.109	2.99	0.021	-	-	-	-	0.002	-	-	-	-	-	-	-
BH18_16 Apr 13_-	BH18	16/04/2013	water	27.02	7.14	4500	0.41	-6	18.4	7.5	910	-	530	<1	-	-	190	21	2.7	66	97	72	<0.1	-	-	0.031	-	-	-	-	3	-	-	-	-	-	-	-	-	-
BH18_30 Oct 13_-	BH18	30/10/2013	water	5.36	7.96	753	2.31	-1	16.9	7.7	630	-	290	<1	-	-	140	12	5.7	47	40	120	-	-	-	0.011	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH18_28 Jan 14_-	BH18	28/01/2014	water	5.5	7.17	907	2.01	51	18	7.4	490	-	300	<1	-	-	170	13	6	47	53	100	<0.1	-	-	0.008	2.5	0.027	-	-	4	<0.005	<0.001	0.042	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH18_16 Apr 14_-	BH18	16/04/2014	water	26.99	6.93	52.5	2.25	50	26.1	6.8	830	-	540	<1	-	-	200	31	3.1	87	100	72	0.11	-	-	0.006	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-
BH18_29 Oct 14_-	BH18	29/10/2014	water	29.8	8.15	831	3.79	72	19.2	7.1	810	-	530	<1	-	-	220	33	9.2	52	51	42	0.11	-	-	<0.1	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-
BH18_21 Jan 15_-	BH18	21/01/2015	water	27.99	6.87	1175	0.97	64	21.8	7	880	-	500	<1	-	-	220	31	5	77	94	80	0.11	-	-	0.008	5.6	<0.01	-	-	3	<0.005	0.003	0.027	<0.0001	-	<0.01	<0.001	<0.001	-	<0.001
BH18_23 Apr 15_-	BH18	23/04/2015	water	27.96	6.86	1126	1.76	81	21.9	7	720	-	550	<1	-	-	190	33	3	96	100	74	0.14	-	-	<0.1	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-
BH18_21 Jul 15_-	BH18	21/07/2015	water	26.75	6.75	819	5.24	69	17.6	7	820	-	500	<1	-	-	210	27	8	44	67	23	0.1	-	-	<0.1	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-
BH18_21 Oct 15_-	BH18	21/10/2015	water	26.93	7.02	495	5.75	35	22.4	7.1	920	-	460	<1	-	-	190	27	4.7	84	120	97	0.1	-	-	<0.1	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-
BH18_21 Jan 16_-	BH18	21/01/2016	water	27.12	7.09	1115	7.25	13	25.5	7.3	830	-	560	<1	-	-	200	33	4.2	93	91	55	0.1	-	-	0.007	1.7	<0.01	-	-	5	<0.005	0.007	0.022	<0.0001	<0.001	<0.01	<0.001	<0.001	-	<0.001
BH18_19 Apr 16_-	BH18	19/04/2016	water	27.87	6.94	1111	3.02	59	21.9	7.2	880	-	510	<5	-	-	190	30	3.6	83	99	50	0.1	-	-	<0.1	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-
BH18_18 Oct 16_-	BH18	18/10/2016	water	5.37	7.6	1005	2.75	19	19.2	7.5	700	-	360	<5	-	-	180	18	14	58	45	150	0.1	-	-	0.94	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-
BH18_19 Jan 17_-	BH18	19/01/2017	water	5.47	7.07	934	2.04	61	19.5	7.4	650	-	270	<5	-	-	140	15	12	49	55	190	0.1	-	-	0.78	0.064	<0.005	-	-	9	<0.01	<0.001	0.067	<0.0001	<0.001	<0.005	<0.001	0.002	-	<0.001
BH18_03 Jul 19_-	BH18	3/07/2019	water	27.11	7.02	1280	2.37	101.4	21.6	7.2	800	-	550	<5	-	-	190	32	6.4	58	90	60	0.1	-	-	1.9	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-
BH18_25 Oct 19_-	BH18	25/10/2019	water	27.13	7.18	1300	4.26	61.7	23.2	7.5	910	-	510	<5	-	-	200	30	7.8	62	83	52	0.1	-	-	1.4	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-
BH18_13 Jan 20_-	BH18	13/01/2020	water	27.28	7.04	1299	1.88	-154.8	23.1	6.9	870	-	500	<5	-	-	180	29	6.8	65	88	58	0.1	-	-	1.9	17	0.019	-	-	4	<0.01	0.002	0.031	<0.0001	<0.001	<0.005	<0.001	0.007	-	<0.001
BH18_23 Apr 20_-	BH18	23/04/2020	water	26.97	7.09	1310	1.62	97.4	22.5	7.1	880	-	530	<5	-	-	190	30	6.2	56	83	67	0.1	-	-	0.3	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-
BH19_01 Jul 06_-	BH19	1/07/2006	water	-	7	-	-	-	-	-	960	-	-	-	16	-	-	-	-	-	-	-	-	-	-	0.608	-	-	-	<0.01	-	-	0.066	-	-	-	-	-	-	-
BH19_01 Oct 06_-	BH19	1/10/2006	water	-	6.87	-	-	-	-	-	1200	-	-	-	18	-	-	-	-	-	-	-	-	-	-	0.556	-	-	-	<0.01	-	-	0.07	-	-	-	-	-	-	-

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions									Nutrients					Organic Indicators	Metals									
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																			
BH19 _01 Jan 07_-	BH19	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_01 Jan 07_-	BH19	1/01/2007	water	-	7	-	-	-	-	-	1110	-	-	-	12	-	-	-	-	-	-	-	-	-	-	1.92	-	-	-	<0.01	-	-	0.047	-	-	<0.001	-	-	<0.001
BH19_01 Apr 07_-	BH19	1/04/2007	water	-	6.84	-	-	-	-	-	1100	-	-	-	17	448	138	28	14	240	460	7	-	20	22.1	3.94	<0.01	0.015	-	-	-	-	0.051	-	-	-	-	-	-	-
BH19_16 Apr 13_-	BH19	16/04/2013	water	2.75	7.54	836	1.1	-154	25	7.5	630	-	330	<1	-	-	130	14	9.9	61	70	89	0.14	-	-	1.7	-	-	-	-	14	-	-	-	-	-	-	-	-	-
BH19_09 Jul 13_-	BH19	9/07/2013	water	26.71	6.86	755	4.4	135	20.1	7.5	730	-	510	<1	-	-	200	30	9	42	52	31	-	-	-	<0.1	-	-	-	-	4	-	-	-	-	-	-	-	-	-
BH19_29 Oct 13_-	BH19	29/10/2013	water	26.85	8.42	1401	4.18	37	21.1	7.2	990	-	540	<1	-	-	260	30	4.5	74	82	86	-	-	-	0.01	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH19_28 Jan 14_-	BH19	28/01/2014	water	27.02	7.02	1405	5.49	55	22.8	7	870	-	530	<1	-	-	210	28	3.4	79	110	82	0.11	-	-	0.006	0.98	0.018	-	-	2	<0.005	0.004	0.023	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH19_16 Apr 14_-	BH19	16/04/2014	water	3.1	7.22	914	1.26	-73	19.9	7	670	-	390	<1	-	-	150	15	10	71	71	65	0.14	-	-	1.4	-	-	-	-	12	-	-	-	-	-	-	-	-	-
BH19_07 Jul 14_-	BH19	7/07/2014	water	-	7.91	397	2.01	370	13.7	7.2	510	-	280	<1	-	-	120	12	10	45	34	67	0.14	-	-	0.71	-	-	-	-	9	-	-	-	-	-	-	-	-	-
BH19_29 Jul 14_-	BH19	29/07/2014	water	2.87	7.57	867	2.78	115	18.5	7.3	540	-	330	<1	-	-	210	24	14	47	38	110	0.18	-	-	0.98	-	-	-	-	200	-	-	-	-	-	-	-	-	-
BH19_16 Oct 14_-	BH19	16/10/2014	water	3.18	6.97	884	1.41	59	17.6	7.1	660	-	310	<1	-	-	170	19	5.8	47	-	-	<0.1	-	-	0.009	-	-	-	-	30	-	-	-	-	-	-	-	-	-
BH19_20 Jan 15_-	BH19	20/01/2015	water	3.25	6.49	919	0.03	87	19.6	7.1	800	-	300	<1	-	-	170	18	6.1	52	47	200	<0.1	-	-	0.005	0.009	<0.01	-	-	19	0.09	0.001	0.012	<0.0001	-	<0.01	<0.001	0.001	-	<0.001
BH19_22 Apr 15_-	BH19	22/04/2015	water	2.92	6.87	1222	2.72	68	18.9	6.8	870	-	430	<1	-	-	190	22	10	65	48	160	<0.1	-	-	0.059	-	-	-	-	30	-	-	-	-	-	-	-	-	-
BH19_21 Jul 15_-	BH19	21/07/2015	water	3.28	6.67	1199	2.71	29	16.8	6.8	1100	-	390	<1	-	-	260	26	7.5	63	78	330	<0.1	-	-	0.007	-	-	-	-	35	-	-	-	-	-	-	-	-	-
BH19_20 Oct 15_-	BH19	20/10/2015	water	3.57	6.59	337	1.85	84	20.6	7.2	1600	-	450	<1	-	-	320	35	8.1	68	86	480	<0.1	-	-	0.048	-	-	-	-	65	-	-	-	-	-	-	-	-	-
BH19_20 Jan 16_-	BH19	20/01/2016	water	3.34	6.82	1546	2.63	60	24.7	6.9	1300	-	400	<1	-	-	300	34	9.1	68	63	370	<0.1	-	-	0.05	4.5	0.31	-	-	76	0.05	0.002	0.026	<0.0001	<0.001	<0.01	<0.001	<0.001	-	<0.001
BH19_14 Apr 16_-	BH19	14/04/2016	water	3.42	7.85	1415	1.61	21	22	6.9	1100	-	470	<5	-	-	290	28	9.4	67	49	270	<0.1	-	-	<0.1	-	-	-	-	160	-	-	-	-	-	-	-	-	-
BH19_13 Jul 16_-	BH19	13/07/2016	water	26.74	6.79	1234	3.8	91	16.6	7.6	420	-	240	<5	-	-	97	9.7	1.1	41	74	21	0.2	-	-	<0.1	-	-	-	-	3	-	-	-	-	-	-	-	-	-
BH19_18 Oct 16_-	BH19	18/10/2016	water	26.87	6.97	780	2.29	-22	17	7	820	-	570	<5	-	-	210	31	7.2	70	100	25	0.1	-	-	0.016	-	-	-	-	3	-	-	-	-	-	-	-	-	-
BH19_19 Jan 17_-	BH19	19/01/2017	water	27.83	7.15	1270	2.09	51	22	7.2	890	-	420	<5	-	-	180	28	5.1	100	130	210	0.1	-	-	0.29	6.6	<0.005	-	-	5	<0.01	0.015	0.029	0.0002	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH19A_02 Jul 19_-	BH19A	2/07/2019	water	3.44	7.46	253.2	3.81	2.7	16.8	7	360	-	100	<5	-	-	94	8.6	6.6	21	32	140	<0.1	-	-	0.018	-	-	-	-	51	-	-	-	-	-	-	-	-	-
BH19A_24 Oct 19_-	BH19A	24/10/2019	water	3.57	7.38	655	3.64	54.3	18.7	7	490	-	96	<5	-	-	120	10	6.7	24	39	160	<0.1	-	-	<0.005	-	-	-	-	37	-	-	-	-	-	-	-	-	-
BH19A_15 Jan 20_-	BH19A	15/01/2020	water	3.88	5.88	762	0.63	-19.6	21.5	5.8	590	-	160	<5	-	-	120	11	6.1	27	170	40	<0.1	-	-	0.099	0.084	<0.005	-	-	16	0.14	0.002	0.016	<0.0001	0.001	<0.005	<0.001	0.017	-	0.001
BH19A_22 Apr 20_-	BH19A	22/04/2020	water	3.5	7.86	508	1.96	-60.3	22.5	7.1	330	-	140	<5	-	-	92	7.1	5.6	25	27	92	<0.1	-	-	0.11	-	-	-	-	57	-	-	-	-	-	-	-	-	-
BH19B_18 Nov 19_-	BH19B	18/11/2019	water	4.28	6.51	1115	0.16	70.9	21.3	7	740	740	410	<5	-	-	170	29	9.2	34	57	140	<0.1	-	-	0.069	<0.005	<0.005	-	-	34	0.15	0.024	0.01	<0.0001	<0.001	<0.005	<0.001	0.01	-	<0.001
BH19B_15 Jan 20_-	BH19B	15/01/2020	water	4.4	6.78	975	0.05	-28	20.6	6.8	700	-	440	<5	-	-	160	21	9.2	40	68	63	<0.1	-	-	1.1	<0.005	<0.005	-	-	26	0.2	0.089	0.035	<0.0001	0.001	<0.05	<0.001	<0.001	-	<0.001
BH19B_22 Apr 20_-	BH19B	22/04/2020	water	4.19	7.21	976	2.24	-13.5	21.9	7.2	660	-	410	<5	-	-	180	24	7	38	44	130	<0.1	-	-	0.1	-	-	-	-	73	-	-	-	-	-	-	-	-	-
BH20_01 Jul 06_-	BH20	1/07/2006	water	-	7.11	-	-	-	-	-	1000	-	-	-	10	-	-	-	-	-	-	-	-	-	-	0.65	-	-	-	<0.01	-	-	0.019	-	-	-	-	-	-
BH20_01 Oct 06_-	BH20	1/10/2006	water	-	6.94	-	-	-	-	-	1900	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.515	-	-	-	0.013	-	-	0.02	-	-	-	-	-	-
BH20 _01 Jan 07_-	BH20	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_01 Jan 07_-	BH20	1/01/2007	water	-	6.96	-	-	-	-	-	800	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.53	-	-	-	<0.01	-	-	0.019	-	<0.001	-	0.001	-	<0.001
BH20_01 Apr 07_-	BH20	1/04/2007	water	-	6.85	-	-	-	-	-	910	-	-	-	13	364	175	25	10	53	90	211	-	13.3	14.2	0.537	<0.01	0.09	-	-	-	-	0.021	-	-	-	-	-	-	-
BH20_16 Apr 13_-	BH20	16/04/2013	water	1.75	7.59	28.4	1.92	-974	18	7.5	490	-	240	<1	-	-	91	14	7.8	52	51	66	<0.1	-	-	0.46	-	-	-	-	18	-	-	-	-	-	-	-	-	-
BH20_28 Jan 14_-	BH20	28/01/2014	water	3.02	7.08	1208	2.67	66	18.5	7.1	830	-	380	<1	-	-	180	19	14	94	120	99	0.12	-	-	1.2	<0.1	<0.01	-	-	18	<0.005	0.005	0.066	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH20_07 Jul 14_-	BH20	7/07/2014	water	-	8.27	405	4.54	53	12.3	7.3	440	-	210	<1	-	-	110	17	10	55	46	86	<0.1	-	-	0.32	-	-	-	-	44	-	-	-	-	-	-	-	-	-
BH20_21 Jan 15_-	BH20	21/01/2015	water	2.11	7.17	645	0.24	-134	21.8	7.3	700	-	310	<1	-	-	150	24	18	86	95	63	<0.1	-	-	1.6	0.006	0.009	-	-	130	<0.005	0.002	0.11	<0.0001	-	<0.01	<0.001	<0.001	-	<0.001
BH20_27 Apr 15_-	BH20	27/04/2015	water	5.8	7.9	259.9	0.23	23	15.1	6.9	350	-	50	<1	-	-	35	6.7	6	34	40	35	<0.1	-	-	0.018	-	-	-	-	18	-	-	-	-	-	-	-	-	-
BH20_20 Oct 15_-	BH20	20/10/2015	water	2.32	7.17	262	1.85	74	19.9	7.5	400	-	190	<1	-	-	97	14	9.8	54	72	55	<0.1	-	-	0.025	-	-	-	-	19	-	-	-	-	-	-	-	-	-
BH20_10 Mar 16_-	BH20	10/03/2016	water	2.87	7.51	801	2.41	-40	20.8	7	500	-	200	<1	-	-	96	14	7.1	50	49	59	0.2	-	-	0.43	10	0.009	-	-	21	<0.005	<0.001	0.058	<0.0001	<0.001	<0.01	<0.001	<0.001	-	<0.001
BH20_19 Apr 16_-	BH20	19/04/2016	water	2.56	5.73	425	2.01	15	20.8	6.6	290	-	59	<5	-	-	51	8	3.9	32	34	61	0.1	-	-	<0.1	-	-	-	-	9	-	-	-	-	-	-	-	-	-
BH20_25 Jan 17_-	BH20	25/01/2017	water	3.41	6.47	1248	0.3	53	19.9	7.3	960	-	370	<5	-	-	190	21	9.2	81	52	250	<0.1	-	-	0.081	0.28	0.055	-	-	21	0.08	0.001	0.014	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH20_02 Jul 19_-	BH20	2/07/2019	water	2.28	7.34	522	10.15	24.2	16.5	6.9	460	-	92	<5	-	-	90	14	9.6	37	51	140	0.1	-	-	0.048	-	-	-	-	12	-	-	-	-	-	-	-	-	-
BH20_24 Oct 19_-	BH20	24/10/2019	water	2.48	7.24	566	6.54	27.5	18.3	7.3	480	-	200	<5	-	-	92	13	5.7	31	45	85	0.2	-	-	0.2	-	-	-	-	9.9	-	-	-	-	-	-	-	-	-
BH20_14 Jan 20_-	BH20	14/01/2020	water	2.51	6.01	688	0.29	15.8	21.7	6.1	570	-	230	<5	-	-	100	16	5.5	40	60	100	0.1	-	-	0.5	0.01	<0.005	-	-	7	0.05	0.007	0.073	<0.0001	<0.001	<0.05	0.002	<0.001	-	<0.001
BH20_22 Apr 20_-	BH20	22/04/2020	water	2.3	7.72	746	3.01	21.3	20.3	7.4	520	-	200	<5	-	-	72	21	7.4	74	67	100	0.1	-	-	<0.005	-	-	-	-	15	-	-	-	-	-	-	-	-	-
BH22_01 Jul 06_-	BH22	1/07/2006	water	-	7.6	-	-	-	-	-	460	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.053	-	-	-	0.53	-	-	0.007	-	-	-	-	-	-
BH22_01 Oct 06_-	BH22	1/10/2006	water	-	7.42	-	-	-	-	-	600	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.095	-	-	-	0.47	-	-	0.003	-	-	-	-	-	-
BH22 _01 Jan 07_-	BH22	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_01 Jan 07_-	BH22	1/01/2007	water	-	7.39	-	-	-	-	-	486	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.081	-	-	-	0.627	-	-	0.006	-	-	<0.001	-	-	<0.001
BH22_01 Apr 07_-	BH22	1/04/2007	water	-	7.15	-	-	-	-	-	524	-	-	-	12	146	87	15	6	50	81.1	143	-	7.92	8.18	0.108	0.465	0.051	-	-	-	-	0.005	-	-	-	-	-	-	-
BH22_22 Jul 13_-	BH22	22/07/2013	water	1.77	7.67	312	2.13	-14	15.6	7.1	380	-	180	<1	-	-	100	13	6.3	46	45	95	-	-	-	0.041	-	-	-	-	22	-	-	-	-	-	-	-	-	-
BH22_29 Oct 13_-	BH22	29/10/2013	water	2.17	7.71	896	2.14	-26	18.1	7.5	660	-	300	<1	-	-	130	19	10	74	70	110	-	-	-	0.46	-	-	-	-	19	-	-	-	-	-	-	-	-	-
BH22_28 Jan 14_-	BH22	28/01/2014	water	2.2	7.36	1065	3.35	-58	19.2	7.3	730	-	370	<1	-	-	150	22	11	82	95	110	0.18	-	-	0.92	0.011	0.019	-	-	13	<0.005	0.004	0.077	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH22_16 Apr 14_-	BH22	16/04/2014	water	2.86	7.84	388	1.61	-33	18.4	6.8	270	-	120	<1	-	-	62	4.7	4.4	15	18	56	0.32	-	-	0.026	-	-	-	-	6	-	-	-	-	-	-	-	-	-
BH22_07 Jul 14_-	BH22	7/07/2014	water	-	8.29	314	1.8	-62	16.6	7.6	250	-	140	<1	-	-	62	4.3	4.1	13	13	24	0.29	-	-	<0.1	-	-	-	-	19	-	-	-	-	-	-	-	-	-
BH22_16 Oct 14_-	BH22	16/10/2014	water	2.23	-	375	1.36	7	16.4	7.6	230	-	120	<1	-	-	55	3.9	4	18	20	33	0.3	-	-	0.006	-	-	-	-	14	-	-	-	-	-	-	-	-	-
BH22_20 Jan 15_-	BH22	20/01/2015	water	2.92	6.24	302	0.4	12	19.2	7.2	290	-	91	<1	-	-	50	3.9	3.5	12	21	29	0.31	-	-	0.026	0.016	<0.01	-	-	32	0.02	0.004	0.012	<0.0001	-	<0.01	<0.001	<0.001	-	<0.001
BH22_22 Apr 15_-	BH22	22/04/2015	water	2.54	7.62	298	1.2	-27	17.3	7.2	200	-	120	<1	-	-	50	3.4	3.4	16	18	19	0.3	-	-	0.011	-	-	-	-	39	-	-	-	-	-	-	-	-	-
BH22_22 Jul 15_-	BH22	22/07/2015	water	2.3	7.71	596	5.55	-84	12.8	7.2	380	-	160	<1	-	-	72	8	7.1	48	57	62	0.3	-	-	0.4	-	-	-	-	14	-	-	-	-	-	-	-	-	-
BH22_20 Oct 15_-	BH22	20/10/2015	water	3.01	6.9	2500	2.19	57	18.3	7.5	500	-	230	<1	-	-	100	12	8	61	70	94	0.2	-	-	0.097	-	-	-	-	18	-	-	-	-	-	-	-	-	-
BH22_20 Jan 16_-	BH22	20/01/2016	water	2.47	7.19	835	3.19	-48	20.8	7.4	530	-	280	<1	-	-	110	15	11	74	55	71	0.1	-	-	0.008	0.04	<0.01	-	-	22	0.01	0.004	0.028	<0.0001	<0.001	<0.01	<0.001	<0.001	-	<0.001
BH22_14 Apr 16_-	BH22	14/04/2016	water	2.77	6.9	522	0.65	-200	19.3	7	310	-	190	<5	-	-	68	8.9	8.4	31	21	22	0.4	-	-	0.14	-	-	-	-	28	-	-	-	-	-	-	-	-	-

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions									Nutrients					Organic Indicators	Metals									
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																			
BH22_13 Jul 16_-	BH22	13/07/2016	water	1.35	7.18	273	3.83	-47	17.3	6.1	310	-	40	<5	-	-	63	8.9	6.5	27	32	120	<0.1	-	-	0.061	-	-	-	-	38	-	-	-	-	-	-	-	-	-
BH22_18 Oct 16_-	BH22	18/10/2016	water	1.97	7.65	519	1.96	-34	17.3	7.4	300	-	210	<5	-	-	73	10	4.9	28	29	19	<0.1	-	-	0.088	-	-	-	-	7	-	-	-	-	-	-	-	-	-
BH22_25 Jan 17_-	BH22	25/01/2017	water	2.04	6.01	652	0.28	-15	20	6.5	450	-	200	<5	-	-	90	12	5.4	39	34	110	<0.1	-	-	0.78	<0.005	<0.005	-	-	8	<0.01	0.002	0.057	<0.0001	<0.001	<0.05	<0.001	<0.001	-	<0.001
BH22_02 Jul 19_-	BH22	2/07/2019	water	2.8	7.43	820	5.29	-75.1	18.5	7.6	610	-	270	<5	-	-	110	16	13	52	72	130	0.2	-	-	0.12	-	-	-	-	12	-	-	-	-	-	-	-	-	-
BH22_24 Oct 19_-	BH22	24/10/2019	water	3.16	7.48	574	1.29	56.3	18.4	7.5	420	-	180	<5	-	-	83	12	12	36	43	76	0.3	-	-	0.084	-	-	-	-	16	-	-	-	-	-	-	-	-	-
BH22_14 Jan 20_-	BH22	14/01/2020	water	3.52	7.45	452.2	0.11	-23	20.5	7.4	320	-	120	<5	-	-	56	8.4	11	24	35	64	0.3	-	-	0.13	<0.005	<0.005	-	-	8	0.04	0.01	0.013	<0.0001	<0.001	<0.005	<0.001	0.009	-	<0.001
BH22_22 Apr 20_-	BH22	22/04/2020	water	3.16	7.65	687	0.85	-71.6	20.4	7.5	430	-	240	<5	-	-	91	12	11	39	57	75	0.3	-	-	0.19	-	-	-	-	17	-	-	-	-	-	-	-	-	-
BH23_01 Jul 06_-	BH23	1/07/2006	water	-	7.75	-	-	-	-	-	340	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.016	-	-	-	0.588	-	-	0.006	-	-	-	-	-	-
BH23_01 Oct 06_-	BH23	1/10/2006	water	-	7.34	-	-	-	-	-	480	-	-	-	3	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.835	-	-	0.005	-	-	-	-	-	-
BH23 _01 Jan 07_-	BH23	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_01 Jan 07_-	BH23	1/01/2007	water	-	7.463	-	-	-	-	-	452	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.017	-	-	-	0.475	-	-	0.006	-	-	-	-	-	-
BH23_01 Apr 07_-	BH23	1/04/2007	water	-	7.38	-	-	-	-	-	364	-	-	-	4	150	66	6	5	29	56.7	36	-	5.2	5.34	0.032	0.821	0.075	-	-	-	-	0.006	-	-	-	-	-	-
BH23_16 Apr 13_-	BH23	16/04/2013	water	-	10.72	8.6	1.79	-1033	19.7	7.6	300	-	170	<1	-	-	63	5.4	2.6	32	43	11	<0.1	-	-	<0.1	-	-	-	-	16	-	-	-	-	-	-	-	-	-
BH23_09 Jul 13_-	BH23	9/07/2013	water	2.15	8	251	0.98	-65	15.2	7.6	240	-	150	<1	-	-	-	8.3	3.4	16	20	34	-	-	-	0.027	-	-	-	-	48	-	-	-	-	-	-	-	-	-
BH23_29 Oct 13_-	BH23	29/10/2013	water	3.18	7.89	259	1.1	-101	17.6	7.6	220	-	130	<1	-	-	87	5.2	3.7	14	10	28	-	-	-	0.006	-	-	-	-	39	-	-	-	-	-	-	-	-	-
BH23_28 Jan 14_-	BH23	28/01/2014	water	3.33	8.05	372	1.51	-32	18.6	7.2	230	-	160	<1	-	-	61	5.6	4	15	13	24	0.37	-	-	0.005	0.12	<0.01	-	-	10	0.05	0.005	0.011	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH23_16 Apr 14_-	BH23	16/04/2014	water	3.78	7.36	315	1.4	-49	20.1	7.1	300	-	180	<1	-	-	72	6.6	4.5	35	45	22	0.1	-	-	0.072	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH23_07 Jul 14_-	BH23	7/07/2014	water	-	8.04	458	2.29	-74	17.2	7.5	320	-	180	<1	-	-	77	7.6	6.4	35	43	29	0.11	-	-	0.041	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH23_16 Oct 14_-	BH23	16/10/2014	water	2.9	7.34	657	1.79	-17	17.3	7.4	370	-	200	<1	-	-	93	8.5	10	39	62	36	0.13	-	-	0.018	-	-	-	-	8	-	-	-	-	-	-	-	-	-
BH23_20 Jan 15_-	BH23	20/01/2015	water	3.6	5.63	517	0.27	87	19.9	6.5	300	-	160	<1	-	-	68	7.1	5.7	37	54	20	0.15	-	-	<0.1	0.69	0.027	-	-	6	<0.005	0.003	0.023	<0.0001	-	<0.01	0.001	0.001	-	<0.001
BH23_22 Apr 15_-	BH23	22/04/2015	water	3.49	7.61	418	2.08	14	17.7	7	240	-	110	<1	-	-	60	5.8	3.7	28	36	18	<0.1	-	-	0.007	-	-	-	-	8	-	-	-	-	-	-	-	-	-
BH23_22 Jul 15_-	BH23	22/07/2015	water	3.18	7.13	629	5.31	-100	15.5	7	450	-	230	<1	-	-	100	9.1	6.8	38	53	51	0.2	-	-	0.04	-	-	-	-	11	-	-	-	-	-	-	-	-	-
BH23_20 Oct 15_-	BH23	20/10/2015	water	3.42	7.04	266	3.64	4	23	7.4	410	-	250	<1	-	-	92	9.3	5.7	59	79	29	<0.1	-	-	<0.1	-	-	-	-	15	-	-	-	-	-	-	-	-	-
BH23_20 Jan 16_-	BH23	20/01/2016	water	3.18	7.12	789	2.7	-19	21.6	7.2	460	-	280	<1	-	-	110	9	9.1	53	39	35	0.2	-	-	0.009	1.4	0.017	-	-	15	<0.005	0.006	0.031	<0.0001	<0.001	<0.01	<0.001	<0.001	-	<0.001
BH23_14 Apr 16_-	BH23	14/04/2016	water	3.3	8.98	722	1.72	-15	20.4	6.7	560	-	200	<5	-	-	110	7.6	11	41	22	67	0.2	-	-	0.044	-	-	-	-	12	-	-	-	-	-	-	-	-	-
BH23_13 Jul 16_-	BH23	13/07/2016	water	1.97	7.55	769	2.11	-85	11.1	7.3	480	-	160	<5	-	-	93	13	10	57	54	140	0.3	-	-	1	-	-	-	-	16	-	-	-	-	-	-	-	-	-
BH23_18 Oct 16_-	BH23	18/10/2016	water	2.62	7.51	817	1.71	23	18.5	6.8	550	-	190	<5	-	-	120	16	11	53	53	130	0.2	-	-	1.4	-	-	-	-	16	-	-	-	-	-	-	-	-	-
BH23_25 Jan 17_-	BH23	25/01/2017	water	3.27	7.03	846	0.27	-86	16.4	7.7	540	-	260	<5	-	-	97	14	12	67	59	94	0.4	-	-	5.7	<0.005	<0.005	-	-	14	<0.01	0.005	0.015	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH23_02 Jul 19_-	BH23	2/07/2019	water	2.87	7.33	256.7	3.54	-160.7	18.5	7.3	340	-	190	<5	-	-	66	7.5	6.2	28	50	23	0.2	-	-	0.032	-	-	-	-	7	-	-	-	-	-	-	-	-	-
BH23_24 Oct 19_-	BH23	24/10/2019	water	3.57	7.35	551	7.59	52.4	20.8	7.2	420	-	180	<5	-	-	80	9.7	9	30	61	23	0.1	-	-	0.56	-	-	-	-	15	-	-	-	-	-	-	-	-	-
BH23_15 Jan 20_-	BH23	15/01/2020	water	3.28	6.05	585	0.15	-51.9	21.1	5.9	400	-	150	<5	-	-	64	8.2	7.3	33	66	21	<0.1	-	-	1.8	0.01	<0.005	-	-	13	0.02	0.007	0.027	<0.0001	<0.001	<0.005	<0.001	0.006	-	<0.001
BH23_22 Apr 20_-	BH23	22/04/2020	water	3	7.45	893	3.77	-94.7	21.5	7.2	540	-	290	<5	-	-	110	11	7.1	62	96	60	0.2	-	-	0.59	-	-	-	-	11	-	-	-	-	-	-	-	-	-
BH24_01 Jul 06_-	BH24	1/07/2006	water	-	7.16	-	-	-	-	-	900	-	-	-	11	-	-	-	-	-	-	-	-	-	-	0.219	-	-	-	<0.01	-	-	0.067	-	-	-	-	-	-
BH24_01 Oct 06_-	BH24	1/10/2006	water	-	7.06	-	-	-	-	-	800	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.167	-	-	-	<0.01	-	-	0.061	-	-	-	-	-	-
BH24_01 Jan 07_-	BH24	1/01/2007	water	-	7.07	-	-	-	-	-	960	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.102	-	-	-	<0.01	-	-	0.048	-	-	<0.001	-	-	<0.001
BH24_01 Apr 07_-	BH24	1/04/2007	water	-	6.91	-	-	-	-	-	1200	-	-	-	9	150	62	8	6	21	31.5	54	-	4.83	5.01	0.417	<0.01	<0.01	-	-	-	-	0.004	-	-	-	-	-	-	-
BH24_16 Apr 13_-	BH24	16/04/2013	water	9.01	7.45	1033	0.73	186	15.2	8.1	950	-	390	<1	-	-	130	12	13	170	40	260	0.19	-	-	0.98	-	-	-	-	42	-	-	-	-	-	-	-	-	-
BH24_29 Oct 13_-	BH24	29/10/2013	water	3.58	8.8	278	1.77	-3	18.4	7.3	170	-	72	<1	-	-	34	2.9	2	28	27	11	-	-	-	0.049	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH24_28 Jan 14_-	BH24	28/01/2014	water	3.65	8.11	259	2.02	-75	19.2	7	210	-	130	<1	-	-	55	6.1	3.4	28	42	13	<0.1	-	-	<0.1	1.5	0.26	-	-	4	<0.005	<0.001	0.01	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH24_16 Apr 14_-	BH24	16/04/2014	water	9.1	7.88	1392	3.83	-67	19.3	7.7	1100	-	610	<1	-	-	230	34	16	100	34	220	0.15	-	-	0.9	-	-	-	-	21	-	-	-	-	-	-	-	-	-
BH24_09 Jul 14_-	BH24	9/07/2014	water	-	8.1	781	2.25	-55	19.4	7.9	950	-	580	<1	-	-	240	28	17	110	30	180	0.14	-	-	1.7	-	-	-	-	26	-	-	-	-	-	-	-	-	-
BH24_16 Oct 14_-	BH24	16/10/2014	water	8.65	7.66	1060	2.15	-15	21.7	7.9	850	-	530	<1	-	-	220	33	15	65	36	190	0.12	-	-	1.5	-	-	-	-	20	-	-	-	-	-	-	-	-	-
BH24_21 Jan 15_-	BH24	21/01/2015	water	12.63	5.84	373	2.24	119	18.8	6.5	220	-	110	<1	-	-	60	7.1	4.1	15	19	43	<0.1	-	-	0.011	51	<0.01	-	-	6	<0.005	0.002	0.021	<0.0001	-	<0.01	<0.001	<0.001	-	<0.001
BH24_22 Apr 15_-	BH24	22/04/2015	water	5.6	7.33	1157	3.61	17.5	17.5	7.5	1000	-	600	<1	-	-	230	33	16	56	35	180	0.12	-	-	0.17	-	-	-	-	11	-	-	-	-	-	-	-	-	-
BH24_22 Jul 15_-	BH24	22/07/2015	water	12.2	6.91	1306	4.45	-31	16.8	7.6	1100	-	510	<1	-	-	320	50	18	58	60	330	0.2	-	-	1.5	-	-	-	-	22	-	-	-	-	-	-	-	-	-
BH24_21 Oct 15_-	BH24	21/10/2015	water	3.04	6.66	339	3.33	31	20.8	7	330	-	250	<1	-	-	96	8.7	4.2	14	14	40	<0.1	-	-	0.006	-	-	-	-	3	-	-	-	-	-	-	-	-	-
BH24_20 Jan 16_-	BH24	20/01/2016	water	12.54	8.49	463	4.79	58	26.1	7.1	350	-	300	<1	-	-	110	9.6	4.3	11	11	19	<0.1	-	-	0.007	0.072	<0.01	-	-	10	<0.005	0.003	0.028	<0.0001	<0.001	<0.01	<0.001	<0.001	-	<0.001
BH24_14 Apr 16_-	BH24	14/04/2016	water	6.89	6.64	526	1.59	22	19.5	6.8	340	-	230	<5	-	-	91	7.2	3.3	15	9	21	<0.1	-	-	<0.1	-	-	-	-	7	-	-	-	-	-	-	-	-	-
BH24_13 Jul 16_-	BH24	13/07/2016	water	12.24	6.8	514	3.21	68	14.8	6.8	310	-	210	<5	-	-	99	8.3	3.5	12	20	50	<0.1	-	-	<0.1	-	-	-	-	14	-	-	-	-	-	-	-	-	-
BH24_18 Oct 16_-	BH24	18/10/2016	water	3.31	7.36	364	1.57	-6	18.8	7.2	380	-	270	<5	-	-	110	13	16	35	31	21	<0.1	-	-	0.006	-	-	-	-	28	-	-	-	-	-	-	-	-	-
BH24_25 Jan 17_-	BH24	25/01/2017	water	3.1	5.97	326	0.25	31	19.3	6.8	330	-	210	<5	-	-	59	6.9	14	40	34	12	<0.1	-	-	0.069	1.6	0.15	-	-	16	<0.01	0.005	0.024	<0.0001	<0.001	<0.005	<0.001	0.002	-	<0.001
BH24_02 Jul 19_-	BH24	2/07/2019	water	12.75	6.72	375	4.77	64	18.1	6.7	280	-	210	<5	-	-	73	5.6	3.1	12	12	21	<0.1	-	-	0.009	-	-	-	-	9	-	-	-	-	-	-	-	-	-
BH24_25 Oct 19_-	BH24	25/10/2019	water	12.77	6.87	405.1	6.1	79.8	18	7.1	220	-	190	<5	-	-	79	6.1	3	12	19	21	<0.1	-	-	<0.005	-	-	-	-	6	-	-	-	-	-	-	-	-	-
BH24_14 Jan 20_-	BH24	14/01/2020	water	12.92	6.54	253.6	3.88	-48.8	18.8	6.3	190	-	77	<5	-	-	39	3.7	1.9	11	23	23	<0.1	-	-	<0.005	0.075	<0.005	-	-	2	<0.01	0.002	0.01	<0.0001	<0.001	<0.005	<0.001	0.001	-	<0.001
BH24_23 Apr 20_-	BH24	23/04/2020	water	12.57	7.19	474.5	4.22	65.4	20.7	6.6	330	-	110	<5	-	-	66	4.8	4	28	50	73	<0.1	-	-	<0.005	-	-	-	-	4	-	-	-	-	-	-	-	-	-
BH25_17 Apr 13_-	BH25	17/04/2013	water	7.29	7	1014	0.25	-41	15.7	7.7	730	-	360	<1	-	-	130	14	3.5	130	210	13	0.19	-	-	0.56	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH25_09 Jul 13_-	BH25	9/07/2013	water	9.14	7.95	954	1.02	-159	17.8	8.1	1100	-	510	<1	-	-	190	22	16	150	38	240	-	-	-	1.3	-	-	-	-	31	-	-	-	-	-	-	-	-	-
BH25_28 Jan 14_-	BH25	28/01/2014	water	10.77	7.31	2710	3.46	-90	21.5	7.3	3900	-	1100	<1	-	-	1200	79	30	320	1000	84	0.21	-	-	8.8	<0.1	<0.01	-	-	36	<0.005	0.002	0.27	<0.0001	<0.001	<0.005	0.001	<0.001	-	<0.001
BH25_16 Apr 14_-	BH25	16/04/2014	water	7.6	7.58	1243	0.83	-125	21	7.5	760	-	380	<1	-	-	140	17	3.4	140	190	10	0.21	-	-	0.49	-	-	-	-	3	-	-	-	-	-	-	-	-	-
BH25_07 Jul 14_-	BH25	7/07/2014	water	7.28	8.04	1185	2.29	-120	17.2	7.4	740	-	360	<1	-	-	150	17	3.7	140	210	12	0.18	-	-	0.62	-	-	-	-	3	-	-	-	-	-	-	-	-	-
BH25_15 Oct 14_-	BH25	15/10/2014	water	7.23	7.19	1141	0.86	-182	17.7	7.3	760	-	360	<1	-	-	140	19	3.8	160	230	19	0.22	-	-	0.5	-	-	-	-	4	-	-	-	-	-	-	-	-	-
BH25_21 Jan 15_-	BH25	21/01/2015	water	7.24	6.96	1198	0.21	-87	20.8	6	770	-	370	<1	-	-	130	18	4.1	170	220	14	0.2	-	-	0.39	14	<0.01	-	-	4	<0.005	<0.001	0.01	<0.0001	-	<0.01	<0.001	<0.001	-	<0.001

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions									Nutrients					Organic Indicators	Metals										
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																			
BH25_22 Apr 15_-	BH25	22/04/2015	water	7.2	7.36	1491	7.36	-132	18	7.2	750	-	350	<1	-	-	140	17	3.7	160	210	31	0.19	-	-	0.51	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH25_21 Jul 15_-	BH25	21/07/2015	water	7.19	7.28	1072	0.97	-152	19.4	7.2	700	-	370	<1	-	-	130	17	3.5	150	200	9	0.2	-	-	0.64	-	-	-	-	4	-	-	-	-	-	-	-	-	-
BH25_20 Oct 15_-	BH25	20/10/2015	water	7.37	6.61	531	2.3	80	20.1	7.3	840	-	310	<1	-	-	140	18	3.8	150	210	81	0.2	-	-	0.59	-	-	-	-	4	-	-	-	-	-	-	-	-	-
BH25_21 Jan 16_-	BH25	21/01/2016	water	7.47	7.57	829	2.27	-58	25.7	7.7	730	-	400	<1	-	-	150	18	4.4	160	200	9	0.2	-	-	0.48	0.29	<0.01	-	-	5	<0.005	<0.001	0.009	<0.0001	<0.001	<0.01	<0.001	<0.001	-	<0.001
BH25_14 Apr 16_-	BH25	14/04/2016	water	7.35	7.73	1248	1.24	-244	19.4	7.5	760	-	380	<5	-	-	120	16	3.4	160	190	10	0.2	-	-	0.43	-	-	-	-	4	-	-	-	-	-	-	-	-	-
BH25_21 Jul 16_-	BH25	21/07/2016	water	7.15	7.76	1241	2.83	41	17	7.5	710	-	400	<5	-	-	130	17	4.1	140	160	8	0.2	-	-	0.54	-	-	-	-	4	-	-	-	-	-	-	-	-	-
BH25_18 Oct 16_-	BH25	18/10/2016	water	12.31	7.44	430	3.72	18	19.3	6.7	230	-	160	<5	-	-	63	5.4	3.1	12	13	24	<0.1	-	-	0.018	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH25_25 Jan 17_-	BH25	25/01/2017	water	12.67	6.44	371	3.05	13	18.9	6.9	240	-	150	<5	-	-	60	5.7	2.8	14	15	33	<0.1	-	-	<0.005	0.12	<0.005	-	-	3	<0.01	0.002	0.012	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH25_02 Jul 19_-	BH25	2/07/2019	water	7.3	7.55	664	5.2	-176.3	19.4	7.7	730	-	410	<5	-	-	140	18	3.9	120	180	54	0.2	-	-	0.61	-	-	-	-	4	-	-	-	-	-	-	-	-	-
BH25_25 Oct 19_-	BH25	25/10/2019	water	7.35	7.55	1329	4.07	64.6	20.1	8	810	-	410	<5	-	-	150	20	4.2	130	180	10	0.2	-	-	0.55	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH25_13 Jan 20_-	BH25	13/01/2020	water	7.39	7.5	1341	0.2	-312.4	21.4	7.4	820	-	420	<5	-	-	140	20	3.8	140	220	15	0.2	-	-	0.48	<0.005	<0.005	-	-	4	<0.01	<0.001	0.011	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH25_23 Apr 20_-	BH25	23/04/2020	water	7.27	7.47	1276	2.25	-101.8	20.2	7.5	790	-	420	<5	-	-	140	19	3.7	110	210	16	0.2	-	-	0.67	-	-	-	-	4	-	-	-	-	-	-	-	-	-
BH3A_01 Jul 00_-	BH3A	1/07/2000	water	-	7.1	710	-	-	-	-	450	-	-	-	5	-	-	-	-	-	-	-	-	-	0.36	-	-	1.6	0.92	-	-	0.002	-	-	0.004	-	-	0.002	-	0.001
BH3A_01 Oct 00_-	BH3A	1/10/2000	water	-	7	560	-	-	-	-	320	-	-	-	4	-	-	-	-	-	-	-	-	-	0.06	-	-	0.4	1.11	-	-	0.001	-	-	0.002	-	-	0.002	-	0.002
BH3A_01 Jan 01_-	BH3A	1/01/2001	water	-	7.6	660	-	-	-	-	390	-	-	-	11	-	-	-	-	-	-	-	-	-	1.16	-	-	1.8	0.12	-	-	0.005	-	-	0.007	-	-	0.001	-	0.001
BH3A_01 Apr 01_-	BH3A	1/04/2001	water	-	7.4	610	-	-	-	-	350	-	-	-	7	-	-	-	-	-	-	-	-	-	0.77	-	-	1.6	0.24	-	-	0.002	-	-	0.001	-	-	0.001	-	0.001
BH3A_01 Jul 01_-	BH3A	1/07/2001	water	-	7.5	780	-	-	-	-	450	-	-	-	7	-	-	-	-	-	-	-	-	-	1.33	-	-	2.2	0.26	-	-	0.002	-	-	0.003	-	-	0.001	-	0.001
BH3A_01 Oct 01_-	BH3A	1/10/2001	water	-	7.6	800	-	-	-	-	450	-	-	-	8	-	-	-	-	-	-	-	-	-	1.55	-	-	1.8	0.58	-	-	0.001	-	-	0.002	-	-	0.001	-	0.001
BH3A_01 Jan 02_-	BH3A	1/01/2002	water	-	7.2	970	-	-	-	-	610	-	-	-	6	-	-	-	-	-	-	-	-	-	1.18	-	-	1.8	0.61	-	-	0.001	-	-	0.001	-	-	0.001	-	0.001
BH3A_01 Apr 02_-	BH3A	1/04/2002	water	-	7.5	800	-	-	-	-	500	-	-	-	8	-	-	-	-	-	-	-	-	-	1.09	-	-	1.4	4.09	-	-	0.003	-	-	0.011	-	-	<0.001	-	<0.001
BH3A_01 Jul 02_-	BH3A	1/07/2002	water	-	7.9	850	-	-	-	-	470	-	-	-	6	-	-	-	-	-	-	-	-	-	1.64	-	-	2	0.19	-	-	0.002	-	-	<0.001	-	-	<0.001	-	<0.001
BH3A_01 Oct 02_-	BH3A	1/10/2002	water	-	7.9	940	-	-	-	-	570	-	-	-	7	-	-	-	-	-	-	-	-	-	1.4	-	-	1.6	0.34	-	-	<0.001	-	-	0.003	-	-	<0.001	-	<0.001
BH3A_01 Jan 03_-	BH3A	1/01/2003	water	-	8.03	840	-	-	-	-	470	-	-	-	6	-	-	-	-	-	-	-	-	-	1.44	-	-	1.6	1.43	-	-	0.002	-	-	<0.001	-	-	0.003	-	<0.001
BH3A_01 Apr 03_-	BH3A	1/04/2003	water	-	7.68	626	-	-	-	-	364	-	-	-	11	-	-	-	-	-	-	-	-	-	0.05	-	-	0.7	0.75	-	-	0.001	-	-	0.001	-	-	0.001	-	0.001
BH3A_01 Jul 03_-	BH3A	1/07/2003	water	-	7.74	905	-	-	-	-	564	-	-	-	10	-	-	-	-	-	-	-	-	-	1.67	-	-	2.4	1.47	-	-	0.001	-	-	0.001	-	-	0.001	-	0.001
BH3A_01 Oct 03_-	BH3A	1/10/2003	water	-	7.67	905	-	-	-	-	620	-	-	-	14	-	-	-	-	-	-	-	-	-	1.25	-	-	1.6	0.02	-	-	0.001	-	-	0.001	-	-	0.001	-	0.001
BH3A_01 Jan 04_-	BH3A	1/01/2004	water	-	8.24	979	-	-	-	-	694	-	-	-	14	-	-	-	-	-	-	-	-	-	1.48	-	-	2.2	0.08	-	-	0.001	-	-	0.005	-	-	0.001	-	0.001
BH3A_01 Apr 04_-	BH3A	1/04/2004	water	-	7.93	-	-	-	-	-	530	-	-	-	7	-	-	-	-	-	-	-	-	-	1.66	-	-	-	0.01	-	-	0.001	-	-	-	-	-	-	-	-
BH3A_01 Jul 04_-	BH3A	1/07/2004	water	-	7.69	-	-	-	-	-	532	-	-	-	8	-	-	-	-	-	-	-	-	-	1.26	-	-	-	0.01	-	-	0.001	-	-	-	-	-	-	-	-
BH3A_01 Oct 04_-	BH3A	1/10/2004	water	-	7.93	-	-	-	-	-	562	-	-	-	9	-	-	-	-	-	-	-	-	-	1.67	-	-	-	0.01	-	-	0.001	-	-	-	-	-	-	-	-
BH3A_01 Jan 05_-	BH3A	1/01/2005	water	-	7.89	-	-	-	-	-	674	-	-	-	6	-	-	-	-	-	-	-	-	-	1.59	-	-	-	0.034	-	-	0.01	-	-	0.01	-	-	0.01	-	0.01
BH3A_01 Apr 05_-	BH3A	1/04/2005	water	-	7.4	-	-	-	-	-	574	-	-	-	7	-	-	-	-	-	-	-	-	-	1.75	-	-	-	0.015	-	-	0.002	-	-	-	-	-	-	-	-
BH3A_01 Jul 05_-	BH3A	1/07/2005	water	-	8.43	-	-	-	-	-	514	-	-	-	6	-	-	-	-	-	-	-	-	-	1.59	-	-	-	0.148	-	-	<0.001	-	-	-	-	-	-	-	-
BH3A_01 Oct 05_-	BH3A	1/10/2005	water	-	7.79	-	-	-	-	-	528	-	-	-	5	-	-	-	-	-	-	-	-	-	1.41	-	-	-	0.026	-	-	<0.001	-	-	-	-	-	-	-	-
BH3A_01 Jan 06_-	BH3A	1/01/2006	water	-	7.92	-	-	-	-	-	440	-	-	-	7	-	-	-	-	-	-	-	-	-	0.99	-	-	-	0.021	-	-	<0.001	-	-	<0.001	-	-	<0.001	-	<0.001
BH3A_01 Apr 06_-	BH3A	1/04/2006	water	-	7.16	-	-	-	-	-	702	-	-	-	6	-	-	-	-	-	-	-	-	-	0.021	-	-	-	1.15	-	-	0.002	-	-	-	-	-	-	-	-
BH3A_01 Jul 06_-	BH3A	1/07/2006	water	-	7.59	-	-	-	-	-	476	-	-	-	8	-	-	-	-	-	-	-	-	-	1.31	-	-	-	<0.01	-	-	<0.001	-	-	-	-	-	-	-	-
BH3A_01 Oct 06_-	BH3A	1/10/2006	water	-	7.81	-	-	-	-	-	494	-	-	-	7	-	-	-	-	-	-	-	-	-	1.48	-	-	-	<0.01	-	-	<0.001	-	-	-	-	-	-	-	-
BH3A_01 Jan 07_-	BH3A	1/01/2007	water	-	7.71	-	-	-	-	-	534	-	-	-	5	-	-	-	-	-	-	-	-	-	1.24	-	-	-	0.014	-	-	<0.001	-	-	<0.001	-	-	<0.001	-	<0.001
BH3A_01 Apr 07_-	BH3A	1/04/2007	water	-	7.31	-	-	-	-	-	606	-	-	-	10	313	102	15	7	82	89.7	98	-	10.1	10.8	1.97	0.027	<0.01	-	-	-	<0.001	-	-	-	-	-	-	-	-
BH3A_16 Apr 13_-	BH3A	16/04/2013	water	4.94	6.7	1039	0.46	214	19.2	7.2	850	-	460	<1	-	-	180	23	9.9	63	56	150	0.14	-	-	<0.1	-	-	-	-	9	-	-	-	-	-	-	-	-	-
BH3A_09 Jul 13_-	BH3A	9/07/2013	water	2.59	6.83	975	5.02	11	16	7.2	680	-	220	<1	-	-	150	14	6.3	48	49	150	-	-	-	<0.1	-	-	-	-	7	-	-	-	-	-	-	-	-	-
BH3A_30 Oct 13_-	BH3A	30/10/2013	water	3.23	7.52	492	1.83	-51	16.8	8	550	-	150	<1	-	-	91	14	9.9	47	37	150	-	-	-	2.2	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH3A_28 Jan 14_-	BH3A	28/01/2014	water	3.42	7.96	461	3.98	-130	19.1	7.8	430	-	150	<1	-	-	84	14	9.7	43	40	150	0.18	-	-	2.1	0.007	<0.01	-	-	5	<0.005	<0.001	0.008	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH3A_14 Apr 14_-	BH3A	14/04/2014	water	3.21	7.95	659	2.87	-78	19.1	8	460	-	150	<1	-	-	83	13	10	45	36	130	0.17	-	-	2.1	-	-	-	-	4	-	-	-	-	-	-	-	-	-
BH3A_07 Jul 14_-	BH3A	7/07/2014	water	-	8.41	667	2.63	-38	15.8	6.8	440	-	110	<1	-	-	81	13	10	42	37	180	0.17	-	-	2.1	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH3A_15 Oct 14_-	BH3A	15/10/2014	water	3	7.56	690	2.59	-102	15.3	7.8	470	-	150	<1	-	-	100	13	12	44	39	160	0.2	-	-	1.8	-	-	-	-	9	-	-	-	-	-	-	-	-	-
BH3A_21 Jan 15_-	BH3A	21/01/2015	water	3.24	6.3	691	0.13	20	18.2	6.7	480	-	150	<1	-	-	98	14	12	43	38	160	0.16	-	-	1.8	0.036	0.005	-	-	5	0.02	<0.001	0.003	<0.0001	-	<0.01	<0.001	0.003	-	<0.001
BH3A_22 Apr 15_-	BH3A	22/04/2015	water	2.74	7.81	620	2.76	-72	17.2	7.8	450	-	160	<1	-	-	88	12	11	43	34	140	0.19	-	-	1.5	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH3A_21 Jul 15_-	BH3A	21/07/2015	water	3.26	7.97	685	3.22	-50	14.8	6.7	510	-	110	<1	-	-	91	12	11	42	36	180	0.2	-	-	1.6	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH3A_20 Oct 15_-	BH3A	20/10/2015	water	3.45	6.65	950	3.28	23.4	19.7	7.1	560	-	110	<1	-	-	93	14	9.8	42	39	240	0.2	-	-	1.7	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH3A_21 Jan 16_-	BH3A	21/01/2016	water	3.11	7.72	679	1.24	-81	22.1	7.4	550	-	130	<1	-	-	110	15	12	44	31	240	0.2	-	-	1.2	0.3	0.006	-	-	6	<0.005	<0.001	0.01	<0.0001	<0.001	<0.01	<0.001	<0.001	-	<0.001
BH3A_14 Apr 16_-	BH3A	14/04/2016	water	4.07	6.7	1055	2.47	67	19.4	7	750	-	360	<5	-	-	160	12	9.6	53	44	150	0.2	-	-	0.01	-	-	-	-	9	-	-	-	-	-	-	-	-	-
BH3A_21 Jul 16_-	BH3A	21/07/2016	water	3.75	8.56	892	3.43	78	17	6.8	690	-	140	<5	-	-	130	10	9.1	50	29	240	0.2	-	-	0.014	-	-	-	-	9	-	-	-	-	-	-	-	-	-
BH3A_18 Oct 16_-	BH3A	18/10/2016	water	3.27	7.91	555	3.08	-5	18.3	7.4	590	-	120	<5	-	-	120	17	12	36	46	220	0.2	-	-	1.6	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH3A_19 Jan 17_-	BH3A	19/01/2017	water	3.34	7.43	828	3.79	-36	19.5	8	600	-	140	<5	-	-	120	18	11	39	51	250	0.2	-	-	1.4	0.03	0.009	-	-	5	<0.01	<0.001	0.012	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH3A_02 Jul 19_-	BH3A	2/07/2019	water	3.3	7.69	729	2.28	167.1	19.2	7.7	670	-	140	<5	-	-	130	17	12	34	37	280	0.2	-	-	1.1	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH3A_24 Oct 19_-	BH3A	24/10/2019	water	3.37	7.75	956	2.08	61.7	18.8	7.6	740	-	140	<5	-	-	170	21	12	32	42	310	0.2	-	-	1.1	-	-	-	-	6	-	-	-	-	-	-	-	-	-
BH3A_27 Apr 20_-	BH3A	27/04/2020	water	3.29	7.89	999	1.72	-147.1	20.8	7.7	770	-	150	<5	-	-	150	19	11	33	49	340	0.2	-	-	1.4	-	-	-	-	4	-	-	-	-	-	-	-	-	-
BH4_01 Sep 94_-	BH4	1/09/1994	water	-	7.1	790	-	-	-	-	524	-	-	-	17	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	0.003	-	-	0.003	-	-	0.005	-	0.003
BH4_01 Dec 94_-	BH4	1/12/1994	water	-	7.4	771	-	-	-	-	484	-	-	-	23	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	-	-	0.002	-	-	0.001	-	-	0.003	-	0.003
BH4_01 Mar 95_-	BH4	1/03/1995	water	-	7.4	923	-	-	-	-	386	-	-	-	18	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	-	-	0.003	-	-	0.004	-	-	0.004	-	0.001

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions									Nutrients					Organic Indicators	Metals										
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																			
BH4_01 Jun 95_-	BH4	1/06/1995	water	-	7.55	816	-	-	-	-	504	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	0.005	-	-	0.001	-	0.002
BH4_01 Sep 95_-	BH4	1/09/1995	water	-	7.39	1002	-	-	-	-	512	-	-	-	17	-	-	-	-	-	-	-	-	-	-	0.1	-	-	1.6	0.06	-	-	0.003	-	-	0.003	-	0.001
BH4_01 Jan 96_-	BH4	1/01/1996	water	-	7.67	903	-	-	-	-	710	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.75	-	-	1.4	-	-	-	0.005	-	-	0.001	-	0.001
BH4_01 Apr 96_-	BH4	1/04/1996	water	-	7.59	926	-	-	-	-	588	-	-	-	16	-	-	-	-	-	-	-	-	-	-	0.6	-	-	1.1	0.06	-	-	0.005	-	-	0.001	-	0.001
BH4_01 Jul 96_-	BH4	1/07/1996	water	-	7.6	810	-	-	-	-	432	-	-	-	20	-	-	-	-	-	-	-	-	-	-	0.7	-	-	1.6	0.76	-	-	0	-	-	0.001	-	0.001
BH4_01 Oct 96_-	BH4	1/10/1996	water	-	7.3	1338	-	-	-	-	798	-	-	-	15	-	-	-	-	-	-	-	-	-	-	0.64	-	-	1	0.4	-	-	0.01	-	-	0.003	-	0.001
BH4_01 Jan 97_-	BH4	1/01/1997	water	-	7.64	1281	-	-	-	-	796	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.58	-	-	0.9	0.09	-	-	0.002	-	-	0.001	-	0.001
BH4_01 Apr 97_-	BH4	1/04/1997	water	-	7.45	957	-	-	-	-	808	-	-	-	14	-	-	-	-	-	-	-	-	-	-	0.65	-	-	0.7	0.08	-	-	0.003	-	-	0.003	-	0.002
BH4_01 Jul 97_-	BH4	1/07/1997	water	-	7.39	1179	-	-	-	-	792	-	-	-	15	-	-	-	-	-	-	-	-	-	-	0.41	-	-	1.6	0.03	-	-	0.005	-	-	0.001	-	0.001
BH4_01 Oct 97_-	BH4	1/10/1997	water	-	7.21	1529	-	-	-	-	792	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.5	-	-	0.8	0.21	-	-	0.005	-	-	0.002	-	0.001
BH4_01 Jan 98_-	BH4	1/01/1998	water	-	7.28	1388	-	-	-	-	1020	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.39	-	-	0.5	0.09	-	-	0.003	-	-	0.001	-	0.001
BH4_01 Apr 98_-	BH4	1/04/1998	water	-	7.36	1445	-	-	-	-	1020	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.16	-	-	0.6	0.01	-	-	0.002	-	-	0.001	-	0.005
BH4A_01 Jan 98_-	BH4A	1/01/1998	water	-	6.51	1110	-	-	-	-	816	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.43	-	-	0.1	0.93	-	-	0.02	-	-	0.004	-	0.001
BH4A_01 Apr 98_-	BH4A	1/04/1998	water	-	6.73	1162	-	-	-	-	702	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.47	-	-	1.2	0.68	-	-	0.002	-	-	0.004	-	0.005
BH4A_01 Jul 98_-	BH4A	1/07/1998	water	-	6.87	1100	-	-	-	-	844	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.9	1.86	-	-	0.001	-	-	0.001	-	0.001
BH4A_01 Oct 98_-	BH4A	1/10/1998	water	-	6.89	1490	-	-	-	-	960	-	-	-	21	-	-	-	-	-	-	-	-	-	-	0.02	-	-	0.8	4.77	-	-	0.01	-	-	0.001	-	0.001
BH4A_01 Jan 99_-	BH4A	1/01/1999	water	-	6.6	1420	-	-	-	-	863	-	-	-	10	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.5	0.27	-	-	0.002	-	-	0.001	-	0.001
BH4A_01 Mar 99_-	BH4A	1/03/1999	water	-	6.6	954	-	-	-	-	596	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.4	1.5	-	-	0.002	-	-	0.009	-	0.001
BH4A_01 Jul 99_-	BH4A	1/07/1999	water	-	6.6	1050	-	-	-	-	634	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.5	0.68	-	-	0.002	-	-	0.008	-	0.001
BH4A_01 Oct 99_-	BH4A	1/10/1999	water	-	6.6	1273	-	-	-	-	731	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.08	-	-	0.8	2.41	-	-	0.002	-	-	0.003	-	0.001
BH4A_01 Jan 00_-	BH4A	1/01/2000	water	-	6.8	1200	-	-	-	-	810	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.24	-	-	0.9	0.06	-	-	0.002	-	-	0.004	-	0.001
BH4A_01 Apr 00_-	BH4A	1/04/2000	water	-	6.5	1100	-	-	-	-	730	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.3	2.17	-	-	0.003	-	-	0.017	-	0.001
BH4A_01 Jul 00_-	BH4A	1/07/2000	water	-	6.6	730	-	-	-	-	440	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.7	0.72	-	-	0.001	-	-	0.006	-	0.002
BH4A_01 Oct 00_-	BH4A	1/10/2000	water	-	6.8	490	-	-	-	-	290	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.8	3	-	-	0.001	-	-	0.002	-	0.001
BH4A_01 Jan 01_-	BH4A	1/01/2001	water	-	6.6	760	-	-	-	-	520	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	1.41	-	-	0.005	-	-	0.007	-	0.001
BH4A_01 Apr 01_-	BH4A	1/04/2001	water	-	6.4	440	-	-	-	-	250	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.01	-	-	1.6	1.79	-	-	0.001	-	-	0.002	-	0.001
BH4A_01 Jul 01_-	BH4A	1/07/2001	water	-	6.4	450	-	-	-	-	250	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.3	5.5	-	-	0.001	-	-	0.002	-	0.001
BH4A_01 Oct 01_-	BH4A	1/10/2001	water	-	6.6	870	-	-	-	-	540	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.02	-	-	0.5	1.38	-	-	0.001	-	-	0.004	-	0.001
BH4A_01 Jan 02_-	BH4A	1/01/2002	water	-	6.4	1300	-	-	-	-	700	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.7	2.3	-	-	0.001	-	-	0.002	-	0.001
BH4A_01 Apr 02_-	BH4A	1/04/2002	water	-	7	960	-	-	-	-	660	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.8	4.23	-	-	<0.001	-	-	0.009	-	<0.001
BH4A_01 Jul 02_-	BH4A	1/07/2002	water	-	7	1200	-	-	-	-	830	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.15	-	-	0.7	0.8	-	-	0.002	-	-	0.004	-	<0.001
BH4A_01 Oct 02_-	BH4A	1/10/2002	water	-	7.1	1500	-	-	-	-	1000	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.16	-	-	0.8	0.34	-	-	0.003	-	-	0.009	-	<0.001
BH4A_01 Jan 03_-	BH4A	1/01/2003	water	-	7.47	1300	-	-	-	-	890	-	-	-	11	-	-	-	-	-	-	-	-	-	-	0.2	-	-	0.7	0.15	-	-	0.003	-	-	0.005	-	<0.001
BH4A_01 Apr 03_-	BH4A	1/04/2003	water	-	7.06	1360	-	-	-	-	934	-	-	-	20	-	-	-	-	-	-	-	-	-	-	0.03	-	-	1	0.03	-	-	0.001	-	-	0.003	-	0.001
BH4A_01 Jul 03_-	BH4A	1/07/2003	water	-	7.07	1100	-	-	-	-	714	-	-	-	14	-	-	-	-	-	-	-	-	-	-	0.01	-	-	2.4	4.04	-	-	0.001	-	-	0.001	-	0.001
BH4A_01 Oct 03_-	BH4A	1/10/2003	water	-	6.96	1280	-	-	-	-	862	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.01	-	-	1.5	5.19	-	-	0.001	-	-	0.001	-	0.001
BH4A_01 Jan 04_-	BH4A	1/01/2004	water	-	7.94	1440	-	-	-	-	1160	-	-	-	15	-	-	-	-	-	-	-	-	-	-	0.1	-	-	0.9	0.89	-	-	0.001	-	-	0.005	-	0.001
BH4A_01 Apr 04_-	BH4A	1/04/2004	water	-	7.15	-	-	-	-	-	1100	-	-	-	37	-	-	-	-	-	-	-	-	-	-	0.08	-	-	-	0.22	-	-	0.001	-	-	-	-	-
BH4A_01 Jul 04_-	BH4A	1/07/2004	water	-	7.21	-	-	-	-	-	920	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.16	-	-	-	0.01	-	-	0.001	-	-	-	-	-
BH4A_01 Oct 04_-	BH4A	1/10/2004	water	-	7.2	-	-	-	-	-	972	-	-	-	11	-	-	-	-	-	-	-	-	-	-	0.38	-	-	-	0.18	-	-	0.001	-	-	-	-	-
BH4A_01 Jan 05_-	BH4A	1/01/2005	water	-	7.24	-	-	-	-	-	1220	-	-	-	10	-	-	-	-	-	-	-	-	-	-	0.037	-	-	-	0.56	-	-	0.02	-	-	0.01	-	0.01
BH4A_01 Apr 05_-	BH4A	1/04/2005	water	-	6.74	-	-	-	-	-	982	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.086	-	-	-	0.269	-	-	0.001	-	-	-	-	-
BH4A_01 Jul 05_-	BH4A	1/07/2005	water	-	8.37	-	-	-	-	-	688	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.05	-	-	-	11.2	-	-	0.001	-	-	-	-	-
BH4A_01 Oct 05_-	BH4A	1/10/2005	water	-	6.67	-	-	-	-	-	714	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.046	-	-	-	10.9	-	-	<0.001	-	-	-	-	-
BH4A_01 Jan 06_-	BH4A	1/01/2006	water	-	6.93	-	-	-	-	-	892	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.537	-	-	-	25	-	-	0.001	-	-	0.006	-	0.003	-	<0.001
BH4A_01 Apr 06_-	BH4A	1/04/2006	water	-	6.66	-	-	-	-	-	734	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	1.93	-	-	<0.001	-	-	-	-	-
BH4A_01 Jul 06_-	BH4A	1/07/2006	water	-	6.84	-	-	-	-	-	694	-	-	-	10	-	-	-	-	-	-	-	-	-	-	0.313	-	-	-	6.76	-	-	<0.001	-	-	-	-	-
BH4A_01 Oct 06_-	BH4A	1/10/2006	water	-	6.8	-	-	-	-	-	800	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.434	-	-	-	2.21	-	-	0.001	-	-	-	-	-
BH4A_01 Jan 07_-	BH4A	1/01/2007	water	-	6.7	-	-	-	-	-	960	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.664	-	-	-	2.59	-	-	0.002	-	-	0.006	-	0.002	-	<0.001
BH4A_01 Apr 07_-	BH4A	1/04/2007	water	-	6.63	-	-	-	-	-	968	-	-	-	14	535	231	26	11	56	83.5	211	-	16.4	17.4	0.948	3.37	<0.01	-	-	-	-	<0.001	-	-	-	-	-	-	-
BH4A_17 Apr 13_-	BH4A	17/04/2013	water	3.74	6.98	618	0.17	-43	18.5	7.9	490	-	170	<1	-	-	73	11	8.6	41	47	130	0.16	-	-	2.2	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH4A_22 Jul 13_-	BH4A	22/07/2013	water	3.71	7.01	551	1.23	-52	15.9	7.5	430	-	170	<1	-	-	110	13	11	49	42	130	-	-	-	2.5	-	-	-	-	4	-	-	-	-	-	-	-	-	-
BH4A_30 Oct 13_-	BH4A	30/10/2013	water	7.01	7.92	1306	3.33	-69	18.3	7.9	820	-	350	<1	-	-	140	16	3.4	150	190	28	-	-	-	0.57	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH4A_28 Jan 14_-	BH4A	28/01/2014	water	7.42	7.45	1277	3.1	144	19.6	7.8	650	-	360	<1	-	-	150	18	3.7	140	210	12	0.2	-	-	0.47	0.013	<0.01	-	-	3	<0.005	<0.001	0.008	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH4A_14 Apr 14_-	BH4A	14/04/2014	water	4.12	6.51	958	4.08	255	18.2	7.1	750	-	260	<1	-	-	170	14	9.3	53	46	210	0.12	-	-	<0.1	-	-	-	-	6	-	-	-	-	-	-	-	-	-
BH4A_07 Jul 14_-	BH4A	7/07/2014	water	-	7.35	1011	4.78	280	16	6.7	770	-	330	<1	-	-	190	15	10	46	41	230	<0.1	-	-	<0.1	-	-	-	-	8	-	-	-	-	-	-	-	-	-
BH4A_15 Oct 14_-	BH4A	15/10/2014	water	3.57	7.56	1171	1.29	110	15.3	7.2	590	-	180	<1	-	-	140	13	7.1	47	45	200	0.2	-	-	0.25	-	-	-	-	6	-	-	-	-	-	-	-	-	-
BH4A_21 Jan 15_-	BH4A	21/01/2015	water	4.32	5.17	814	0.19	176	20.5	5.9	700	-	130	<1	-	-	140	11	9.2	39	39	260	0.12	-	-	0.14	0.46	0.006	-	-	7	0.02	<0.001	0.028	0.0011	-	<0.01	<0.001	0.002	-	<0.001
BH4A_27 Apr 15_-	BH4A	27/04/2015	water	2.5	6.89	800	5.35	46	16.1	6.9	570	-	68	<1	-	-	110	7.6	9.1	48	49	210	0.1	-	-	<0.1	-	-	-	-	5	-	-	-	-	-	-	-	-	-
BH4A_21 Jul 15_-	BH4A	21/07/2015	water	4.03	6.91	885	3.05	10	16.2	6.8	640	-	220	<1	-	-	140	13	7	61	50	160	0.2	-	-	<0.1	-	-	-	-	9	-	-	-	-	-	-	-	-	-
BH4A_20 Oct 15_-	BH4A	20/10/2015	water	4.22	6.39	1101	2.63	49.5	20.5	7.1	710	-	350	<1	-	-	190	21	7.7	66	63	240	0.1	-	-	<0.1	-	-	-	-	7	-	-	-	-	-	-	-	-	-
BH4A_20 Jan 16_-	BH4A	20/01/2016	water	4.02	6.89	136	3.2	91	25.9	6.9	990	-	290	<1	-	-	250	21	14	98	58	340	0.1	-	-	0.008	1.8	<0.01	-	-	10	0.02	<0.001	0.053	0.0006	<0.001	<0.01	<0.001	<0.001	-	<0.001

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions									Nutrients					Organic Indicators	Metals										
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																			
BH4A_14 Apr 16_-	BH4A	14/04/2016	water	3.21	7.4	810	3.09	-32	19	6.4	600	-	91	<5	-	-	100	14	12	40	30	260	0.2	-	-	1.3	-	-	-	-	18	-	-	-	-	-	-	-	-	-
BH4A_21 Jul 16_-	BH4A	21/07/2016	water	3.13	8.56	811	1.96	-195	18.7	7.6	560	-	130	<5	-	-	110	14	13	38	30	210	0.2	-	-	1.5	-	-	-	-	4	-	-	-	-	-	-	-	-	-
BH4A_18 Oct 16_-	BH4A	18/10/2016	water	7.26	7.96	1187	2.3	-86	20.6	7.7	740	-	430	<5	-	-	150	19	3.5	150	170	12	0.2	-	-	0.59	-	-	-	-	4	-	-	-	-	-	-	-	-	-
BH4A_19 Jan 17_-	BH4A	19/01/2017	water	7.3	7.34	1021	2.61	-124	21	7.9	710	-	430	<5	-	-	130	17	3.3	140	200	10	0.2	-	-	0.5	<0.005	<0.005	-	-	6	<0.01	<0.001	0.01	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH4A_03 Jul 19_-	BH4A	3/07/2019	water	4.05	6.88	1067	1.83	107.2	18.2	7.1	830	-	310	<5	-	-	210	15	11	38	51	270	0.1	-	-	0.061	-	-	-	-	8	-	-	-	-	-	-	-	-	-
BH4A_25 Oct 19_-	BH4A	25/10/2019	water	4.33	7.22	1201	4.4	79.7	19.1	7.1	980	-	340	<5	-	-	240	17	11	38	52	260	0.1	-	-	0.033	-	-	-	-	7	-	-	-	-	-	-	-	-	-
BH4A_13 Jan 20_-	BH4A	13/01/2020	water	4.31	7.29	1212	0.62	-246.9	20	7	900	-	250	<5	-	-	210	14	11	32	49	360	0.2	-	-	0.045	0.58	0.026	-	-	7	0.01	<0.001	0.045	0.0009	0.001	<0.005	<0.001	0.016	-	<0.001
BH4A_23 Apr 20_-	BH4A	23/04/2020	water	4.12	6.93	1225	2.19	112.7	20.5	7	1000	-	200	<5	-	-	200	14	11	58	93	390	0.2	-	-	0.016	-	-	-	-	9	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 00_-	BH5A	1/07/2000	water	-	6.9	860	-	-	-	-	490	-	-	-	3	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	3.61	-	-	0.003	-	-	0.004	-	-	0.001	-	0.002
BH5A_01 Oct 00_-	BH5A	1/10/2000	water	-	7	790	-	-	-	-	450	-	-	-	3	-	-	-	-	-	-	-	-	-	0.01	-	-	0.6	4.36	-	-	0.002	-	-	0.002	-	-	0.001	-	0.001
BH5A_01 Jan 01_-	BH5A	1/01/2001	water	-	7.3	600	-	-	-	-	350	-	-	-	5	-	-	-	-	-	-	-	-	-	2.03	-	-	0.3	0.01	-	-	0.003	-	-	0.008	-	-	0.001	-	0.01
BH5A_01 Apr 01_-	BH5A	1/04/2001	water	-	7.3	560	-	-	-	-	320	-	-	-	2	-	-	-	-	-	-	-	-	-	0.01	-	-	0.3	2.18	-	-	0.002	-	-	0.002	-	-	0.002	-	0.001
BH5A_01 Jul 01_-	BH5A	1/07/2001	water	-	7.1	580	-	-	-	-	370	-	-	-	5	-	-	-	-	-	-	-	-	-	2.88	-	-	0.5	0.06	-	-	0.002	-	-	0.002	-	-	0.001	-	0.001
BH5A_01 Oct 01_-	BH5A	1/10/2001	water	-	7.2	640	-	-	-	-	360	-	-	-	3	-	-	-	-	-	-	-	-	-	0.98	-	-	1.2	1.35	-	-	0.002	-	-	0.001	-	-	0.001	-	0.001
BH5A_01 Jan 02_-	BH5A	1/01/2002	water	-	6.9	570	-	-	-	-	370	-	-	-	2	-	-	-	-	-	-	-	-	-	0.06	-	-	0.2	1.58	-	-	0.001	-	-	0.001	-	-	0.001	-	0.002
BH5A_01 Apr 02_-	BH5A	1/04/2002	water	-	7.6	460	-	-	-	-	270	-	-	-	3	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.8	1.5	-	-	0.002	-	-	0.005	-	-	<0.001	-	<0.001
BH5A_01 Jul 02_-	BH5A	1/07/2002	water	-	7.6	600	-	-	-	-	350	-	-	-	2	-	-	-	-	-	-	-	-	-	1.04	-	-	1	3.37	-	-	0.002	-	-	<0.001	-	-	<0.001	-	<0.001
BH5A_01 Jan 03_-	BH5A	1/01/2003	water	-	7.8	630	-	-	-	-	300	-	-	-	2	-	-	-	-	-	-	-	-	-	1.02	-	-	<0.1	13.6	-	-	0.002	-	-	<0.001	-	-	0.001	-	<0.001
BH5A_01 Apr 03_-	BH5A	1/04/2003	water	-	7.52	771	-	-	-	-	506	-	-	-	9	-	-	-	-	-	-	-	-	-	0.49	-	-	2.2	16.8	-	-	0.002	-	-	0.001	-	-	0.001	-	0.001
BH5A_01 Jul 03_-	BH5A	1/07/2003	water	-	7.48	635	-	-	-	-	388	-	-	-	8	-	-	-	-	-	-	-	-	-	0.13	-	-	1.2	6.43	-	-	0.002	-	-	0.001	-	-	0.001	-	0.001
BH5A_01 Oct 03_-	BH5A	1/10/2003	water	-	7.7	540	-	-	-	-	310	-	-	-	1	-	-	-	-	-	-	-	-	-	0.45	-	-	0.5	4.86	-	-	0.001	-	-	0.008	-	-	<0.001	-	<0.001
BH5A_01 Jan 04_-	BH5A	1/01/2004	water	-	8.12	807	-	-	-	-	568	-	-	-	12	-	-	-	-	-	-	-	-	-	0.65	-	-	1.4	1.7	-	-	0.002	-	-	0.005	-	-	0.001	-	0.001
BH5A_01 Apr 04_-	BH5A	1/04/2004	water	-	7.7	-	-	-	-	-	290	-	-	-	3	-	-	-	-	-	-	-	-	-	0.11	-	-	-	2.75	-	-	0.001	-	-	-	-	-	-	-	-
BH5A_01 Jul 04_-	BH5A	1/07/2004	water	-	7.52	-	-	-	-	-	316	-	-	-	7	-	-	-	-	-	-	-	-	-	0.01	-	-	-	4.39	-	-	0.001	-	-	-	-	-	-	-	-
BH5A_01 Oct 04_-	BH5A	1/10/2004	water	-	7.57	-	-	-	-	-	410	-	-	-	10	-	-	-	-	-	-	-	-	-	0.44	-	-	-	3.74	-	-	0.002	-	-	-	-	-	-	-	-
BH5A_01 Jan 05_-	BH5A	1/01/2005	water	-	7.64	-	-	-	-	-	444	-	-	-	2	-	-	-	-	-	-	-	-	-	0.078	-	-	-	4.76	-	-	0.02	-	-	0.01	-	-	0.01	-	0.01
BH5A_01 Apr 05_-	BH5A	1/04/2005	water	-	7.01	-	-	-	-	-	718	-	-	-	10	-	-	-	-	-	-	-	-	-	8.15	-	-	-	2.59	-	-	0.003	-	-	-	-	-	-	-	-
BH5A_01 Jul 05_-	BH5A	1/07/2005	water	-	8.16	-	-	-	-	-	406	-	-	-	1	-	-	-	-	-	-	-	-	-	0.122	-	-	-	3.88	-	-	0.001	-	-	-	-	-	-	-	-
BH5A_01 Oct 05_-	BH5A	1/10/2005	water	-	7.26	-	-	-	-	-	366	-	-	-	4	-	-	-	-	-	-	-	-	-	1.22	-	-	-	3.95	-	-	<0.001	-	-	-	-	-	-	-	-
BH5A_01 Jan 06_-	BH5A	1/01/2006	water	-	7.21	-	-	-	-	-	678	-	-	-	7	-	-	-	-	-	-	-	-	-	3.55	-	-	-	2.23	-	-	0.002	-	-	0.001	-	-	<0.001	-	<0.001
BH5A_01 Apr 06_-	BH5A	1/04/2006	water	-	7.09	-	-	-	-	-	676	-	-	-	3	-	-	-	-	-	-	-	-	-	7.1	-	-	-	2.02	-	-	0.003	-	-	-	-	-	-	-	-
BH5A_01 Jul 06_-	BH5A	1/07/2006	water	-	7.07	-	-	-	-	-	742	-	-	-	9	-	-	-	-	-	-	-	-	-	9.76	-	-	-	2.32	-	-	0.002	-	-	-	-	-	-	-	-
BH5A_01 Oct 06_-	BH5A	1/10/2006	water	-	7.83	-	-	-	-	-	706	-	-	-	12	-	-	-	-	-	-	-	-	-	15.4	-	-	-	3.28	-	-	0.002	-	-	-	-	-	-	-	-
BH5A_01 Jan 07_-	BH5A	1/01/2007	water	-	6.9	-	-	-	-	-	866	-	-	-	11	-	-	-	-	-	-	-	-	-	6.69	-	-	-	1.19	-	-	0.002	-	-	<0.001	-	-	0.001	-	<0.001
BH5A_01 Apr 07_-	BH5A	1/04/2007	water	-	6.8	-	-	-	-	-	918	-	-	-	14	580	176	31	15	117	198	58	-	16.8	18.4	6.56	1.04	<0.01	-	-	-	0.001	-	-	-	-	-	-	-	-
BH5A_17 Apr 13_-	BH5A	17/04/2013	water	7.22	6.99	1322	0.28	-8	16.3	7.7	1000	-	530	<1	-	-	180	27	19	110	130	180	<0.1	-	-	16	-	-	-	-	18	-	-	-	-	-	-	-	-	-
BH5A_22 Jul 13_-	BH5A	22/07/2013	water	7.21	7.02	1298	0.47	-11	15.1	7.1	900	-	530	<1	-	-	240	31	20	130	140	180	-	-	-	13	-	-	-	-	16	-	-	-	-	-	-	-	-	-
BH5A_30 Oct 13_-	BH5A	30/10/2013	water	2.63	7.7	906	2.3	22	15.4	7.3	700	-	320	<1	-	-	180	18	7.1	50	47	130	-	-	-	0.006	-	-	-	-	13	-	-	-	-	-	-	-	-	-
BH5A_28 Jan 14_-	BH5A	28/01/2014	water	4.3	7.16	807	3.2	49	18	6.9	560	-	210	<1	-	-	130	12	7.4	45	45	150	0.13	-	-	<0.1	1.8	0.005	-	-	7	0.01	<0.001	0.02	0.0005	0.002	<0.005	<0.001	<0.001	-	<0.001
BH5A_14 Apr 14_-	BH5A	14/04/2014	water	7.25	6.76	1513	2.15	-17	20.4	7.3	930	-	570	<1	-	-	200	32	18	140	120	120	<0.1	-	-	7.2	-	-	-	-	18	-	-	-	-	-	-	-	-	-
BH5A_07 Jul 14_-	BH5A	7/07/2014	water	7.2	7.46	1544	2.9	110	18.1	7	1000	-	580	<1	-	-	180	33	24	130	140	160	<0.1	-	-	15	-	-	-	-	20	-	-	-	-	-	-	-	-	-
BH5A_15 Oct 14_-	BH5A	15/10/2014	water	7.07	7.35	1626	4.17	56	16.8	7	1200	-	580	<1	-	-	210	35	27	150	180	180	<0.1	-	-	18	-	-	-	-	23	-	-	-	-	-	-	-	-	-
BH5A_21 Jan 15_-	BH5A	21/01/2015	water	7.26	6.56	1541	0.17	-60	20.2	6.2	1100	-	570	<1	-	-	210	38	28	150	150	190	<0.1	-	-	13	0.12	<0.01	-	-	20	<0.005	0.009	0.064	<0.0001	-	<0.01	0.002	0.002	-	<0.001
BH5A_22 Apr 15_-	BH5A	22/04/2015	water	7.17	6.91	1815	0.83	-89	18.6	7.1	1300	-	630	<1	-	-	210	41	34	150	150	200	<0.1	-	-	18	-	-	-	-	21	-	-	-	-	-	-	-	-	-
BH5A_21 Jul 15_-	BH5A	21/07/2015	water	7.07	6.84	1096	4.03	42	15.7	7.1	1100	-	550	<1	-	-	200	36	20	150	150	170	<0.1	-	-	8.5	-	-	-	-	23	-	-	-	-	-	-	-	-	-
BH5A_20 Oct 15_-	BH5A	20/10/2015	water	7.2	6.74	663	2.01	117	21.1	7.3	1300	-	610	<1	-	-	210	40	21	170	180	180	<0.1	-	-	11	-	-	-	-	21	-	-	-	-	-	-	-	-	-
BH5A_21 Jan 16_-	BH5A	21/01/2016	water	7.07	7.04	1238	1.22	-12	25.2	7.4	1100	-	670	<1	-	-	210	41	25	210	180	180	<0.1	-	-	10	0.02	0.007	-	-	23	<0.005	0.02	0.046	<0.0001	<0.001	<0.01	0.002	<0.001	-	<0.001
BH5A_14 Apr 16_-	BH5A	14/04/2016	water	7.03	7.49	1667	2.26	-138	20.6	7.5	1000	-	530	<5	-	-	160	27	22	130	150	190	0.1	-	-	20	-	-	-	-	19	-	-	-	-	-	-	-	-	-
BH5A_21 Jul 16_-	BH5A	21/07/2016	water	7.1	7.38	1619	1.73	-23	17.3	7	1000	-	520	<5	-	-	180	30	20	130	140	120	<0.1	-	-	10	-	-	-	-	18	-	-	-	-	-	-	-	-	-
BH5A_18 Oct 16_-	BH5A	18/10/2016	water	4.01	6.79	629	1.56	47	18.2	7.1	750	-	320	<5	-	-	180	16	7.2	43	32	190	0.2	-	-	0.014	-	-	-	-	7	-	-	-	-	-	-	-	-	-
BH5A_19 Jan 17_-	BH5A	19/01/2017	water	4.22	6.88	521	2.61	38	20.9	7.4	750	-	290	<5	-	-	170	14	10	47	42	260	0.1	-	-	0.009	1.8	<0.005	-	-	20	<0.01	<0.001	0.042	0.0008	0.002	<0.005	<0.001	<0.001	-	<0.001
BH5A_02 Jul 19_-	BH5A	2/07/2019	water	7.33	6.98	925	2.39	-76.3	19.5	7.2	1000	-	650	<5	-	-	170	28	27	120	160	84	<0.1	-	-	19	-	-	-	-	27	-	-	-	-	-	-	-	-	-
BH5A_24 Oct 19_-	BH5A	24/10/2019	water	7.23	6.79	1692	2.5	55	20	6.9	1100	-	710	<5	-	-	190	33	32	140	170	27	0.1	-	-	23	-	-	-	-	26	-	-	-	-	-	-	-	-	-
BH5A_15 Jan 20_-	BH5A	15/01/2020	water	7.36	7.24	1544	0.9	-12.5	20.5	7.1	940	-	630	<5	-	-	170	28	24	130	160	31	<0.1	-	-	19	1.2	<0.005	-	-	19	<0.01	0.092	0.052	<0.0001	<0.001	<0.005	0.002	0.003	-	<0.001
BH5A_23 Apr 20_-	BH5A	23/04/2020	water	7.22	7.02	1567	2.61	-13	20.3	7.3	1000	-	670	<5	-	-	160	31	25	120	180	36	<0.1	-	-	22	-	-	-	-	26	-	-	-	-	-	-	-	-	-
BH6A_01 Jul 01_-	BH6A	1/07/2001	water	-	6.7	1100	-	-	-	-	710	-	-	-	11	-	-	-	-	-	-	-	-	-	0.95	-	-	2	0.01	-	-	0.02	-	-	0.004	-	-	0.001	-	0.001
BH6A_01 Oct 01_-	BH6A	1/10/2001	water	-	6.8	1100	-	-	-	-	680	-	-	-	11	-	-	-	-	-	-	-	-	-	1.42	-	-	2	0.01	-	-	0.013	-	-	0.002	-	-	0.001	-	0.001
BH6A_01 Jan 02_-	BH6A	1/01/2002	water	-	6.7	1300	-	-	-	-	690	-	-	-	15	-	-	-	-	-	-	-	-	-	2.04	-	-	3.4	0.01	-	-	0.01	-	-	0.001	-	-	0.001	-	0.001
BH6A_01 Apr 02_-	BH6A	1/04/2002	water	-	7.1	1200	-	-	-	-	720	-	-	-	14	-	-	-	-	-	-	-	-	-	2.37	-	-	4	0.01	-	-	0.02	-	-	0.006	-	-	<0.001	-	<0.001
BH6A_01 Jul 02_-	BH6A	1/07/2002	water	-	7.3	1000	-	-	-	-	630	-	-	-	10	-	-	-	-	-	-	-	-	-	2.01	-	-	3	0.05	-	-	0.009	-	-	<0.001	-	-	<0.001	-	<0.001
BH6A_01 Oct 02_-	BH6A	1/10/2002	water	-	7.4	990	-	-	-	-	560	-	-	-	10	-	-	-	-	-	-	-	-	-	2.54	-	-	2.6	<0.01	-	-	0.01	-	-	<0.001	-	-	<0.001	-	<0.001
BH6A_01 Jan 03_-	BH6A	1/01/2003	water	-	7.51	960	-	-	-	-	580	-	-	-	13	-	-	-	-	-	-	-	-	-	2.92	-	-	3.2	0.19	-	-	0.004	-	-	0.005	-	-	<0.001	-	<0.001

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions										Nutrients					Organic Indicators	Metals										
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																						
2-4m																																						
4-8m																																						
>8m																																						
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																						
2-4m																																						
4-8m																																						
>8m																																						
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																						
2-4m																																						
4-8m																																						
>8m																																						

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																				
BH6A_01 Apr 03_-	BH6A	1/04/2003	water	-	7.4	941	-	-	-	-	540	-	-	-	24	-	-	-	-	-	-	-	-	-	-	0.98	-	-	2	0.03	-	-	0.017	-	-	0.001	-	-	0.002	-	0.001
BH6A_01 Jul 03_-	BH6A	1/07/2003	water	-	7.63	1100	-	-	-	-	714	-	-	-	24	-	-	-	-	-	-	-	-	-	-	0.3	-	-	1.5	0.05	-	-	0.014	-	-	0.001	-	-	0.001	-	0.001
BH6A_01 Oct 03_-	BH6A	1/10/2003	water	-	7.32	1320	-	-	-	-	872	-	-	-	21	-	-	-	-	-	-	-	-	-	-	1.19	-	-	3.3	0.01	-	-	0.009	-	-	0.001	-	-	0.001	-	0.001
BH6A_01 Jan 04_-	BH6A	1/01/2004	water	-	7.92	1090	-	-	-	-	724	-	-	-	22	-	-	-	-	-	-	-	-	-	-	2.19	-	-	3.5	0.01	-	-	0.011	-	-	0.005	-	-	0.001	-	0.001
BH6A_01 Apr 04_-	BH6A	1/04/2004	water	-	7.22	-	-	-	-	-	606	-	-	-	36	-	-	-	-	-	-	-	-	-	-	1.85	-	-	-	0.01	-	-	0.009	-	-	-	-	-	-	-	-
BH6A_01 Jul 04_-	BH6A	1/07/2004	water	-	7.28	-	-	-	-	-	552	-	-	-	22	-	-	-	-	-	-	-	-	-	-	1.25	-	-	-	0.01	-	-	0.005	-	-	-	-	-	-	-	-
BH6A_01 Oct 04_-	BH6A	1/10/2004	water	-	7.31	-	-	-	-	-	630	-	-	-	13	-	-	-	-	-	-	-	-	-	-	1.67	-	-	-	0.01	-	-	0.008	-	-	-	-	-	-	-	-
BH6A_01 Jan 05_-	BH6A	1/01/2005	water	-	7.41	-	-	-	-	-	638	-	-	-	10	-	-	-	-	-	-	-	-	-	-	3.36	-	-	-	0.015	-	-	0.006	-	-	0.001	-	-	0.001	-	0.001
BH6A_01 Apr 05_-	BH6A	1/04/2005	water	-	6.86	-	-	-	-	-	588	-	-	-	12	-	-	-	-	-	-	-	-	-	-	2.08	-	-	-	0.01	-	-	0.006	-	-	-	-	-	-	-	-
BH6A _01 Jul 05_-	BH6A	1/07/2005	water	-	8.37	-	-	-	-	-	562	-	-	-	11	-	-	-	-	-	-	-	-	-	-	2.34	-	-	-	0.035	-	-	0.006	-	-	-	-	-	-	-	-
BH6A_01 Oct 05_-	BH6A	1/10/2005	water	-	6.83	-	-	-	-	-	544	-	-	-	9	-	-	-	-	-	-	-	-	-	-	1.19	-	-	-	0.028	-	-	0.003	-	-	-	-	-	-	-	-
BH6A_01 Jan 06_-	BH6A	1/01/2006	water	-	7.19	-	-	-	-	-	586	-	-	-	11	-	-	-	-	-	-	-	-	-	-	1.28	-	-	-	0.01	-	-	0.006	-	-	<0.005	-	-	<0.001	-	<0.001
BH6A_01 Apr 06_-	BH6A	1/04/2006	water	-	6.99	-	-	-	-	-	562	-	-	-	11	-	-	-	-	-	-	-	-	-	-	0.24	-	-	-	0.01	-	-	0.01	-	-	-	-	-	-	-	-
BH6A_01 Jul 06_-	BH6A	1/07/2006	water	-	7.04	-	-	-	-	-	1200	-	-	-	15	-	-	-	-	-	-	-	-	-	-	0.759	-	-	-	0.021	-	-	0.005	-	-	-	-	-	-	-	-
BH6A_01 Oct 06_-	BH6A	1/10/2006	water	-	6.95	-	-	-	-	-	656	-	-	-	12	-	-	-	-	-	-	-	-	-	-	0.999	-	-	-	0.014	-	-	0.004	-	-	-	-	-	-	-	-
BH6A_01 Jan 07_-	BH6A	1/01/2007	water	-	7.08	-	-	-	-	-	568	-	-	-	7	-	-	-	-	-	-	-	-	-	-	1	-	-	-	0.013	-	-	0.01	-	-	<0.001	-	-	<0.001	-	<0.001
BH6A_01 Apr 07_-	BH6A	1/04/2007	water	-	6.79	-	-	-	-	-	606	-	-	-	11	432	141	19	6	52	92.9	37	-	11	12	1.77	0.024	<0.01	-	-	-	-	0.01	-	-	-	-	-	-	-	-
BH6A_17 Apr 13_-	BH6A	17/04/2013	water	14.81	6.95	294	0.04	-100	16.3	7.8	1300	-	680	<1	-	-	250	48	13	120	230	110	0.14	-	-	2.9	-	-	-	-	67	-	-	-	-	-	-	-	-	-	-	-
BH6A_09 Jul 13_-	BH6A	9/07/2013	water	14.2	6.95	1362	1.59	-90	17.1	7.7	1400	-	700	<1	-	-	290	45	16	140	250	100	-	-	-	4.2	-	-	-	-	51	-	-	-	-	-	-	-	-	-	-	-
BH6A_29 Oct 13_-	BH6A	29/10/2013	water	14.72	7.26	1910	1.3	-56	18.7	7.3	1300	-	610	<1	-	-	250	44	13	130	200	84	-	-	-	2.8	-	-	-	-	44	-	-	-	-	-	-	-	-	-	-	-
BH6A_28 Jan 14_-	BH6A	28/01/2014	water	7.42	6.92	1023	2.46	5	20.1	7.1	850	-	540	<1	-	-	200	35	18	140	150	170	<0.1	-	-	9	0.32	<0.01	-	-	18	<0.005	0.004	0.051	<0.0001	<0.001	0.007	0.001	<0.001	-	<0.001
BH6A_16 Apr 14_-	BH6A	16/04/2014	water	14.72	7.03	1950	1.42	-78	19	6.8	1400	-	670	<1	-	-	250	43	14	180	270	54	0.15	-	-	3.8	-	-	-	-	67	-	-	-	-	-	-	-	-	-	-	-
BH6A_09 Jul 14_-	BH6A	9/07/2014	water	-	7.11	1233	1.85	-52	18.6	7.1	1700	-	730	<1	-	-	280	46	23	240	340	61	0.17	-	-	8.1	-	-	-	-	81	-	-	-	-	-	-	-	-	-	-	-
BH6A_16 Oct 14_-	BH6A	16/10/2014	water	15.52	6.95	2046	0.64	-120	20.1	7.1	1300	-	650	<1	-	-	280	42	20	180	310	120	0.15	-	-	8.2	-	-	-	-	65	-	-	-	-	-	-	-	-	-	-	-
BH6A_20 Jan 15_-	BH6A	20/01/2015	water	14.9	6.64	2060	1.03	-105	21.4	7.3	1800	-	710	<1	-	-	280	48	23	250	360	100	0.19	-	-	8.6	<0.1	<0.01	-	-	92	<0.005	0.004	0.16	<0.0001	-	<0.01	0.002	<0.001	-	<0.001
BH6A_27 Apr 15_-	BH6A	27/04/2015	water	23.17	6.7	910	2.75	-27	17.9	7.2	850	-	420	<1	-	-	140	37	4.1	110	120	61	0.11	-	-	0.26	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-
BH6A_22 Jul 15_-	BH6A	22/07/2015	water	14.1	6.65	1599	3.14	-56	15.9	6.8	1600	-	690	<1	-	-	260	41	23	200	310	110	0.2	-	-	10	-	-	-	-	78	-	-	-	-	-	-	-	-	-	-	-
BH6A_21 Oct 15_-	BH6A	21/10/2015	water	11.22	6.76	1530	0.87	-92	22.4	7.2	2000	-	820	<1	-	-	290	47	28	240	400	100	0.2	-	-	14	-	-	-	-	87	-	-	-	-	-	-	-	-	-	-	-
BH6A_20 Jan 16_-	BH6A	20/01/2016	water	12.01	6.8	2658	2.23	-118	28.4	7.1	1900	-	860	<1	-	-	340	50	41	310	340	80	0.2	-	-	18	1.3	0.13	-	-	100	<0.005	0.003	0.29	<0.0001	<0.001	<0.01	0.002	<0.001	-	<0.001
BH6A_14 Apr 16_-	BH6A	14/04/2016	water	13.83	7.37	2990	0.68	-90	21.2	7.5	2000	-	880	<5	-	-	330	46	38	280	190	60	0.3	-	-	17	-	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-
BH6A_20 Sep 16_-	BH6A	20/09/2016	water	14.75	6.78	2186	0.12	-78.3	19.1	7.1	1300	-	620	<5	-	-	240	39	22	220	290	59	0.2	-	-	7.3	-	-	-	-	65	-	-	-	-	-	-	-	-	-	-	-
BH6A_18 Oct 16_-	BH6A	18/10/2016	water	14.65	6.77	2360	1.4	-70	20.1	7.2	1900	-	850	<5	-	-	320	53	29	270	400	88	0.2	-	-	12	-	-	-	-	84	-	-	-	-	-	-	-	-	-	-	-
BH6A_19 Jan 17_-	BH6A	19/01/2017	water	7.12	6.47	1036	2.57	85	20.6	7.6	1200	-	770	<5	-	-	220	41	24	160	180	120	0.1	-	-	13	0.29	<0.005	-	-	27	<0.01	0.044	0.051	<0.0001	<0.001	<0.005	0.002	0.001	-	<0.001
BH6A_25 Jan 17_-	BH6A	25/01/2017	water	15.16	6.87	2109	0.9	-90	21.1	7.3	1500	-	740	<5	-	-	230	39	28	270	320	44	0.2	-	-	12	<0.005	<0.005	-	-	68	<0.01	0.004	0.17	<0.0001	0.001	<0.05	0.001	<0.001	-	<0.001
BH6A_02 Jul 19_-	BH6A	2/07/2019	water	10.64	6.6	754	5.01	50.4	18.4	6.6	660	-	180	<5	-	-	170	14	6.4	29	55	230	<0.1	-	-	0.15	-	-	-	-	110	-	-	-	-	-	-	-	-	-	-	-
BH6A_25 Oct 19_-	BH6A	25/10/2019	water	10.66	6.49	955	3.75	79.4	19	7	800	-	280	<5	-	-	210	23	10	32	49	230	<0.1	-	-	0.11	-	-	-	-	52	-	-	-	-	-	-	-	-	-	-	-
BH6A_14 Jan 20_-	BH6A	14/01/2020	water	10.79	6.85	801	2.3	-129.5	19.2	6.5	580	-	250	<5	-	-	140	14	2.3	18	34	140	<0.1	-	-	0.035	0.37	0.024	-	-	9	0.01	0.004	0.055	<0.0001	<0.001	<0.05	<0.001	0.006	-	<0.001
BH6A_23 Apr 20_-	BH6A	23/04/2020	water	10.45	7.28	759	2.03	-88.1	19.4	6.8	560	-	260	<5	-	-	130	16	4.8	22	34	130	<0.1	-	-	0.061	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Sep 93_-	BH7	1/09/1993	water	-	7.4	430	-	-	-	-	324	-	-	-	23	-	-	-	-	-	-	-	-	-	-	0.3	-	-	-	-	-	-	0.328	-	-	0.0036	-	-	0.0193	-	0.003
BH7_01 Jun 94_-	BH7	1/06/1994	water	-	7.6	660	-	-	-	-	288	-	-	-	3	-	-	-	-	-	-	-	-	-	-	1.1	-	-	-	-	-	-	0.24	-	-	0.004	-	-	0.005	-	0.003
BH7_01 Sep 94_-	BH7	1/09/1994	water	-	7.3	650	-	-	-	-	380	-	-	-	22	-	-	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	-	0.305	-	-	0.003	-	-	0.005	-	0.004
BH7_01 Dec 94_-	BH7	1/12/1994	water	-	6.8	400	-	-	-	-	376	-	-	-	13	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	-	0.284	-	-	0.001	-	-	0.001	-	0.001
BH7_01 Mar 95_-	BH7	1/03/1995	water	-	7.13	698	-	-	-	-	318	-	-	-	15	-	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	0.273	-	-	0.001	-	-	0.001	-	0.001
BH7_01 Jun 95_-	BH7	1/06/1995	water	-	7.41	647	-	-	-	-	340	-	-	-	22	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	0.204	-	-	0.001	-	-	0.002	-	0.001
BH7_01 Sep 95_-	BH7	1/09/1995	water	-	7.73	703	-	-	-	-	446	-	-	-	22	-	-	-	-	-	-	-	-	-	-	0.1	-	-	1.2	0.07	-	-	0.199	-	-	0.004	-	-	0.003	-	0.001
BH7_01 Jan 96_-	BH7	1/01/1996	water	-	7.5	633	-	-	-	-	340	-	-	-	24	-	-	-	-	-	-	-	-	-	-	0.5	-	-	1.2	-	-	-	0.214	-	-	0.001	-	-	0.001	-	0.001
BH7_01 Apr 96_-	BH7	1/04/1996	water	-	7.3	717	-	-	-	-	476	-	-	-	35	-	-	-	-	-	-	-	-	-	-	0.48	-	-	1	0.07	-	-	0.219	-	-	0.001	-	-	0.001	-	0.001
BH7_01 Jul 96_-	BH7	1/07/1996	water	-	7.16	727	-	-	-	-	443	-	-	-	18	-	-	-	-	-	-	-	-	-	-	0.48	-	-	0.8	0.03	-	-	0.204	-	-	0.001	-	-	0.001	-	0.001
BH7_01 Oct 96_-	BH7	1/10/1996	water	-	7.33	855	-	-	-	-	508	-	-	-	14	-	-	-	-	-	-	-	-	-	-	0.74	-	-	0.9	0.18	-	-	0.279	-	-	0.001	-	-	0.001	-	0.001
BH7_01 Jan 97_-	BH7	1/01/1997	water	-	7.39	856	-	-	-	-	432	-	-	-	31	-	-	-	-	-	-	-	-	-	-	0.44	-	-	2.1	0.07	-	-	0.126	-	-	0.001	-	-	0.001	-	0.001
BH7_01 Apr 97_-	BH7	1/04/1997	water	-	7.36	706	-	-	-	-	438	-	-	-	17	-	-	-	-	-	-	-	-	-	-	0.55	-	-	0.7	0.35	-	-	0.238	-	-	0.003	-	-	0.001	-	0.001
BH7_01 Jul 97_-	BH7	1/07/1997	water	-	7.29	837	-	-	-	-	432	-	-	-	17	-	-	-	-	-	-	-	-	-	-	0.36	-	-	0.9	0.33	-	-	0.23	-	-	0.002	-	-	0.001	-	0.001
BH7_01 Oct 97_-	BH7	1/10/1997	water	-	7.32	843	-	-	-	-	400	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.57	-	-	1.3	0.01	-	-	0.21	-	-	0.001	-	-	0.001	-	0.001
BH7_01 Jan 98_-	BH7	1/01/1998	water	-	7.31	875	-	-	-	-	448	-	-	-	10	-	-	-	-	-	-	-	-	-	-	1.29	-	-	1.3	0.36	-	-	0.239	-	-	0.001	-	-	0.001	-	0.001
BH7_01 Apr 98_-	BH7	1/04/1998	water	-	7.45	869	-	-	-	-	442	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.65	-	-	1.3	0.04	-	-	0.185	-	-	0.001	-	-	0.001	-	0.004
BH7A_01 Jan 98_-	BH7A	1/01/1998	water	-	7.25	565	-	-	-	-	346	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.17	-	-	0.8	0.18	-	-	0.042	-	-	0.001	-	-	0.001	-	0.001
BH7A_01 Apr 98_-	BH7A	1/04/1998	water	-	7.23	663	-	-	-	-	372	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.03	-	-	0.6	27.8	-	-	0.002	-	-	0.001	-	-	0.002	-	0.006
BH7A_01 Jul 98_-	BH7A	1/07/1998	water	-	7.54	437	-	-	-	-	322	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.6	2.25	-	-	0.004	-	-	0.001	-	-	0.001	-	0.002
BH7A_01 Oct 98_-	BH7A	1/10/1998	water	-	7.8	416	-	-	-	-	230	-	-	-	38	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.5	0.11	-	-	0.01	-	-	0.002	-	-	0.003	-	0.006
BH7A_01 Jan 99_-	BH7A	1/01/1999	water	-	7.6	439	-	-	-	-	256	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.05	-	-	0.1	1.5	-	-	0.004	-	-	0.001	-	-	0.002	-	0.001
BH7A_01 Mar 99_-	BH7A	1/03/1999	water	-	7.3	479	-	-	-	-	359	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	4.9	-	-	0.006	-	-	0.005	-	-	0.007	-	0.001
BH7A_01 Jul 99_-	BH7A	1/07/1999	water	-	7.2	842	-	-	-	-	476	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.9	-	-	1.9	0.37	-	-	0.01	-	-	0.005	-	-	0.001	-	0.001

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions										Nutrients					Organic Indicators	Metals										
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																			
BH7A_01 Oct 99_-	BH7A	1/10/1999	water	-	7.5	532	-	-	-	-	313	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.02	-	-	0.3	0.08	-	-	0.004	-	-	0.001	-	-	0.018	-	0.001
BH7A_01 Jan 00_-	BH7A	1/01/2000	water	-	7.3	690	-	-	-	-	430	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.3	2.66	-	-	0.004	-	-	0.002	-	-	0.002	-	0.001
BH7A_01 Apr 00_-	BH7A	1/04/2000	water	-	6.9	690	-	-	-	-	450	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.03	-	-	0.1	4.74	-	-	0.005	-	-	0.007	-	-	0.002	-	0.001
BH7A_01 Jul 00_-	BH7A	1/07/2000	water	-	6.9	760	-	-	-	-	450	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.8	1.79	-	-	0.003	-	-	0.003	-	-	0.002	-	0.001
BH7A_01 Oct 00_-	BH7A	1/10/2000	water	-	7.2	640	-	-	-	-	360	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.4	1.25	-	-	0.002	-	-	0.002	-	-	0.001	-	0.001
BH7A_01 Jan 01_-	BH7A	1/01/2001	water	-	7.4	560	-	-	-	-	330	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.02	-	-	0.4	0.27	-	-	0.001	-	-	0.008	-	-	0.002	-	0.001
BH7A_01 Apr 01_-	BH7A	1/04/2001	water	-	7.3	610	-	-	-	-	350	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	0.31	-	-	0.003	-	-	0.001	-	-	0.001	-	0.001
BH7A_01 Jul 01_-	BH7A	1/07/2001	water	-	7.2	520	-	-	-	-	320	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.02	-	-	0.3	0.08	-	-	0.004	-	-	0.002	-	-	0.002	-	0.001
BH7A_01 Oct 01_-	BH7A	1/10/2001	water	-	7.3	570	-	-	-	-	290	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.3	0.04	-	-	0.005	-	-	0.001	-	-	0.002	-	0.001
BH7A_01 Jan 02_-	BH7A	1/01/2002	water	-	7.1	750	-	-	-	-	430	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.3	0.81	-	-	0.001	-	-	0.001	-	-	0.001	-	0.001
BH7A_01 Apr 02_-	BH7A	1/04/2002	water	-	7.6	700	-	-	-	-	440	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.22	-	-	0.4	0.34	-	-	0.008	-	-	0.004	-	-	<0.001	-	<0.001
BH7A_01 Jul 02_-	BH7A	1/07/2002	water	-	7.6	570	-	-	-	-	330	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.03	-	-	0.2	0.05	-	-	0.009	-	-	<0.001	-	-	<0.001	-	<0.001
BH7A_01 Oct 02_-	BH7A	1/10/2002	water	-	7.7	770	-	-	-	-	440	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.32	-	-	0.4	0.02	-	-	0.018	-	-	0.021	-	-	<0.001	-	<0.001
BH7A_01 Jan 03_-	BH7A	1/01/2003	water	-	7.73	430	-	-	-	-	320	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.03	-	-	1.2	0.33	-	-	0.006	-	-	<0.001	-	-	<0.001	-	<0.001
BH7A_01 Apr 03_-	BH7A	1/04/2003	water	-	7.69	590	-	-	-	-	336	-	-	-	14	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	0.08	-	-	0.012	-	-	0.001	-	-	0.002	-	0.001
BH7A_01 Jul 03_-	BH7A	1/07/2003	water	-	7.75	656	-	-	-	-	392	-	-	-	10	-	-	-	-	-	-	-	-	-	-	0.32	-	-	0.6	0.01	-	-	0.018	-	-	0.001	-	-	0.001	-	0.001
BH7A_01 Oct 03_-	BH7A	1/10/2003	water	-	7.88	667	-	-	-	-	466	-	-	-	13	-	-	-	-	-	-	-	-	-	-	0.08	-	-	0.5	0.06	-	-	0.02	-	-	0.001	-	-	0.001	-	0.001
BH7A_01 Jan 04_-	BH7A	1/01/2004	water	-	8.41	678	-	-	-	-	432	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.11	-	-	0.4	0.01	-	-	0.042	-	-	0.005	-	-	0.001	-	0.001
BH7A_01 Apr 04_-	BH7A	1/04/2004	water	-	7.54	-	-	-	-	-	504	-	-	-	20	-	-	-	-	-	-	-	-	-	-	0.11	-	-	-	0.03	-	-	0.032	-	-	-	-	-	-	-	-
BH7A_01 Jul 04_-	BH7A	1/07/2004	water	-	7.7	-	-	-	-	-	366	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	0.02	-	-	0.017	-	-	-	-	-	-	-	-
BH7A_01 Oct 04_-	BH7A	1/10/2004	water	-	7.68	-	-	-	-	-	406	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.14	-	-	-	0.01	-	-	0.019	-	-	-	-	-	-	-	-
BH7A_01 Jan 05_-	BH7A	1/01/2005	water	-	7.8	-	-	-	-	-	410	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.61	-	-	-	0.037	-	-	0.035	-	-	0.001	-	-	0.001	-	0.001
BH7A_01 Apr 05_-	BH7A	1/04/2005	water	-	7.27	-	-	-	-	-	326	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.086	-	-	-	0.035	-	-	0.02	-	-	-	-	-	-	-	-
BH7A_01 Jul 05_-	BH7A	1/07/2005	water	-	7.77	-	-	-	-	-	318	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.03	-	-	-	0.041	-	-	0.011	-	-	-	-	-	-	-	-
BH7A_01 Oct 05_-	BH7A	1/10/2005	water	-	7.34	-	-	-	-	-	396	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.173	-	-	-	0.03	-	-	0.037	-	-	-	-	-	-	-	-
BH7A_01 Jan 06_-	BH7A	1/01/2006	water	-	7.47	-	-	-	-	-	458	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.108	-	-	-	0.053	-	-	0.044	-	-	0.002	-	-	<0.001	-	<0.001
BH7A_01 Apr 06_-	BH7A	1/04/2006	water	-	7.19	-	-	-	-	-	444	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.08	-	-	-	0.01	-	-	0.094	-	-	-	-	-	-	-	-
BH7A_01 Jul 06_-	BH7A	1/07/2006	water	-	7.26	-	-	-	-	-	408	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.061	-	-	-	<0.01	-	-	0.039	-	-	-	-	-	-	-	-
BH7A_01 Oct 06_-	BH7A	1/10/2006	water	-	7.25	-	-	-	-	-	482	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.088	-	-	-	0.17	-	-	0.039	-	-	-	-	-	-	-	-
BH7A_01 Jan 07_-	BH7A	1/01/2007	water	-	7.14	-	-	-	-	-	576	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.192	-	-	-	0.18	-	-	0.016	-	-	<0.001	-	-	<0.001	-	<0.001
BH7A_01 Apr 07_-	BH7A	1/04/2007	water	-	6.98	-	-	-	-	-	504	-	-	-	7	446	136	23	2	22	30.9	14	-	9.68	10.1	0.145	0.151	0.027	-	-	-	-	0.022	-	-	-	-	-	-	-	-
BH7A_17 Apr 13_-	BH7A	17/04/2013	water	2.17	7.56	2.1	0.83	29	17.3	7.7	2700	-	1900	<1	-	-	200	88	170	470	490	210	0.15	-	-	240	-	-	-	-	310	-	-	-	-	-	-	-	-	-	-	-
BH7A_09 Jul 13_-	BH7A	9/07/2013	water	2.98	7.12	863	2.04	-20	18.4	7.8	520	-	430	<1	-	-	130	21	2.7	38	34	11	-	-	-	0.2	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-
BH7A_29 Oct 13_-	BH7A	29/10/2013	water	2.2	8.1	924	3.16	-11	19	7.5	540	-	420	<1	-	-	150	24	2.1	19	22	26	-	-	-	0.012	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-
BH7A_28 Jan 14_-	BH7A	28/01/2014	water	2.46	7.23	926	3.92	36	20.3	7.3	560	-	410	<1	-	-	150	25	2.3	27	32	28	0.11	-	-	0.009	12	0.15	-	-	4	<0.005	0.005	0.024	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH7A_16 Apr 14_-	BH7A	16/04/2014	water	2.25	7.02	780	2.12	86	21.5	7.2	550	-	410	<1	-	-	140	22	1.6	33	32	19	0.16	-	-	0.061	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-
BH7A_09 Jul 14_-	BH7A	9/07/2014	water	-	7.71	600	4.2	79	19.6	7.5	710	-	420	<1	-	-	170	26	2.2	38	50	23	0.12	-	-	<0.1	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-
BH7A_16 Oct 14_-	BH7A	16/10/2014	water	2	7.13	852	0.92	-74	18.9	7.4	480	-	400	<1	-	-	140	22	2	32	26	19	0.19	-	-	0.45	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-
BH7A_21 Jan 15_-	BH7A	21/01/2015	water	2.37	6.09	818	0.13	85	19.8	6.4	640	-	410	<1	-	-	150	25	3.3	25	31	32	0.11	-	-	0.041	6.6	0.26	-	-	7	<0.005	0.005	0.03	<0.0001	-	<0.01	<0.001	0.002	-	<0.001
BH7A_23 Apr 15_-	BH7A	23/04/2015	water	8.93	7.08	1848	2.08	-91	20	7.2	500	-	370	<1	-	-	130	22	2.1	24	28	27	0.22	-	-	0.36	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-
BH7A_21 Jul 15_-	BH7A	21/07/2015	water	2.63	7.1	836	3.46	-35	17.4	7.1	520	-	390	<1	-	-	140	21	3.1	26	36	23	0.2	-	-	0.058	-	-	-	-	18	-	-	-	-	-	-	-	-	-	-	-
BH7A_21 Oct 15_-	BH7A	21/10/2015	water	2.21	6.94	330	3.35	25	20.5	7.3	550	-	320	<1	-	-	130	20	2.7	26	43	71	0.1	-	-	<0.1	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-
BH7A_21 Jan 16_-	BH7A	21/01/2016	water	2.15	7.26	979	4.29	67	24.1	7.1	650	-	410	<1	-	-	160	26	3.3	41	44	38	0.2	-	-	0.26	0.57	0.011	-	-	16	<0.005	0.002	0.028	<0.0001	<0.001	<0.01	<0.001	<0.001	-	<0.001
BH7A_19 Apr 16_-	BH7A	19/04/2016	water	2.25	6.8	755	2.35	-37	21.3	7.4	550	-	420	<5	-	-	160	25	3	29	30	41	0.2	-	-	0.078	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-
BH7A_13 Jul 16_-	BH7A	13/07/2016	water	2.2	7.33	896	3.86	-76	15.2	7.8	560	-	440	<5	-	-	140	23	2.2	27	36	26	0.2	-	-	0.18	-	-	-	-	17	-	-	-	-	-	-	-	-	-	-	-
BH7A_18 Oct 16_-	BH7A	18/10/2016	water	2.27	6.88	631	2.5	40	16.8	7.3	580	-	440	<5	-	-	150	23	2.3	29	27	36	0.2	-	-	0.012	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-
BH7A_19 Jan 17_-	BH7A	19/01/2017	water	2.35	6.97	787	2.17	-4	20.1	7	570	-	380	<5	-	-	150	25	1.7	21	28	85	0.1	-	-	0.009	9.8	0.21	-	-	5	<0.01	0.011	0.026	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH7A_02 Jul 19_-	BH7A	2/07/2019	water	2.61	7.46	712	6.92	-36.5	18.6	7.4	500	-	420	<5	-	-	120	22	2	17	26	21	0.2	-	-	0.076	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
BH7A_25 Oct 19_-	BH7A	25/10/2019	water	2.62	7.32	858	3.68	51	19.1	7.8	610	-	420	<5	-	-	150	24	2.4	21	36	31	0.2	-	-	0.12	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
BH7A_14 Jan 20_-	BH7A	14/01/2020	water	2.82	7.27	794	7.74	-252.7	19.7	7.1	540	-	420	<5	-	-	140	25	2.1	17	27	26	0.2	-	-	0.006	4.7	0.19	-	-	3	<0.01	0.005	0.024	<0.0001	<0.001	<0.005	<0.001	0.006	-	<0.001
BH7A_23 Apr 20_-	BH7A	23/04/2020	water	2.39	7.55	860	2.44	-19.6	19.3	7.2	510	-	410	<5	-	-	140	22	2.3	25	48	34	0.2	-	-	0.068	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Sep 93_-	BH8	1/09/1993	water	-	7.4	800	-	-	-	-	652	-	-	-	60	-	-	-	-	-	-	-	-	-	-	1.3	-	-	-	-	-	-	0.0116	-	-	0.003	-	-	0.028	-	0.003
BH8_01 Jun 94_-	BH8	1/06/1994	water	-	7.4	1020	-	-	-	-	432	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	0.042	-	-	0.006	-	-	0.005	-	0.003
BH8_01 Sep 94_-	BH8	1/09/1994	water	-	7.2	1130	-	-	-	-	784	-	-	-	49	-	-	-	-	-	-	-	-	-	-	1.5	-	-	-	-	-	-	0.013	-	-	0.003	-	-	0.005	-	0.003
BH8_01 Dec 94_-	BH8	1/12/1994	water	-	7.1	805	-	-	-	-	452	-	-	-	27	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	-	0.013	-	-	0.001	-	-	0.001	-	0.001
BH8_01 Mar 95_-	BH8	1/03/1995	water	-	7.24	957	-	-	-	-	442	-	-	-	15	-	-	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	-	0.025	-	-	0.001	-	-	0.002	-	0.001
BH8_01 Jun 95_-	BH8	1/06/1995	water	-	7.33	1012	-	-	-	-	532	-	-	-	21	-	-	-	-	-	-	-	-	-	-	0.7	-	-	-	-	-	-	0.04	-	-	0.001	-	-	0.001	-	0.001
BH8_01 Sep 95_-	BH8	1/09/1995	water	-	7.78	916	-	-	-	-	684	-	-	-	18	-	-	-	-	-	-	-	-	-	-	0.1	-	-	1.3	0.02	-	-	0.038	-	-	0.003	-	-	0.002	-	0.001
BH8_01 Jan 96_-	BH8	1/01/1996	water	-	7.49	783	-	-	-	-	440	-	-	-	19	-	-	-	-	-	-	-	-	-	-	0.32	-	-	1.1	-	-	-	0.05	-	-	0.001	-	-	0.001	-	0.001
BH8_01 Apr 96_-	BH8	1/04/1996	water	-	7.68	730	-	-	-	-	324	-	-	-	11	-	-	-	-	-	-	-	-	-	-	0.46	-	-	0.7	0.06	-	-	0.056	-	-	0.001	-	-	0.001	-	0.002
BH8_01 Jul 96_-	BH8	1/07/1996	water	-	8.91	699	-	-	-	-	296	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.85	-	-	1.7	0.16	-	-	0.055	-	-	0.001	-	-	0.001	-	0.001
BH8_01 Oct 96_-	BH8	1/10/1996	water	-	7.44	681	-	-	-	-	456	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.55	-	-	0.8	0.26	-	-	0.073	-	-	0.001	-	-	0.001	-	0.001

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions									Nutrients					Organic Indicators	Metals										
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																			
BH8A_01 Jul 96_-	BH8A	1/07/1996	water	-	7	394	-	-	-	-	770	-	-	-	18	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	0.63	-	-	0.002	-	-	0.001	-	-	0.001
BH8A_01 Oct 96_-	BH8A	1/10/1996	water	-	7.6	448	-	-	-	-	306	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.04	-	-	0.1	1.32	-	-	0.002	-	-	0.001	-	-	0.001
BH8A_01 Jan 97_-	BH8A	1/01/1997	water	-	8.04	470	-	-	-	-	268	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	2.07	-	-	0.008	-	-	0.001	-	-	0.001
BH8A_01 Apr 97_-	BH8A	1/04/1997	water	-	7.62	379	-	-	-	-	256	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	1.32	-	-	0.002	-	-	0.001	-	-	0.001
BH8A_01 Jul 97_-	BH8A	1/07/1997	water	-	7.65	463	-	-	-	-	266	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.2	2.04	-	-	0.002	-	-	0.001	-	-	0.001
BH8A_01 Oct 97_-	BH8A	1/10/1997	water	-	7.67	468	-	-	-	-	250	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.88	-	-	1.3	1.61	-	-	0.01	-	-	0.001	-	-	0.002	-	0.001
BH8A_01 Jan 98_-	BH8A	1/01/1998	water	-	7.61	458	-	-	-	-	298	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	0.37	-	-	0.004	-	-	0.001	-	-	0.001
BH8A_01 Apr 98_-	BH8A	1/04/1998	water	-	7.75	449	-	-	-	-	266	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.6	1.59	-	-	0.002	-	-	0.001	-	-	0.001
BH8A_01 Jul 98_-	BH8A	1/07/1998	water	-	7.86	406	-	-	-	-	262	-	-	-	4	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.6	1.5	-	-	0.003	-	-	0.001	-	-	0.001
BH8A_01 Oct 98_-	BH8A	1/10/1998	water	-	7.79	429	-	-	-	-	252	-	-	-	10	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	0.82	-	-	0.01	-	-	0.002	-	-	0.001
BH8A_01 Jan 99_-	BH8A	1/01/1999	water	-	7.7	437	-	-	-	-	230	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.05	-	-	0.5	0.58	-	-	0.002	-	-	0.001	-	-	0.002	-	0.001
BH8A_01 Mar 99_-	BH8A	1/03/1999	water	-	7.6	354	-	-	-	-	228	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.4	0.57	-	-	0.003	-	-	0.005	-	-	0.005	-	0.001
BH8A_01 Jul 99_-	BH8A	1/07/1999	water	-	7.6	482	-	-	-	-	258	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.4	0.48	-	-	0.003	-	-	0.004	-	-	0.001	-	0.001
BH8A_01 Oct 99_-	BH8A	1/10/1999	water	-	7.6	475	-	-	-	-	255	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.4	0.28	-	-	0.003	-	-	0.001	-	-	0.028	-	0.001
BH8A_01 Jan 00_-	BH8A	1/01/2000	water	-	7.5	440	-	-	-	-	260	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	0.75	-	-	0.003	-	-	0.001	-	-	0.001	-	0.001
BH8A_01 Apr 00_-	BH8A	1/04/2000	water	-	7.4	460	-	-	-	-	260	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	0.59	-	-	0.003	-	-	0.005	-	-	0.001	-	0.001
BH8A_01 Jul 00_-	BH8A	1/07/2000	water	-	7	460	-	-	-	-	250	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.01	-	-	1.2	0.47	-	-	0.002	-	-	0.003	-	-	0.002	-	0.001
BH8A_01 Oct 00_-	BH8A	1/10/2000	water	-	7.3	460	-	-	-	-	250	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.6	0.51	-	-	0.002	-	-	0.001	-	-	0.001	-	0.001
BH8A_01 Jan 01_-	BH8A	1/01/2001	water	-	7.6	430	-	-	-	-	250	-	-	-	10	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	0.46	-	-	0.002	-	-	0.005	-	-	0.001	-	0.001
BH8A_01 Apr 01_-	BH8A	1/04/2001	water	-	7.5	430	-	-	-	-	250	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.2	0.46	-	-	0.004	-	-	0.003	-	-	0.001	-	0.001
BH8A_01 Jul 01_-	BH8A	1/07/2001	water	-	7.4	580	-	-	-	-	380	-	-	-	3	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.5	0.25	-	-	0.003	-	-	0.003	-	-	0.001	-	0.001
BH8A_01 Oct 01_-	BH8A	1/10/2001	water	-	7.3	650	-	-	-	-	360	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.3	0.12	-	-	0.002	-	-	0.001	-	-	0.001	-	0.001
BH8A_01 Jan 02_-	BH8A	1/01/2002	water	-	7.2	650	-	-	-	-	380	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.4	0.14	-	-	0.001	-	-	0.001	-	-	0.001	-	0.001
BH8A_01 Apr 02_-	BH8A	1/04/2002	water	-	7.6	620	-	-	-	-	370	-	-	-	4	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.5	0.11	-	-	0.002	-	-	0.004	-	-	<0.001	-	<0.001
BH8A_01 Jul 02_-	BH8A	1/07/2002	water	-	7.7	590	-	-	-	-	310	-	-	-	1	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	<0.1	0.06	-	-	0.002	-	-	<0.001	-	-	<0.001	-	<0.001
BH8A_01 Oct 02_-	BH8A	1/10/2002	water	-	7.7	590	-	-	-	-	340	-	-	-	1	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	<0.1	0.08	-	-	0.002	-	-	0.013	-	-	<0.001	-	<0.001
BH8A_01 Jan 03_-	BH8A	1/01/2003	water	-	7.74	400	-	-	-	-	300	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.02	-	-	0.4	0.12	-	-	0.002	-	-	0.005	-	-	<0.001	-	<0.001
BH8A_01 Apr 03_-	BH8A	1/04/2003	water	-	7.72	493	-	-	-	-	320	-	-	-	11	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	0.21	-	-	0.001	-	-	0.001	-	-	0.002	-	0.001
BH8A_01 Jul 03_-	BH8A	1/07/2003	water	-	7.7	757	-	-	-	-	496	-	-	-	11	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.3	0.11	-	-	0.003	-	-	0.001	-	-	0.002	-	0.001
BH8A_01 Oct 03_-	BH8A	1/10/2003	water	-	7.7	562	-	-	-	-	402	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.3	0.05	-	-	0.002	-	-	0.001	-	-	0.002	-	0.001
BH8A_01 Jan 04_-	BH8A	1/01/2004	water	-	8.05	573	-	-	-	-	374	-	-	-	7	-	-	-	-	-	-	-	-	-	-	0.01	-	-	0.1	0.09	-	-	0.002	-	-	0.005	-	-	0.001	-	0.001
BH8A_01 Apr 04_-	BH8A	1/04/2004	water	-	7.75	-	-	-	-	-	338	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.06	-	-	-	0.06	-	-	0.002	-	-	-	-	-	-	-	-
BH8A_01 Jul 04_-	BH8A	1/07/2004	water	-	7.71	-	-	-	-	-	312	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	0.08	-	-	0.001	-	-	-	-	-	-	-	-
BH8A_01 Oct 04_-	BH8A	1/10/2004	water	-	7.71	-	-	-	-	-	342	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.04	-	-	-	0.16	-	-	0.002	-	-	-	-	-	-	-	-
BH8A_01 Jan 05_-	BH8A	1/01/2005	water	-	7.78	-	-	-	-	-	342	-	-	-	2	-	-	-	-	-	-	-	-	-	-	1.15	-	-	-	0.131	-	-	0.002	-	-	<0.001	-	-	0.001	-	<0.001
BH8A_01 Apr 05_-	BH8A	1/04/2005	water	-	7.3	-	-	-	-	-	334	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.036	-	-	-	0.052	-	-	0.001	-	-	-	-	-	-	-	-
BH8A_01 Jul 05_-	BH8A	1/07/2005	water	-	8.07	-	-	-	-	-	278	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.04	-	-	-	0.062	-	-	0.001	-	-	-	-	-	-	-	-
BH8A_01 Oct 05_-	BH8A	1/10/2005	water	-	7.32	-	-	-	-	-	332	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.068	-	-	-	0.05	-	-	0.001	-	-	-	-	-	-	-	-
BH8A_01 Jan 06_-	BH8A	1/01/2006	water	-	7.6	-	-	-	-	-	352	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.04	-	-	-	0.035	-	-	0.001	-	-	0.002	-	-	0.001	-	<0.001
BH8A_01 Apr 06_-	BH8A	1/04/2006	water	-	7.3	-	-	-	-	-	306	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.03	-	-	-	0.065	-	-	0.001	-	-	-	-	-	-	-	-
BH8A_01 Jul 06_-	BH8A	1/07/2006	water	-	7.4	-	-	-	-	-	344	-	-	-	2	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.122	-	-	0.001	-	-	-	-	-	-	-	-
BH8A_01 Oct 06_-	BH8A	1/10/2006	water	-	-	-	-	-	-	-	428	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.079	-	-	0.001	-	-	-	-	-	-	-	-
BH8A_01 Jan 07_-	BH8A	1/01/2007	water	-	7.36	-	-	-	-	-	406	-	-	-	2	-	-	-	-	-	-	-	-	-	-	0.066	-	-	-	0.212	-	-	0.002	-	-	<0.001	-	-	<0.001	-	<0.001
BH8A_01 Apr 07_-	BH8A	1/04/2007	water	-	7.18	-	-	-	-	-	368	-	-	-	6	245	95	8	1	22	50.9	13	-	6.38	6.61	0.051	0.188	0.019	-	-	-	-	0.002	-	-	-	-	-	-	-	-
BH8A_17 Apr 13_-	BH8A	17/04/2013	water	16.66	7.85	3000	0.29	-17	17	7.9	300	-	250	<1	-	-	78	6.2	1	23	30	8	0.13	-	-	0.007	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-
BH8A_09 Jul 13_-	BH8A	9/07/2013	water	16.16	7.35	410	6.65	81	16.9	7.8	390	-	250	<1	-	-	98	8.8	1.3	35	48	10	-	-	-	<0.1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
BH8A_29 Oct 13_-	BH8A	29/10/2013	water	16.88	7.71	440	3.11	35	18.1	7.7	360	-	230	<1	-	-	98	8.8	1.2	39	55	27	-	-	-	0.007	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-
BH8A_28 Jan 14_-	BH8A	28/01/2014	water	16.62	7.71	618	8.7	73	20.2	7.4	360	-	240	<1	-	-	91	8.8	1.2	36	54	13	0.14	-	-	<0.1	0.14	<0.01	-	-	1	<0.005	0.002	0.008	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH8A_16 Apr 14_-	BH8A	16/04/2014	water	16.6	7.82	533	6.23	79	20.5	7.5	330	-	240	<1	-	-	79	7.5	1.1	36	42	10	0.14	-	-	<0.1	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-
BH8A_09 Jul 14_-	BH8A	9/07/2014	water	-	8.49	353	7.17	45	17.9	7.1	420	-	190	<1	-	-	90	8.6	1.2	40	39	65	0.12	-	-	<0.1	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-
BH8A_16 Oct 14_-	BH8A	16/10/2014	water	16.31	7.54	665	4.39	44	18.9	7.6	360	-	250	<1	-	-	98	9.1	1.3	40	57	14	0.12	-	-	<0.1	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-
BH8A_21 Jan 15_-	BH8A	21/01/2015	water	16.56	7.16	555	5.76	18.3	18.3	7.6	370	-	240	<1	-	-	97	9.2	1.3	34	48	10	0.14	-	-	<0.1	0.086	<0.01	-	-	2	<0.005	0.002	0.01	<0.0001	-	<0.01	<0.001	<0.001	-	<0.001
BH8A_23 Apr 15_-	BH8A	23/04/2015	water	16.48	7.72	540	3.68	84	19.4	7.5	370	-	240	<1	-	-	89	8.5	1.2	37	42	12	0.16	-	-	<0.1	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-
BH8A_21 Jul 15_-	BH8A	21/07/2015	water	16.22	7.26	714	5.67	49	16.6	7.1	430	-	220	<1	-	-	89	8.6	1.1	46	75	14	0.2	-	-	<0.1	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-
BH8A_21 Oct 15_-	BH8A	21/10/2015	water	16.23	7.73	243	3.4	48	20.2	7.7	420	-	240	<1	-	-	90	8.8	1.2	40	68	14	0.2	-	-	<0.1	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-
BH8A_21 Jan 16_-	BH8A	21/01/2016	water	16.34	6.09	774	8.6	126	22.7	7.6	380	-	45	<1	-	-	95	9.2	1.4	37	63	13	0.2	-	-	<0.1	0.27	<0.01	-	-	34	<0.005	0.002	0.008	<0.0001	<0.001	<0.01	<0.001	<0.001	-	<0.001
BH8A_19 Apr 16_-	BH8A	19/04/2016	water	16.18	5.4	557	4.84	55	19.6	7.7	380	-	230	<5	-	-	94	9.2	1.2	35	57	12	0.2	-	-	<0.1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
BH8A_13 Jul 16_-	BH8A	13/07/2016	water	16.23	7.47	399	1.91	71	14.3	7.2	710	-	560	<5	-	-	210	32	8.9	43	67	27	0.1	-	-	<0.1	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-
BH8A_18 Oct 16_-	BH8A	18/10/2016	water	16.11	6.81	980	2.46	-179	16	7.6	400	-	270	<5	-	-	100	9.9	1.2	47	55	15	0.2	-	-	<0.1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
BH8A_19 Jan 17_-	BH8A	19/01/2017	water	16.25	7.6	614	6.17	53	20.1	7.6	360	-	280	<5	-	-	93	8.5	1.2	37	49	15	0.1	-	-	<0.005	0.067	<0.005	-	-	6	<0.01	0.002	0.009	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH8A_02 Jul 19_-	BH8A	2/07/2019	water	9.87	8.17	455.9	9.78	53.1	16.5	7.7	310	-	230	<5	-	-	76	7.2	1	26	42	12	0.2	-	-	0.01	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-
BH8A_22 Apr 20_-	BH8A	22/04/2020	water	16.59	7.7	753	8.03	39.9	18.1	7.5	520	-	250	<5	-	-	110	11	1.4	45	120	34	0.1	-	-	<0.005	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions										Nutrients					Organic Indicators	Metals										
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																						
2-4m																																						
4-8m																																						
>8m																																						
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																						
2-4m																																						
4-8m																																						
>8m																																						
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																						
2-4m																																						
4-8m																																						
>8m																																						

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																				
BH9_01 Jun 94_-	BH9	1/06/1994	water	-	7.6	1210	-	-	-	-	580	-	-	-	18	-	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	0.0722	-	-	0.009	-	-	0.005	-	0.003
BH9_01 Sep 94_-	BH9	1/09/1994	water	-	7.4	1090	-	-	-	-	640	-	-	-	58	-	-	-	-	-	-	-	-	-	-	5.3	-	-	-	-	-	-	0.117	-	-	0.004	-	-	0.005	-	0.003
BH9_01 Dec 94_-	BH9	1/12/1994	water	-	7	1068	-	-	-	-	676	-	-	-	129	-	-	-	-	-	-	-	-	-	-	5.3	-	-	-	-	-	-	0.095	-	-	0.001	-	-	0.006	-	0.001
BH9_01 Mar 95_-	BH9	1/03/1995	water	-	7.2	1242	-	-	-	-	516	-	-	-	35	-	-	-	-	-	-	-	-	-	-	5.3	-	-	-	-	-	-	0.192	-	-	0.003	-	-	0.005	-	0.001
BH9_01 Jun 95_-	BH9	1/06/1995	water	-	7.31	1670	-	-	-	-	1060	-	-	-	41	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	0.0149	-	-	0.002	-	-	0.002	-	0.001
BH9_01 Sep 95_-	BH9	1/09/1995	water	-	7.85	1784	-	-	-	-	1540	-	-	-	29	-	-	-	-	-	-	-	-	-	-	2	-	-	4.5	0.1	-	-	0.071	-	-	0.009	-	-	0.005	-	0.002
BH9_01 Jan 96_-	BH9	1/01/1996	water	-	7.46	1224	-	-	-	-	1010	-	-	-	5	-	-	-	-	-	-	-	-	-	-	5.44	-	-	7	-	-	-	0.108	-	-	0.001	-	-	0.001	-	0.001
BH9_01 Apr 96_-	BH9	1/04/1996	water	-	7.55	659	-	-	-	-	680	-	-	-	25	-	-	-	-	-	-	-	-	-	-	0.79	-	-	1.2	0.05	-	-	0.031	-	-	0.002	-	-	0.011	-	0.028
BH9_01 Jul 96_-	BH9	1/07/1996	water	-	7.95	1655	-	-	-	-	1560	-	-	-	24	-	-	-	-	-	-	-	-	-	-	2.99	-	-	15.3	1.68	-	-	0.018	-	-	0.002	-	-	0.003	-	0.001
BH9A_01 Jul 96_-	BH9A	1/07/1996	water	-	8.6	1229	-	-	-	-	1020	-	-	-	25	-	-	-	-	-	-	-	-	-	-	9.18	-	-	14.6	0.06	-	-	0.191	-	-	0.002	-	-	0.001	-	0.001
BH9A_01 Oct 96_-	BH9A	1/10/1996	water	-	7.6	1521	-	-	-	-	982	-	-	-	31	-	-	-	-	-	-	-	-	-	-	14.5	-	-	15.4	0.45	-	-	0.207	-	-	0.004	-	-	0.004	-	0.004
BH9A_01 Jan 97_-	BH9A	1/01/1997	water	-	7.73	1502	-	-	-	-	780	-	-	-	88	-	-	-	-	-	-	-	-	-	-	9.97	-	-	14.7	0.43	-	-	0.153	-	-	0.001	-	-	0.001	-	0.001
BH9A_01 Apr 97_-	BH9A	1/04/1997	water	-	7.8	1116	-	-	-	-	792	-	-	-	33	-	-	-	-	-	-	-	-	-	-	12.9	-	-	12.9	0.02	-	-	0.203	-	-	0.005	-	-	0.001	-	0.001
BH9A_01 Jul 97_-	BH9A	1/07/1997	water	-	7.57	1140	-	-	-	-	632	-	-	-	28	-	-	-	-	-	-	-	-	-	-	8.32	-	-	10	0.05	-	-	0.186	-	-	0.002	-	-	0.001	-	0.001
BH9A_01 Oct 97_-	BH9A	1/10/1997	water	-	7.67	1030	-	-	-	-	566	-	-	-	17	-	-	-	-	-	-	-	-	-	-	8.42	-	-	10.4	0.01	-	-	0.17	-	-	0.001	-	-	0.001	-	0.001
BH9A_01 Jan 98_-	BH9A	1/01/1998	water	-	7.68	1022	-	-	-	-	594	-	-	-	18	-	-	-	-	-	-	-	-	-	-	9.06	-	-	8.9	0.08	-	-	0.165	-	-	0.008	-	-	0.008	-	0.001
BH9A_01 Apr 98_-	BH9A	1/04/1998	water	-	7.7	987	-	-	-	-	578	-	-	-	21	-	-	-	-	-	-	-	-	-	-	9.51	-	-	12.8	0.01	-	-	0.177	-	-	0.006	-	-	0.001	-	0.001
BH9A_01 Nov 98_-	BH9A	1/11/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001
BH9A_01 Jan 99_-	BH9A	1/01/1999	water	-	7.5	957	-	-	-	-	525	-	-	-	20	-	-	-	-	-	-	-	-	-	-	9.18	-	-	9	0.01	-	-	0.171	-	-	0.001	-	-	0.002	-	0.001
BH9A_01 Mar 99_-	BH9A	1/03/1999	water	-	7.5	869	-	-	-	-	512	-	-	-	23	-	-	-	-	-	-	-	-	-	-	8.4	-	-	8.1	0.05	-	-	0.17	-	-	0.003	-	-	0.005	-	0.002
BH9A_01 Jul 99_-	BH9A	1/07/1999	water	-	7.4	990	-	-	-	-	551	-	-	-	12	-	-	-	-	-	-	-	-	-	-	4.18	-	-	5.6	0.01	-	-	0.019	-	-	0.005	-	-	0.001	-	0.001
BH9A_01 Oct 99_-	BH9A	1/10/1999	water	-	7.5	893	-	-	-	-	508	-	-	-	31	-	-	-	-	-	-	-	-	-	-	9.66	-	-	12	0.01	-	-	0.169	-	-	0.009	-	-	0.003	-	0.001
BH9A_01 Jan 00_-	BH9A	1/01/2000	water	-	7.1	720	-	-	-	-	480	-	-	-	38	-	-	-	-	-	-	-	-	-	-	6.79	-	-	7.6	0.01	-	-	0.196	-	-	0.004	-	-	0.001	-	0.001
BH9A_01 Apr 00_-	BH9A	1/04/2000	water	-	7.5	930	-	-	-	-	580	-	-	-	39	-	-	-	-	-	-	-	-	-	-	7.22	-	-	8	0.01	-	-	0.211	-	-	0.009	-	-	0.001	-	0.002
BH9A_01 Jul 00_-	BH9A	1/07/2000	water	-	7.3	950	-	-	-	-	570	-	-	-	34	-	-	-	-	-	-	-	-	-	-	6.4	-	-	8.8	0.01	-	-	0.169	-	-	0.005	-	-	0.003	-	0.001
BH9A_01 Oct 00_-	BH9A	1/10/2000	water	-	7.4	970	-	-	-	-	610	-	-	-	45	-	-	-	-	-	-	-	-	-	-	7.7	-	-	8.8	0.01	-	-	0.064	-	-	0.006	-	-	0.001	-	0.001
BH9A_01 Jan 01_-	BH9A	1/01/2001	water	-	7.8	840	-	-	-	-	580	-	-	-	49	-	-	-	-	-	-	-	-	-	-	9.45	-	-	11	0.01	-	-	0.212	-	-	0.01	-	-	0.001	-	0.001
BH9A_01 Apr 01_-	BH9A	1/04/2001	water	-	7.7	940	-	-	-	-	620	-	-	-	41	-	-	-	-	-	-	-	-	-	-	10.1	-	-	13	0.03	-	-	0.197	-	-	0.004	-	-	0.001	-	0.001
BH9A_01 Jul 01_-	BH9A	1/07/2001	water	-	7.5	1100	-	-	-	-	640	-	-	-	35	-	-	-	-	-	-	-	-	-	-	5.44	-	-	14	0.01	-	-	0.247	-	-	0.005	-	-	0.001	-	0.001
BH9A_01 Jan 02_-	BH9A	1/01/2002	water	-	7.7	980	-	-	-	-	610	-	-	-	21	-	-	-	-	-	-	-	-	-	-	12.3	-	-	14	0.01	-	-	0.124	-	-	0.003	-	-	0.003	-	0.001
BH9A_01 Apr 02_-	BH9A	1/04/2002	water	-	8	1100	-	-	-	-	690	-	-	-	29	-	-	-	-	-	-	-	-	-	-	12.9	-	-	1.4	0.02	-	-	0.205	-	-	0.005	-	-	<0.001	-	0.001
BH9A_01 Jul 02_-	BH9A	1/07/2002	water	-	8	960	-	-	-	-	580	-	-	-	23	-	-	-	-	-	-	-	-	-	-	11.5	-	-	12	0.01	-	-	0.153	-	-	0.001	-	-	<0.001	-	<0.001
BH9A_01 Oct 02_-	BH9A	1/10/2002	water	-	8.1	980	-	-	-	-	590	-	-	-	27	-	-	-	-	-	-	-	-	-	-	13.1	-	-	15	<0.01	-	-	0.169	-	-	0.002	-	-	<0.001	-	<0.001
BH9A_01 Jan 03_-	BH9A	1/01/2003	water	-	8.48	850	-	-	-	-	600	-	-	-	32	-	-	-	-	-	-	-	-	-	-	11.3	-	-	13	0.04	-	-	0.145	-	-	0.002	-	-	<0.001	-	<0.001
BH9A_01 Apr 03_-	BH9A	1/04/2003	water	-	8.03	1070	-	-	-	-	570	-	-	-	47	-	-	-	-	-	-	-	-	-	-	12.9	-	-	15.2	0.01	-	-	0.129	-	-	0.001	-	-	0.002	-	0.001
BH9A_01 Jul 03_-	BH9A	1/07/2003	water	-	7.86	1250	-	-	-	-	826	-	-	-	40	-	-	-	-	-	-	-	-	-	-	8.79	-	-	11.7	0.01	-	-	0.14	-	-	0.001	-	-	0.001	-	0.001
BH9A_01 Oct 03_-	BH9A	1/10/2003	water	-	8.09	1010	-	-	-	-	690	-	-	-	55	-	-	-	-	-	-	-	-	-	-	13.3	-	-	20.2	0.01	-	-	0.193	-	-	0.002	-	-	0.001	-	0.001
BH9A_01 Jan 04_-	BH9A	1/01/2004	water	-	8.35	1010	-	-	-	-	756	-	-	-	36	-	-	-	-	-	-	-	-	-	-	13.3	-	-	24.8	0.01	-	-	0.168	-	-	0.005	-	-	0.001	-	0.002
BH9A_01 Apr 04_-	BH9A	1/04/2004	water	-	8.02	-	-	-	-	-	832	-	-	-	40	-	-	-	-	-	-	-	-	-	-	12.4	-	-	-	0.01	-	-	0.175	-	-	-	-	-	-	-	-
BH9A_01 Jul 04_-	BH9A	1/07/2004	water	-	8.15	-	-	-	-	-	618	-	-	-	46	-	-	-	-	-	-	-	-	-	-	10.5	-	-	-	0.78	-	-	0.165	-	-	-	-	-	-	-	-
BH9A_01 Oct 04_-	BH9A	1/10/2004	water	-	7.91	-	-	-	-	-	718	-	-	-	18	-	-	-	-	-	-	-	-	-	-	7.91	-	-	-	0.01	-	-	0.073	-	-	-	-	-	-	-	-
BH9A_01 Jan 05_-	BH9A	1/01/2005	water	-	8.16	-	-	-	-	-	722	-	-	-	35	-	-	-	-	-	-	-	-	-	-	15.1	-	-	-	0.018	-	-	0.171	-	-	0.001	-	-	0.001	-	0.001
BH9A_01 Apr 05_-	BH9A	1/04/2005	water	-	7.32	-	-	-	-	-	694	-	-	-	20	-	-	-	-	-	-	-	-	-	-	0.278	-	-	-	0.027	-	-	0.008	-	-	-	-	-	-	-	-
BH9A_01 Jul 05_-	BH9A	1/07/2005	water	-	8.51	-	-	-	-	-	640	-	-	-	23	-	-	-	-	-	-	-	-	-	-	8.61	-	-	-	0.54	-	-	0.082	-	-	-	-	-	-	-	-
BH9A_01 Jan 07_-	BH9A	1/01/2007	water	-	7.4	1815	-	-	-	-	1130	-	-	-	40	502	119	20	21	187	136	153	0.7	16.3	17.1	6.44	<0.01	<0.01	-	-	0.06	0.097	0.072	<0.0001	0.002	0.001	0.001	<0.001	0.23	<0.001
BH9B_01 Jul 05_-	BH9B	1/07/2005	water	-	7.69	-	-	-	-	-	1720	-	-	-	68	-	-	-	-	-	-	-	-	-	-	5.69	-	-	-	<0.01	-	-	0.073	-	-	-	-	-	-	-	-
BH9B_01 Oct 06_-	BH9B	1/10/2006	water	-	7.56	-	-	-	-	-	1240	-	-	-	44	-	-	-	-	-	-	-	-	-	-	8.58	-	-	-	<0.01	-	-	0.101	-	-	-	-	-	-	-	-
BH9B_01 Jan 07_-	BH9B	1/01/2007	water	-	7.4	-	-	-	-	-	1130	-	-	-	40	-	-	-	-	-	-	-	-	-	-	6.44	-	-	-	<0.01	-	-	0.097	-	-	0.002	-	-	<0.001	-	<0.001
BH9B_01 Apr 07_-	BH9B	1/04/2007	water	-	7.36	-	-	-	-	-	832	-	-	-	47	460	86	14	22	178	156	73	-	13.8	15.1	11.9	0.014	<0.01	-	-	-	-	0.118	-	-	-	-	-	-	-	-
BH9C_17 Apr 13_-	BH9C	17/04/2013	water	4.54	7.26	861	0.62	-9	25	7.3	640	-	450	<1	-	-	150	17	11	50	62	45	0.2	-	-	1.5	-	-	-	-	52	-	-	-	-	-	-	-	-	-	-	-
BH9C_09 Jul 13_-	BH9C	9/07/2013	water	4.38	7.19	1210	2.1	-112	18.9	7.8	810	-	550	<1	-	-	140	20	26	120	100	10	-	-	-	16	-	-	-	-	29	-	-	-	-	-	-	-	-	-	-	-
BH9C_29 Oct 13_-	BH9C	29/10/2013	water	5.57	7.29	1210	3.9	-130	7.3	7.4	720	-	570	<1	-	-	170	21	21	99	81	40	-	-	-	15	-	-	-	-	60	-	-	-	-	-	-	-	-	-	-	-
BH9C_28 Jan 14_-	BH9C	28/01/2014	water	5.75	7.08	1077	2.96	44	19.4	7	620	-	480	<1	-	-	9	16	13	60	62	39	0.22	-	-	5.6	0.19	0.083	-	-	66	0.01	0.012	0.05	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH9C_16 Apr 14_-	BH9C	16/04/2014	water	5.74	6.95	1136	1.42	270	18.4	6.9	690	-	530	<1	-	-	170	20	15	64	61	52	0.18	-	-	7.8	-	-	-	-	32	-	-	-	-	-	-	-	-	-	-	-
BH9C_07 Jul 14_-	BH9C	7/07/2014	water	5.6	7.31	46.8	2.72	496	17.3	7	780	-	540	<1	-	-	170	19	16	68	64	53	0.19	-	-	8.4	-	-	-	-	95	-	-	-	-	-	-	-	-	-	-	-
BH9C_15 Oct 14_-	BH9C	15/10/2014	water	5.23	6.99	1614	0.64	-91	17.8	7	1100	-	1700	<1	-	-	410	43	36	190	150	85	0.2	-	-	29	-	-	-	-	120	-	-	-	-	-	-	-	-	-	-	-
BH9C_20 Jan 15_-	BH9C	20/01/2015	water	5.74	6.18	894	0.29	13	19.5	6.6	690	-	480	<1	-	-	160	20	14	58	57	49	0.22	-	-	6.6	0.072	0.058	-	-	35	<0.005	0.006	0.095	<0.0001	-	<0.01	<0.001	0.003	-	<0.001
BH9C_22 Apr 15_-	BH9C	22/04/2015	water	4.99	7	1739	0.12	-79	17.9	6.8	1400	-	1200	<1	-	-	350	35	35	200	150	110	0.19	-	-	27	-	-	-	-	280	-	-	-	-	-	-	-	-	-	-	-
BH9C_21 Jul 15_-	BH9C	21/07/2015	water	5.3	6.84	913	0.41	-124	18.9	6.8	630	-	710	<1	-	-	230	19	11	58	50	41	0.2	-	-	6.5	-	-	-	-	280	-	-	-	-	-	-	-	-	-	-	-
BH9C_20 Oct 15_-	BH9C	20/10/2015	water	5.65	6.85	1700	1.92	95	24.1	7.1	510	-	440	<1	-	-	180	16	8.1	47	39	45	0.2	-	-	4.6	-	-	-	-	110	-	-	-	-	-	-	-	-	-	-	-
BH9C_20 Jan 16_-	BH9C	20/01/2016	water	5.45	7.2	927	3.67	69	23.2	7.2	620	-	480	<1	-	-	210	17	11	59	45	50	0.2	-	-	5.8	2	0.16	-	-	150	0.01	0.012	0.079	<0.0001	<0.001	<0.01	<0.001	<0.001	-	<0.001
BH9C_14 Apr 16_-	BH9C	14/04/2016	water	5.65	6.88	877	1.7	42	20	6.9	530	-	550	<5	-	-	330	15	7.7	41	32	46	0.3	-	-	0.89	-	-	-	-	430	-	-	-	-	-	-	-	-	-	-	-

	Field Parameters						Inorganics					Unassigned	Acidity & Alkalinity	Major Ions									Nutrients					Organic Indicators	Metals									
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Total Organic Carbon	Aluminium	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Iron	Lead
	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)		6.5-8.5					6.5-8.5	600									180	250	250				0.411						0.2							1	0.3	
ADWG 2011 Health (v3.5 updated 2018)																			500[#2]	1.5				11.29[#3]	0.91[#4]		50			0.01	2	0.002		0.05		2		0.01
NHMRC Recreational Guidelines 2008 - Health																			5000[#2]	15				112.9[#3]	9.1[#5]		500			0.1	20	0.02		0.5		20		0.1
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																					
2-4m																																					
4-8m																																					
>8m																																					

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																			
BH9C_13 Jul 16_-	BH9C	13/07/2016	water	5.17	6.31	1749	2.15	16.8	16.8	7.2	800	-	640	<5	-	-	220	29	22	100	83	86	0.2	-	-	22	-	-	-	-	100	-	-	-	-	-	-	-	-	-
BH9C_18 Oct 16_-	BH9C	18/10/2016	water	5.54	7.23	477	2.41	48	20.3	7	450	-	520	<5	-	-	250	20	7.5	28	23	19	0.2	-	-	4.8	-	-	-	-	230	-	-	-	-	-	-	-	-	-
BH9C_19 Jan 17_-	BH9C	19/01/2017	water	5.75	7.05	691	1.6	11	21.5	6.9	460	-	500	<5	-	-	310	17	6.2	26	23	31	0.2	-	-	1.5	0.51	0.021	-	-	490	<0.01	0.012	0.09	<0.0001	<0.001	<0.005	<0.001	<0.001	-	<0.001
BH9C_02 Jul 19_-	BH9C	2/07/2019	water	5.72	7.07	1110	8.28	-6.2	16.3	7	810	-	580	<5	-	-	190	23	16	71	85	88	0.2	-	-	13	-	-	-	-	150	-	-	-	-	-	-	-	-	-
BH9C_24 Oct 19_-	BH9C	24/10/2019	water	5.9	6.9	830	3.02	73.7	20.4	6.9	570	-	340	<5	-	-	160	9	5.9	26	32	86	0.2	-	-	0.19	-	-	-	-	30	-	-	-	-	-	-	-	-	-
BH9C_13 Jan 20_-	BH9C	13/01/2020	water	5.99	7.45	828	7.55	-415.7	20.3	7	680	-	370	<5	-	-	150	11	8	39	59	100	0.2	-	-	4.5	0.67	0.009	-	-	10	0.04	0.008	0.06	<0.0001	<0.001	<0.005	<0.001	0.018	-	<0.001
BH9C_23 Apr 20_-	BH9C	23/04/2020	water	5.66	7.14	1059	3.02	0.9	21.5	7.3	680	-	480	<5	-	-	140	24	13	57	60	77	0.2	-	-	12	-	-	-	-	27	-	-	-	-	-	-	-	-	-

Statistical Summary																																						
Number of Results	404	1114	887	421	421	421	420	1116	2	420	420	695	22	440	442	442	442	441	441	387	22	22	1115	127	127	431	628	420	106	801	106	106	610	106	106	630	1	632
Number of Detects	404	1114	887	421	421	421	420	1116	2	420	0	691	22	440	442	442	442	441	440	286	22	22	1012	104	56	423	592	415	29	756	106	6	475	2	23	462	1	411
Minimum Concentration	0.43	5.17	2.1	0.03	-1033	7.3	5.8	94	740	40	<1	<1	106	9	2.9	1	11	9	2	<0.1	3.25	3.34	<0.005	<0.005	<0.005	0.01	<0.01	<1	<0.005	0	0.003	<0.0001	0.0005	0.001	<0.001	<0.001	0.23	<0.001
Minimum Detect	0.43	5.17	2.1	0.03	ND	7.3	5.8	94	740	40	ND	1	106	9	2.9	1	11	9	2	0.1	3.25	3.34	0.005	0.006	0.005	0.01	0.01	1	0.01	0.001	0.003	0.0002	0.0005	0.001	0.001	0.001	0.23	0.001
Maximum Concentration	29.8	10.72	36800	10.15	496	28.4	8.1	3900	1100	1900	<5	129	686	1200	88	170	540	1000	480	0.7	20	22.1	240	51	0.31	24.8	32	490	0.2	0.328	0.29	0.0011	0.03	<0.5	0.022	0.028	0.23	0.028
Maximum Detect	29.8	10.72	36800	10.15	496	28.4	8.1	3900	1100	1900	ND	129	686	1200	88	170	540	1000	480	0.7	20	22.1	240	51	0.31	24.8	32	490	0.2	0.328	0.29	0.0011	0.03	0.007	0.022	0.028	0.23	0.028
Average Concentration	7.4	7.3	985	2.6	-12	19	7.2	643		378	1.3	14	365	156	21	9.8	75	86	97	0.15	11	12	2.1	1.9	0.028	2.8	1.7	27	0.014	0.029	0.049	0.000086	0.0026	0.0076	0.0012	0.0019		0.0011
Median Concentration	4.29	7.3	913	2.3	-4	19.3	7.2	610	920	370	0.5	10	398	150	19	7.8	55	60	75	0.13	10.7	11.45	0.24	0.12	0.005	1.1	0.16	10	0.005	0.004	0.0275	0.00005	0.001	0.0025	0.0005	0.001	0.23	0.001
Standard Deviation	7	0.49	1308	1.8	123	2.6	0.38	313		209	0.99	13	157	85	12	10	60	82	85	0.092	4.3	4.8	8	5.5	0.056	4	3.7	51	0.03	0.055	0.055	0.00016	0.0033	0.024	0.003	0.0028		0.0017
Number of Guideline Exceedances	0	55	0	0	0	0	19	576	0	0	0	0	0	0	0	0	21	14	30	0	0	0	510	6	0	0	0	0	1	294	0	0	0	1	0	0	0	9
Number of Guideline Exceedances(Detects Only)	0	55	0	0	0	0	19	576	0	0	0	0	0	0	0	0	21	14	30	0	0	0	510	6	0	0	0	0	1	294	0	0	0	0	0	0	0	9

Env Stds Comments

#1:Natural concentrations generally <0.01 mg/L
#2:Not specifically guideline value: >500mg/L can have purgative effects
#3:Guideline value calculated by dividing Nitrate (as Nitrate) value (50 mg/L) by 4.427
#4:Guideline value calculated by dividing Nitrite (as Nitrite) value (0.3 mg/L) by molecular weight (3.2967033).
#5:Guideline value calculated by dividing Nitrite (as Nitrite) value (30 mg/L) by molecular weight (3.2967033).
#6:Not limiting: Derived water HSL exceeds water solubility limit

				BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16														PAHs - extended	SVOCs	OC Pesticides																											
	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Hexachlorocyclohexane	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor
	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)	0.1		3[#1]		25	3			20																																																	
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	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Hexachlorocyclohexane	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor
	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
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NHMRC Recreational Guidelines 2008 - Health	5	0.01		10	8000	3000			6000														0.1																				90		200										100	3
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	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
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4-8m				*NL[#6]*	*NL[#6]*	*NL[#6]*			*NL[#6]*																					*NL[#6]*																															
>8m				*NL[#6]*	*NL[#6]*	*NL[#6]*			*NL[#6]*																					*NL[#6]*																															
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																																											
2-4m				5000	NL[#6]	NL[#6]			NL[#6]																					NL[#6]																															
4-8m				5000	NL[#6]	NL[#6]			NL[#6]																					NL[#6]																															
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| SampleCode | Location_Code | Sampled_Date_Time | Matrix_Type | | | | | | | | | | | | | | | | | | |

				BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	SVOCs	OC Pesticides																										
	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Hexachlorocyclohexane	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor
	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)	0.1		3[#1]		25	3			20																																															
ADWG 2011 Health (v3.5 updated 2018)	0.5	0.001		1	800	300			600														0.01																				9		20										10	0.3
NHMRC Recreational Guidelines 2008 - Health	5	0.01		10	8000	3000			6000														0.1																				90		200										100	3
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																																								
2-4m				**NL[#6]**	**NL[#6]**	**NL[#6]**			**NL[#6]**																					**NL[#6]**																											
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				BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	SVOCs	OC Pesticides																												
	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Hexachlorocyclohexane	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor
	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)	0.1		3[#1]		25	3			20																																																	
ADWG 2011 Health (v3.5 updated 2018)	0.5	0.001		1	800	300			600														0.01																																			
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				BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	SVOCs	OC Pesticides																												
	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Hexachlorocyclohexane	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor
	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
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	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
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	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Hexachlorocyclohexane	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor
	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
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	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
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4-8m				5000	NL[#6]	NL[#6]			NL[#6]																						NL[#6]																															
>8m				5000	NL[#6]	NL[#6]			NL[#6]																						NL[#6]																															

| SampleCode | Location_Code | Sampled_Date_Time | Matrix_Type | | | | | | | | | | | | | | | | | | |

				BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	SVOCs	OC Pesticides																										
	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Hexachlorocyclohexane	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor
	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)	0.1		3[#1]		25	3			20																																																
ADWG 2011 Health (v3.5 updated 2018)	0.5	0.001		1	800	300			600														0.01																																		
NHMRC Recreational Guidelines 2008 - Health	5	0.01		10	8000	3000			6000														0.1																																		
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				BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	SVOCs	OC Pesticides																												
	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Hexachlorocyclohexane	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor
	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)	0.1		3[#1]		25	3			20																																																	
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				BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	SVOCs	OC Pesticides																										
	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Hexachlorocyclohexane	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor
	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
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	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Hexachlorocyclohexane	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor
	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
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	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
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	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
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| SampleCode | Location_Code | Sampled_Date_Time | Matrix_Type | | | | | | | | | | | | | | | | | | |

				BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16												PAHs - extended	SVOCs	OC Pesticides																											
	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Hexachlorocyclohexane	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor
	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)	0.1		3[#1]		25	3			20																																																	
ADWG 2011 Health (v3.5 updated 2018)	0.5	0.001		1	800	300			600														0.01																																			
NHMRC Recreational Guidelines 2008 - Health	5	0.01		10	8000	3000			6000														0.1																																			
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																																									
2-4m				**NL[#6]**	**NL[#6]**	**NL[#6]**			**NL[#6]**																						**NL[#6]**																													
4-8m				**NL[#6]**	**NL[#6]**	**NL[#6]**			**NL[#6]**																						**NL[#6]**																													
>8m				**NL[#6]**	**NL[#6]**	**NL[#6]**			**NL[#6]**																						**NL[#6]**																													
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																																									
2-4m				*NL[#6]*	*NL[#6]*	*NL[#6]*			*NL[#6]*																						*NL[#6]*																													
4-8m				*NL[#6]*	*NL[#6]*	*NL[#6]*			*NL[#6]*																						*NL[#6]*																													
>8m				*NL[#6]*	*NL[#6]*	*NL[#6]*			*NL[#6]*																						*NL[#6]*																													
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																																									
2-4m				5000	NL[#6]	NL[#6]			NL[#6]																						NL[#6]																													
4-8m				5000	NL[#6]	NL[#6]			NL[#6]																						NL[#6]																													
>8m				5000	NL[#6]	NL[#6]			NL[#6]																						NL[#6]																													

| SampleCode | Location_Code | Sampled_Date_Time | Matrix_Type | | | | | | | | | | | | | | | | | | |

				BTEXN							TRH - NEPM 2013				TRH - NEPM 1999				PAHs - standard 16													PAHs - extended	SVOCs	OC Pesticides																										
	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Xylene (m)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(b)&(k)fluoranthene	Hexachlorocyclohexane	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor
	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)	0.1		3[#1]		25	3			20																																																	
ADWG 2011 Health (v3.5 updated 2018)	0.5	0.001		1	800	300			600														0.01																																			
NHMRC Recreational Guidelines 2008 - Health	5	0.01		10	8000	3000			6000														0.1																																			
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																																										
2-4m				**NL[#6]**	**NL[#6]**	**NL[#6]**			**NL[#6]**																						**NL[#6]**																													
4-8m				**NL[#6]**	**NL[#6]**	**NL[#6]**			**NL[#6]**																						**NL[#6]**																													
>8m				**NL[#6]**	**NL[#6]**	**NL[#6]**			**NL[#6]**																						**NL[#6]**																													
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																																											
2-4m				*NL[#6]*	*NL[#6]*	*NL[#6]*			*NL[#6]*																						*NL[#6]*																													
4-8m				*NL[#6]*	*NL[#6]*	*NL[#6]*			*NL[#6]*																						*NL[#6]*																													
>8m				*NL[#6]*	*NL[#6]*	*NL[#6]*			*NL[#6]*																						*NL[#6]*																													
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																																										
2-4m				5000	NL[#6]	NL[#6]			NL[#6]																						NL[#6]																													
4-8m				5000	NL[#6]	NL[#6]			NL[#6]																						NL[#6]																													
>8m				5000	NL[#6]	NL[#6]			NL[#6]																						NL[#6]																													

| SampleCode | Location_Code | Sampled_Date_Time | Matrix_Type | | | | | | | | | | | | | | | | | | |

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
AB01_01 Jul 01_-	AB01	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Oct 01_-	AB01	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Jan 02_-	AB01	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Apr 02_-	AB01	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Jul 02_-	AB01	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Apr 03_-	AB01	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Jul 04_-	AB01	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB01_01 Jan 05_-	AB01	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jun 94_-	BH10	1/06/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Sep 94_-	BH10	1/09/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Dec 94_-	BH10	1/12/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Mar 95_-	BH10	1/03/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jun 95_-	BH10	1/06/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Sep 95_-	BH10	1/09/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 96_-	BH10	1/01/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 96_-	BH10	1/04/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 96_-	BH10	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 96_-	BH10	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 97_-	BH10	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 97_-	BH10	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 97_-	BH10	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 97_-	BH10	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 98_-	BH10	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 98_-	BH10	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 98_-	BH10	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 98_-	BH10	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 99_-	BH10	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Mar 99_-	BH10	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 99_-	BH10	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 99_-	BH10	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 00_-	BH10	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 00_-	BH10	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 00_-	BH10	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 00_-	BH10	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 01_-	BH10	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 01_-	BH10	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 01_-	BH10	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 01_-	BH10	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 02_-	BH10	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 02_-	BH10	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 02_-	BH10	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 02_-	BH10	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 03_-	BH10	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Apr 03_-	BH10	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jul 03_-	BH10	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Oct 03_-	BH10	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_01 Jan 04_-	BH10	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_29 Jul 14_-	BH10	29/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_15 Oct 14_-	BH10	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_20 Jan 15_-	BH10	20/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH10_22 Apr 15_-	BH10	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_21 Jul 15_-	BH10	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_20 Oct 15_-	BH10	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_20 Jan 16_-	BH10	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH10_14 Apr 16_-	BH10	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_13 Jul 16_-	BH10	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10_18 Oct 16_-	BH10	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 01_-	BH10A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Oct 01_-	BH10A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 02_-	BH10A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 02_-	BH10A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 02_-	BH10A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				OP Pesticides									Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH10A_01 Oct 02_-_	BH10A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 03_-_	BH10A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 03_-_	BH10A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 03_-_	BH10A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Oct 03_-_	BH10A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 04_-_	BH10A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 04_-_	BH10A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 04_-_	BH10A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Oct 04_-_	BH10A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 05_-_	BH10A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 05_-_	BH10A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 05_-_	BH10A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Oct 05_-_	BH10A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 06_-_	BH10A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 06_-_	BH10A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jul 06_-_	BH10A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Oct 06_-_	BH10A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Jan 07_-_	BH10A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10A_01 Apr 07_-_	BH10A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_12 Apr 17_-_	BH10B	12/04/2017	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_05 Jul 17_-_	BH10B	5/07/2017	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_09 Oct 17_-_	BH10B	9/10/2017	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_15 Jan 18_-_	BH10B	15/01/2018	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH10B_23 Apr 18_-_	BH10B	23/04/2018	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_09 Jul 18_-_	BH10B	9/07/2018	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_08 Oct 18_-_	BH10B	8/10/2018	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_22 Jan 19_-_	BH10B	22/01/2019	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH10B_09 Apr 19_-_	BH10B	9/04/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_02 Jul 19_-_	BH10B	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_24 Oct 19_-_	BH10B	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10B_15 Jan 20_-_	BH10B	15/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH10B_22 Apr 20_-_	BH10B	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jun 94_-_	BH11	1/06/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Sep 94_-_	BH11	1/09/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Dec 94_-_	BH11	1/12/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Mar 95_-_	BH11	1/03/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jun 95_-_	BH11	1/06/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Sep 95_-_	BH11	1/09/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 96_-_	BH11	1/01/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 96_-_	BH11	1/04/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 96_-_	BH11	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 96_-_	BH11	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 97_-_	BH11	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 97_-_	BH11	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 97_-_	BH11	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 97_-_	BH11	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 98_-_	BH11	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 98_-_	BH11	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 98_-_	BH11	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 98_-_	BH11	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Nov 98_-_	BH11	1/11/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 99_-_	BH11	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Mar 99_-_	BH11	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 99_-_	BH11	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 99_-_	BH11	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 00_-_	BH11	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 00_-_	BH11	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 00_-_	BH11	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 00_-_	BH11	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 01_-_	BH11	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 01_-_	BH11	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 01_-_	BH11	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH11_01 Oct 01_-	BH11	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 02_-	BH11	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 02_-	BH11	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 02_-	BH11	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 02_-	BH11	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 03_-	BH11	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 03_-	BH11	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 03_-	BH11	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 03_-	BH11	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 04_-	BH11	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 04_-	BH11	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 04_-	BH11	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 05_-	BH11	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 05_-	BH11	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 05_-	BH11	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 06_-	BH11	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jul 06_-	BH11	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Oct 06_-	BH11	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Jan 07_-	BH11	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11_01 Apr 07_-	BH11	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_01 Jan 06_-	BH11A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_16 Apr 13_-	BH11A	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_09 Jul 13_-	BH11A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_29 Oct 13_-	BH11A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_28 Jan 14_-	BH11A	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH11A_16 Apr 14_-	BH11A	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_16 Apr 14_-2	BH11A	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_09 Jul 14_-	BH11A	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_16 Oct 14_-	BH11A	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_21 Jan 15_-	BH11A	21/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH11A_23 Apr 15_-	BH11A	23/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_21 Jul 15_-	BH11A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_21 Oct 15_-	BH11A	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_21 Jan 16_-	BH11A	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH11A_19 Apr 16_-	BH11A	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_13 Jul 16_-	BH11A	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_18 Oct 16_-	BH11A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_19 Jan 17_-	BH11A	19/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH11A_25 Jan 17_-	BH11A	25/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH11A_02 Jul 19_-	BH11A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_25 Oct 19_-	BH11A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11A_14 Jan 20_-	BH11A	14/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH11A_22 Apr 20_-	BH11A	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Sep 94_-	BH12	1/09/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Dec 94_-	BH12	1/12/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Mar 95_-	BH12	1/03/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Jun 95_-	BH12	1/06/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Sep 95_-	BH12	1/09/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Jan 96_-	BH12	1/01/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Apr 96_-	BH12	1/04/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Jul 96_-	BH12	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Oct 96_-	BH12	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Jan 97_-	BH12	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Apr 97_-	BH12	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Jul 97_-	BH12	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Oct 97_-	BH12	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Jan 98_-	BH12	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Apr 98_-	BH12	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Jul 98_-	BH12	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Oct 98_-	BH12	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Jan 99_-	BH12	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Mar 99_-	BH12	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH12_01 Jul 99_-	BH12	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12_01 Oct 99_-	BH12	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 00_-	BH12A	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 00_-	BH12A	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 00_-	BH12A	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 01_-	BH12A	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 01_-	BH12A	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 01_-	BH12A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 01_-	BH12A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 02_-	BH12A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 02_-	BH12A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 02_-	BH12A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 02_-	BH12A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 03_-	BH12A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 03_-	BH12A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 03_-	BH12A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 03_-	BH12A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 04_-	BH12A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 04_-	BH12A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 04_-	BH12A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 04_-	BH12A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 05_-	BH12A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 05_-	BH12A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 05_-	BH12A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 05_-	BH12A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 06_-	BH12A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 06_-	BH12A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jul 06_-	BH12A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Oct 06_-	BH12A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Jan 07_-	BH12A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_01 Apr 07_-	BH12A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_17 Apr 13_-	BH12A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_09 Jul 13_-	BH12A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_29 Oct 13_-	BH12A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_28 Jan 14_-	BH12A	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH12A_14 Apr 14_-	BH12A	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_07 Jul 14_-	BH12A	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_15 Oct 14_-	BH12A	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_21 Jan 15_-	BH12A	21/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH12A_23 Apr 15_-	BH12A	23/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_21 Jul 15_-	BH12A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_20 Oct 15_-	BH12A	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_21 Jan 16_-	BH12A	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH12A_14 Apr 16_-	BH12A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_21 Jul 16_-	BH12A	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_18 Oct 16_-	BH12A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_19 Jan 17_-	BH12A	19/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH12A_03 Jul 19_-	BH12A	3/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_25 Oct 19_-	BH12A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12A_13 Jan 20_-	BH12A	13/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH12A_23 Apr 20_-	BH12A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Dec 94_-	BH13	1/12/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Mar 95_-	BH13	1/03/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jun 95_-	BH13	1/06/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Sep 95_-	BH13	1/09/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jan 96_-	BH13	1/01/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Apr 96_-	BH13	1/04/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jul 96_-	BH13	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Oct 96_-	BH13	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jan 97_-	BH13	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Apr 97_-	BH13	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jul 97_-	BH13	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH13_01 Oct 97_-	BH13	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jan 98_-	BH13	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Apr 98_-	BH13	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jul 98_-	BH13	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Oct 98_-	BH13	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jan 99_-	BH13	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Mar 99_-	BH13	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jul 99_-	BH13	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Oct 99_-	BH13	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13_01 Jan 00_-	BH13	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 00_-	BH13A	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 00_-	BH13A	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 00_-	BH13A	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 01_-	BH13A	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 01_-	BH13A	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 01_-	BH13A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 01_-	BH13A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 02_-	BH13A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 02_-	BH13A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 02_-	BH13A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 02_-	BH13A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 03_-	BH13A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 03_-	BH13A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 03_-	BH13A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 03_-	BH13A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 04_-	BH13A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 04_-	BH13A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 04_-	BH13A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 04_-	BH13A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 05_-	BH13A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 05_-	BH13A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 05_-	BH13A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 05_-	BH13A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 06_-	BH13A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 06_-	BH13A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jul 06_-	BH13A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Oct 06_-	BH13A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Jan 07_-	BH13A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_01 Apr 07_-	BH13A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_17 Apr 13_-	BH13A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_09 Jul 13_-	BH13A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_29 Oct 13_-	BH13A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_28 Jan 14_-	BH13A	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH13A_14 Apr 14_-	BH13A	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_07 Jul 14_-	BH13A	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_15 Oct 14_-	BH13A	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_27 Apr 15_-	BH13A	27/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_21 Jul 15_-	BH13A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_20 Oct 15_-	BH13A	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_21 Jan 16_-	BH13A	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH13A_19 Apr 16_-	BH13A	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_21 Jul 16_-	BH13A	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_18 Oct 16_-	BH13A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_03 Jul 19_-	BH13A	3/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_25 Oct 19_-	BH13A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH13A_13 Jan 20_-	BH13A	13/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH13A_23 Apr 20_-	BH13A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 97_-	BH14	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 97_-	BH14	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 97_-	BH14	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 97_-	BH14	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 98_-	BH14	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH14_01 Apr 98_-	BH14	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 98_-	BH14	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 98_-	BH14	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 99_-	BH14	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Mar 99_-	BH14	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 99_-	BH14	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 99_-	BH14	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 00_-	BH14	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 00_-	BH14	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 00_-	BH14	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 00_-	BH14	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 01_-	BH14	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 01_-	BH14	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 01_-	BH14	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 01_-	BH14	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 02_-	BH14	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 02_-	BH14	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 02_-	BH14	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 02_-	BH14	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 03_-	BH14	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 03_-	BH14	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 03_-	BH14	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 03_-	BH14	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 04_-	BH14	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 04_-	BH14	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 04_-	BH14	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 04_-	BH14	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 05_-	BH14	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 05_-	BH14	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jun 05_-	BH14	1/06/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 05_-	BH14	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 06_-	BH14	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 06_-	BH14	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jul 06_-	BH14	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Oct 06_-	BH14	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Jan 07_-	BH14	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_01 Apr 07_-	BH14	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_16 Apr 13_-	BH14	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_22 Apr 15_-	BH14	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_22 Jul 15_-	BH14	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_20 Oct 15_-	BH14	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14_20 Jan 16_-	BH14	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH14A_29 Jul 14_-	BH14A	29/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_29 Oct 14_-	BH14A	29/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_20 Jan 15_-	BH14A	20/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH14A_14 Apr 16_-	BH14A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_13 Jul 16_-	BH14A	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_19 Jan 17_-	BH14A	19/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH14A_02 Jul 19_-	BH14A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_24 Oct 19_-	BH14A	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH14A_27 Apr 20_-	BH14A	27/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 97_-	BH15	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 97_-	BH15	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 97_-	BH15	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 97_-	BH15	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 98_-	BH15	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 98_-	BH15	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 98_-	BH15	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 98_-	BH15	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 99_-	BH15	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Mar 99_-	BH15	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 99_-	BH15	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH15_01 Oct 99_-_-	BH15	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 00_-_-	BH15	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 00_-_-	BH15	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 00_-_-	BH15	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 00_-_-	BH15	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 01_-_-	BH15	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 01_-_-	BH15	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jun 01_-_-	BH15	1/06/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 01_-_-	BH15	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 02_-_-	BH15	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 02_-_-	BH15	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 02_-_-	BH15	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 02_-_-	BH15	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 03_-_-	BH15	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 03_-_-	BH15	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 03_-_-	BH15	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 03_-_-	BH15	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 04_-_-	BH15	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 04_-_-	BH15	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 04_-_-	BH15	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 04_-_-	BH15	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 05_-_-	BH15	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 05_-_-	BH15	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jun 05_-_-	BH15	1/06/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 05_-_-	BH15	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Feb 06_-_-	BH15	1/02/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 06_-_-	BH15	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jul 06_-_-	BH15	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Oct 06_-_-	BH15	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Jan 07_-_-	BH15	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_01 Apr 07_-_-	BH15	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_16 Apr 13_-_-	BH15	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_09 Jul 13_-_-	BH15	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_29 Oct 13_-_-	BH15	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_28 Jan 14_-_-	BH15	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH15_16 Apr 14_-_-	BH15	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_07 Jul 14_-_-	BH15	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_07 Jul 14_-2_-	BH15	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_16 Oct 14_-_-	BH15	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_20 Jan 15_-_-	BH15	20/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH15_22 Apr 15_-_-	BH15	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_22 Jul 15_-_-	BH15	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_20 Oct 15_-_-	BH15	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_20 Jan 16_-_-	BH15	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH15_14 Apr 16_-_-	BH15	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_13 Jul 16_-_-	BH15	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_18 Oct 16_-_-	BH15	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_25 Jan 17_-_-	BH15	25/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH15_02 Jul 19_-_-	BH15	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_24 Oct 19_-_-	BH15	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH15_14 Jan 20_-_-	BH15	14/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH15_22 Apr 20_-_-	BH15	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 00_-_-	BH16	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jul 00_-_-	BH16	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Oct 00_-_-	BH16	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 01_-_-	BH16	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 01_-_-	BH16	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jun 01_-_-	BH16	1/06/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Oct 01_-_-	BH16	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 02_-_-	BH16	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 02_-_-	BH16	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jul 02_-_-	BH16	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH16_01 Oct 02_-	BH16	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 03_-	BH16	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 03_-	BH16	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jun 03_-	BH16	1/06/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Oct 03_-	BH16	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 04_-	BH16	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 04_-	BH16	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jul 04_-	BH16	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Oct 04_-	BH16	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 05_-	BH16	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 05_-	BH16	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jul 05_-	BH16	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Oct 05_-	BH16	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 06_-	BH16	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 06_-	BH16	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jul 06_-	BH16	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Oct 06_-	BH16	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Jan 07_-	BH16	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_01 Apr 07_-	BH16	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_16 Apr 13_-	BH16	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_22 Jul 13_-	BH16	22/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_29 Oct 13_-	BH16	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_28 Jan 14_-	BH16	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH16_16 Apr 14_-	BH16	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_09 Jul 14_-	BH16	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_16 Oct 14_-	BH16	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_20 Jan 15_-	BH16	20/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH16_22 Apr 15_-	BH16	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_22 Jul 15_-	BH16	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_20 Oct 15_-	BH16	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_20 Jan 16_-	BH16	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH16_14 Apr 16_-	BH16	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_13 Jul 16_-	BH16	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_18 Oct 16_-	BH16	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_25 Jan 17_-	BH16	25/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH16_02 Jul 19_-	BH16	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_24 Oct 19_-	BH16	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH16_14 Jan 20_-	BH16	14/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH16_22 Apr 20_-	BH16	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 00_-	BH17	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 00_-	BH17	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 01_-	BH17	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 01_-	BH17	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jun 01_-	BH17	1/06/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 01_-	BH17	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 02_-	BH17	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 02_-	BH17	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 02_-	BH17	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 02_-	BH17	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 03_-	BH17	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 03_-	BH17	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 03_-	BH17	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 03_-	BH17	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 04_-	BH17	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 04_-	BH17	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 04_-	BH17	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 04_-	BH17	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 05_-	BH17	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 05_-	BH17	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 05_-	BH17	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 05_-	BH17	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 06_-	BH17	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH17_01 Apr 06_-	BH17	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jul 06_-	BH17	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Oct 06_-	BH17	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Jan 07_-	BH17	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_01 Apr 07_-	BH17	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_17 Apr 13_-	BH17	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_22 Jul 13_-	BH17	22/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_14 Apr 14_-	BH17	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_07 Jul 14_-	BH17	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_22 Apr 15_-	BH17	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_21 Jul 15_-	BH17	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_20 Oct 15_-	BH17	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_21 Jan 16_-	BH17	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH17_14 Apr 16_-	BH17	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_21 Jul 16_-	BH17	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_02 Jul 19_-	BH17	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_24 Oct 19_-	BH17	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_15 Jan 20_-	BH17	15/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH17_23 Apr 20_-	BH17	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jun 01_-	BH18	1/06/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 01_-	BH18	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 02_-	BH18	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 02_-	BH18	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jun 02_-	BH18	1/06/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 02_-	BH18	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 03_-	BH18	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 03_-	BH18	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jul 03_-	BH18	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 03_-	BH18	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 04_-	BH18	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 04_-	BH18	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jul 04_-	BH18	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 04_-	BH18	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 05_-	BH18	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 05_-	BH18	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jul 05_-	BH18	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 05_-	BH18	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 06_-	BH18	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 06_-	BH18	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jul 06_-	BH18	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Oct 06_-	BH18	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Jan 07_-	BH18	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_01 Apr 07_-	BH18	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_16 Apr 13_-	BH18	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_30 Oct 13_-	BH18	30/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_28 Jan 14_-	BH18	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH18_16 Apr 14_-	BH18	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_29 Oct 14_-	BH18	29/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_21 Jan 15_-	BH18	21/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH18_23 Apr 15_-	BH18	23/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_21 Jul 15_-	BH18	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_21 Oct 15_-	BH18	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_21 Jan 16_-	BH18	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH18_19 Apr 16_-	BH18	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_18 Oct 16_-	BH18	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_19 Jan 17_-	BH18	19/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH18_03 Jul 19_-	BH18	3/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_25 Oct 19_-	BH18	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH18_13 Jan 20_-	BH18	13/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH18_23 Apr 20_-	BH18	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_01 Jul 06_-	BH19	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_01 Oct 06_-	BH19	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH19 _01 Jan 07 _-	BH19	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	<5	-	3
BH19_01 Jan 07 _-	BH19	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_01 Apr 07 _-	BH19	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_16 Apr 13 _-	BH19	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_09 Jul 13 _-	BH19	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_29 Oct 13 _-	BH19	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_28 Jan 14 _-	BH19	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH19_16 Apr 14 _-	BH19	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_07 Jul 14 _-	BH19	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_29 Jul 14 _-	BH19	29/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_16 Oct 14 _-	BH19	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_20 Jan 15 _-	BH19	20/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH19_22 Apr 15 _-	BH19	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_21 Jul 15 _-	BH19	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_20 Oct 15 _-	BH19	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_20 Jan 16 _-	BH19	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH19_14 Apr 16 _-	BH19	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_13 Jul 16 _-	BH19	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_18 Oct 16 _-	BH19	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_19 Jan 17 _-	BH19	19/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH19A_02 Jul 19 _-	BH19A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19A_24 Oct 19 _-	BH19A	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19A_15 Jan 20 _-	BH19A	15/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH19A_22 Apr 20 _-	BH19A	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19B_18 Nov 19 _-	BH19B	18/11/2019	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH19B_15 Jan 20 _-	BH19B	15/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH19B_22 Apr 20 _-	BH19B	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_01 Jul 06_-	BH20	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_01 Oct 06 _-	BH20	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20 _01 Jan 07 _-	BH20	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	<5	-	-
BH20_01 Jan 07 _-	BH20	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_01 Apr 07 _-	BH20	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_16 Apr 13 _-	BH20	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_28 Jan 14 _-	BH20	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH20_07 Jul 14 _-	BH20	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_21 Jan 15 _-	BH20	21/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH20_27 Apr 15 _-	BH20	27/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_20 Oct 15 _-	BH20	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_10 Mar 16 _-	BH20	10/03/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH20_19 Apr 16 _-	BH20	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_25 Jan 17 _-	BH20	25/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH20_02 Jul 19 _-	BH20	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_24 Oct 19 _-	BH20	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_14 Jan 20 _-	BH20	14/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH20_22 Apr 20 _-	BH20	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_01 Jul 06_-	BH22	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_01 Oct 06 _-	BH22	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22 _01 Jan 07 _-	BH22	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	<5	-	8
BH22_01 Jan 07 _-	BH22	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_01 Apr 07 _-	BH22	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_22 Jul 13 _-	BH22	22/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_29 Oct 13 _-	BH22	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_28 Jan 14 _-	BH22	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH22_16 Apr 14 _-	BH22	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_07 Jul 14 _-	BH22	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_16 Oct 14 _-	BH22	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_20 Jan 15 _-	BH22	20/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH22_22 Apr 15 _-	BH22	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_22 Jul 15_-	BH22	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_20 Oct 15 _-	BH22	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_20 Jan 16 _-	BH22	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH22_14 Apr 16 _-	BH22	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH22_13 Jul 16_-	BH22	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_18 Oct 16_-	BH22	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_25 Jan 17_-	BH22	25/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH22_02 Jul 19_-	BH22	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_24 Oct 19_-	BH22	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH22_14 Jan 20_-	BH22	14/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH22_22 Apr 20_-	BH22	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_01 Jul 06_-	BH23	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_01 Oct 06_-	BH23	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_01 Jan 07_-	BH23	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	<5	-	-
BH23_01 Jan 07_-	BH23	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_01 Apr 07_-	BH23	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_16 Apr 13_-	BH23	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_09 Jul 13_-	BH23	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_29 Oct 13_-	BH23	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_28 Jan 14_-	BH23	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH23_16 Apr 14_-	BH23	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_07 Jul 14_-	BH23	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_16 Oct 14_-	BH23	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_20 Jan 15_-	BH23	20/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH23_22 Apr 15_-	BH23	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_22 Jul 15_-	BH23	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_20 Oct 15_-	BH23	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_20 Jan 16_-	BH23	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH23_14 Apr 16_-	BH23	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_13 Jul 16_-	BH23	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_18 Oct 16_-	BH23	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_25 Jan 17_-	BH23	25/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH23_02 Jul 19_-	BH23	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_24 Oct 19_-	BH23	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_15 Jan 20_-	BH23	15/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH23_22 Apr 20_-	BH23	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_01 Jul 06_-	BH24	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_01 Oct 06_-	BH24	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_01 Jan 07_-	BH24	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_01 Apr 07_-	BH24	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_16 Apr 13_-	BH24	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_29 Oct 13_-	BH24	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_28 Jan 14_-	BH24	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH24_16 Apr 14_-	BH24	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_09 Jul 14_-	BH24	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_16 Oct 14_-	BH24	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_21 Jan 15_-	BH24	21/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH24_22 Apr 15_-	BH24	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_22 Jul 15_-	BH24	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_21 Oct 15_-	BH24	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_20 Jan 16_-	BH24	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH24_14 Apr 16_-	BH24	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_13 Jul 16_-	BH24	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_18 Oct 16_-	BH24	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_25 Jan 17_-	BH24	25/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH24_02 Jul 19_-	BH24	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_25 Oct 19_-	BH24	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH24_14 Jan 20_-	BH24	14/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH24_23 Apr 20_-	BH24	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_17 Apr 13_-	BH25	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_09 Jul 13_-	BH25	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_28 Jan 14_-	BH25	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH25_16 Apr 14_-	BH25	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_07 Jul 14_-	BH25	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_15 Oct 14_-	BH25	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_21 Jan 15_-	BH25	21/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH25_22 Apr 15_-	BH25	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_21 Jul 15_-	BH25	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_20 Oct 15_-	BH25	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_21 Jan 16_-	BH25	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH25_14 Apr 16_-	BH25	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_21 Jul 16_-	BH25	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_18 Oct 16_-	BH25	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_25 Jan 17_-	BH25	25/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH25_02 Jul 19_-	BH25	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_25 Oct 19_-	BH25	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_13 Jan 20_-	BH25	13/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH25_23 Apr 20_-	BH25	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jul 00_-	BH3A	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Oct 00_-	BH3A	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jan 01_-	BH3A	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Apr 01_-	BH3A	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jul 01_-	BH3A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Oct 01_-	BH3A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jan 02_-	BH3A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Apr 02_-	BH3A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jul 02_-	BH3A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Oct 02_-	BH3A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jan 03_-	BH3A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Apr 03_-	BH3A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jul 03_-	BH3A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Oct 03_-	BH3A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jan 04_-	BH3A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Apr 04_-	BH3A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jul 04_-	BH3A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Oct 04_-	BH3A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jan 05_-	BH3A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Apr 05_-	BH3A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jul 05_-	BH3A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Oct 05_-	BH3A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jan 06_-	BH3A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Apr 06_-	BH3A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jul 06_-	BH3A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Oct 06_-	BH3A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Jan 07_-	BH3A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_01 Apr 07_-	BH3A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_16 Apr 13_-	BH3A	16/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_09 Jul 13_-	BH3A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_30 Oct 13_-	BH3A	30/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_28 Jan 14_-	BH3A	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH3A_14 Apr 14_-	BH3A	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_07 Jul 14_-	BH3A	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_15 Oct 14_-	BH3A	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_21 Jan 15_-	BH3A	21/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH3A_22 Apr 15_-	BH3A	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_21 Jul 15_-	BH3A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_20 Oct 15_-	BH3A	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_21 Jan 16_-	BH3A	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH3A_14 Apr 16_-	BH3A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_21 Jul 16_-	BH3A	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_18 Oct 16_-	BH3A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_19 Jan 17_-	BH3A	19/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH3A_02 Jul 19_-	BH3A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_24 Oct 19_-	BH3A	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3A_27 Apr 20_-	BH3A	27/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Sep 94_-	BH4	1/09/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Dec 94_-	BH4	1/12/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Mar 95_-	BH4	1/03/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH4_01 Jun 95_-	BH4	1/06/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Sep 95_-	BH4	1/09/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Jan 96_-	BH4	1/01/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Apr 96_-	BH4	1/04/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Jul 96_-	BH4	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Oct 96_-	BH4	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Jan 97_-	BH4	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Apr 97_-	BH4	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Jul 97_-	BH4	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Oct 97_-	BH4	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Jan 98_-	BH4	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4_01 Apr 98_-	BH4	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 98_-	BH4A	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 98_-	BH4A	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 98_-	BH4A	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 98_-	BH4A	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 99_-	BH4A	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Mar 99_-	BH4A	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 99_-	BH4A	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 99_-	BH4A	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 00_-	BH4A	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 00_-	BH4A	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 00_-	BH4A	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 00_-	BH4A	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 01_-	BH4A	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 01_-	BH4A	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 01_-	BH4A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 01_-	BH4A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 02_-	BH4A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 02_-	BH4A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 02_-	BH4A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 02_-	BH4A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 03_-	BH4A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 03_-	BH4A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 03_-	BH4A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 03_-	BH4A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 04_-	BH4A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 04_-	BH4A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 04_-	BH4A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 04_-	BH4A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 05_-	BH4A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 05_-	BH4A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 05_-	BH4A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 05_-	BH4A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 06_-	BH4A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 06_-	BH4A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jul 06_-	BH4A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Oct 06_-	BH4A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Jan 07_-	BH4A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_01 Apr 07_-	BH4A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_17 Apr 13_-	BH4A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_22 Jul 13_-	BH4A	22/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_30 Oct 13_-	BH4A	30/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_28 Jan 14_-	BH4A	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH4A_14 Apr 14_-	BH4A	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_07 Jul 14_-	BH4A	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_15 Oct 14_-	BH4A	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_21 Jan 15_-	BH4A	21/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH4A_27 Apr 15_-	BH4A	27/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_21 Jul 15_-	BH4A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_20 Oct 15_-	BH4A	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_20 Jan 16_-	BH4A	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH4A_14 Apr 16_-	BH4A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_21 Jul 16_-	BH4A	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_18 Oct 16_-	BH4A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_19 Jan 17_-	BH4A	19/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH4A_03 Jul 19_-	BH4A	3/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_25 Oct 19_-	BH4A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4A_13 Jan 20_-	BH4A	13/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH4A_23 Apr 20_-	BH4A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 00_-	BH5A	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 00_-	BH5A	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 01_-	BH5A	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 01_-	BH5A	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 01_-	BH5A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 01_-	BH5A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 02_-	BH5A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 02_-	BH5A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 02_-	BH5A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 03_-	BH5A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 03_-	BH5A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 03_-	BH5A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 03_-	BH5A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 04_-	BH5A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 04_-	BH5A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 04_-	BH5A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 04_-	BH5A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 05_-	BH5A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 05_-	BH5A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 05_-	BH5A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 05_-	BH5A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 06_-	BH5A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 06_-	BH5A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jul 06_-	BH5A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Oct 06_-	BH5A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Jan 07_-	BH5A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_01 Apr 07_-	BH5A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_17 Apr 13_-	BH5A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_22 Jul 13_-	BH5A	22/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_30 Oct 13_-	BH5A	30/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_28 Jan 14_-	BH5A	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH5A_14 Apr 14_-	BH5A	14/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_07 Jul 14_-	BH5A	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_15 Oct 14_-	BH5A	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_21 Jan 15_-	BH5A	21/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH5A_22 Apr 15_-	BH5A	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_21 Jul 15_-	BH5A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_20 Oct 15_-	BH5A	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_21 Jan 16_-	BH5A	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH5A_14 Apr 16_-	BH5A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_21 Jul 16_-	BH5A	21/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_18 Oct 16_-	BH5A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_19 Jan 17_-	BH5A	19/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH5A_02 Jul 19_-	BH5A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_24 Oct 19_-	BH5A	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5A_15 Jan 20_-	BH5A	15/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH5A_23 Apr 20_-	BH5A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jul 01_-	BH6A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 01_-	BH6A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 02_-	BH6A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Apr 02_-	BH6A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jul 02_-	BH6A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 02_-	BH6A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 03_-	BH6A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH6A_01 Apr 03_-	BH6A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jul 03_-	BH6A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 03_-	BH6A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 04_-	BH6A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Apr 04_-	BH6A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jul 04_-	BH6A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 04_-	BH6A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 05_-	BH6A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Apr 05_-	BH6A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A _01 Jul 05_-	BH6A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 05_-	BH6A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 06_-	BH6A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Apr 06_-	BH6A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jul 06_-	BH6A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Oct 06_-	BH6A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Jan 07_-	BH6A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_01 Apr 07_-	BH6A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_17 Apr 13_-	BH6A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_09 Jul 13_-	BH6A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_29 Oct 13_-	BH6A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_28 Jan 14_-	BH6A	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH6A_16 Apr 14_-	BH6A	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_09 Jul 14_-	BH6A	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_16 Oct 14_-	BH6A	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_20 Jan 15_-	BH6A	20/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH6A_27 Apr 15_-	BH6A	27/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_22 Jul 15_-	BH6A	22/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_21 Oct 15_-	BH6A	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_20 Jan 16_-	BH6A	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH6A_14 Apr 16_-	BH6A	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_20 Sep 16_-	BH6A	20/09/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_18 Oct 16_-	BH6A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_19 Jan 17_-	BH6A	19/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH6A_25 Jan 17_-	BH6A	25/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH6A_02 Jul 19_-	BH6A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_25 Oct 19_-	BH6A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6A_14 Jan 20_-	BH6A	14/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH6A_23 Apr 20_-	BH6A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Sep 93_-	BH7	1/09/1993	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jun 94_-	BH7	1/06/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Sep 94_-	BH7	1/09/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Dec 94_-	BH7	1/12/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Mar 95_-	BH7	1/03/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jun 95_-	BH7	1/06/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Sep 95_-	BH7	1/09/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jan 96_-	BH7	1/01/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Apr 96_-	BH7	1/04/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jul 96_-	BH7	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Oct 96_-	BH7	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jan 97_-	BH7	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Apr 97_-	BH7	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jul 97_-	BH7	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Oct 97_-	BH7	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Jan 98_-	BH7	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7_01 Apr 98_-	BH7	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 98_-	BH7A	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 98_-	BH7A	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 98_-	BH7A	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 98_-	BH7A	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 99_-	BH7A	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Mar 99_-	BH7A	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 99_-	BH7A	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				OP Pesticides									Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH7A_01 Oct 99_-	BH7A	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 00_-	BH7A	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 00_-	BH7A	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 00_-	BH7A	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 00_-	BH7A	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 01_-	BH7A	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 01_-	BH7A	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 01_-	BH7A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 01_-	BH7A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 02_-	BH7A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 02_-	BH7A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 02_-	BH7A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 02_-	BH7A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 03_-	BH7A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 03_-	BH7A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 03_-	BH7A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 03_-	BH7A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 04_-	BH7A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 04_-	BH7A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 04_-	BH7A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 04_-	BH7A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 05_-	BH7A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 05_-	BH7A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 05_-	BH7A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 05_-	BH7A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 06_-	BH7A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 06_-	BH7A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jul 06_-	BH7A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Oct 06_-	BH7A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Jan 07_-	BH7A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_01 Apr 07_-	BH7A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_17 Apr 13_-	BH7A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_09 Jul 13_-	BH7A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_29 Oct 13_-	BH7A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_28 Jan 14_-	BH7A	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH7A_16 Apr 14_-	BH7A	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_09 Jul 14_-	BH7A	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_16 Oct 14_-	BH7A	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_21 Jan 15_-	BH7A	21/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH7A_23 Apr 15_-	BH7A	23/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_21 Jul 15_-	BH7A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_21 Oct 15_-	BH7A	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_21 Jan 16_-	BH7A	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH7A_19 Apr 16_-	BH7A	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_13 Jul 16_-	BH7A	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_18 Oct 16_-	BH7A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_19 Jan 17_-	BH7A	19/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH7A_02 Jul 19_-	BH7A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_25 Oct 19_-	BH7A	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH7A_14 Jan 20_-	BH7A	14/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH7A_23 Apr 20_-	BH7A	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Sep 93_-	BH8	1/09/1993	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Jun 94_-	BH8	1/06/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Sep 94_-	BH8	1/09/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Dec 94_-	BH8	1/12/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Mar 95_-	BH8	1/03/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Jun 95_-	BH8	1/06/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Sep 95_-	BH8	1/09/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Jan 96_-	BH8	1/01/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Apr 96_-	BH8	1/04/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Jul 96_-	BH8	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8_01 Oct 96_-	BH8	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH8A_01 Jul 96_-	BH8A	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 96_-	BH8A	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 97_-	BH8A	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 97_-	BH8A	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 97_-	BH8A	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 97_-	BH8A	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 98_-	BH8A	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 98_-	BH8A	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 98_-	BH8A	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 98_-	BH8A	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 99_-	BH8A	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Mar 99_-	BH8A	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 99_-	BH8A	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 99_-	BH8A	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 00_-	BH8A	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 00_-	BH8A	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 00_-	BH8A	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 00_-	BH8A	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 01_-	BH8A	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 01_-	BH8A	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 01_-	BH8A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 01_-	BH8A	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 02_-	BH8A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 02_-	BH8A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 02_-	BH8A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 02_-	BH8A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 03_-	BH8A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 03_-	BH8A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 03_-	BH8A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 03_-	BH8A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 04_-	BH8A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 04_-	BH8A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 04_-	BH8A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 04_-	BH8A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 05_-	BH8A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 05_-	BH8A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 05_-	BH8A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 05_-	BH8A	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 06_-	BH8A	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 06_-	BH8A	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jul 06_-	BH8A	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Oct 06_-	BH8A	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Jan 07_-	BH8A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_01 Apr 07_-	BH8A	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_17 Apr 13_-	BH8A	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_09 Jul 13_-	BH8A	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_29 Oct 13_-	BH8A	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_28 Jan 14_-	BH8A	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH8A_16 Apr 14_-	BH8A	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_09 Jul 14_-	BH8A	9/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_16 Oct 14_-	BH8A	16/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_21 Jan 15_-	BH8A	21/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH8A_23 Apr 15_-	BH8A	23/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_21 Jul 15_-	BH8A	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_21 Oct 15_-	BH8A	21/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_21 Jan 16_-	BH8A	21/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH8A_19 Apr 16_-	BH8A	19/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_13 Jul 16_-	BH8A	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_18 Oct 16_-	BH8A	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_19 Jan 17_-	BH8A	19/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH8A_02 Jul 19_-	BH8A	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH8A_22 Apr 20_-	BH8A	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH9_01 Jun 94_-	BH9	1/06/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Sep 94_-	BH9	1/09/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Dec 94_-	BH9	1/12/1994	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Mar 95_-	BH9	1/03/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Jun 95_-	BH9	1/06/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Sep 95_-	BH9	1/09/1995	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Jan 96_-	BH9	1/01/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Apr 96_-	BH9	1/04/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9_01 Jul 96_-	BH9	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 96_-	BH9A	1/07/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 96_-	BH9A	1/10/1996	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 97_-	BH9A	1/01/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 97_-	BH9A	1/04/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 97_-	BH9A	1/07/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 97_-	BH9A	1/10/1997	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 98_-	BH9A	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 98_-	BH9A	1/04/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Nov 98_-	BH9A	1/11/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 99_-	BH9A	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Mar 99_-	BH9A	1/03/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 99_-	BH9A	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 99_-	BH9A	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 00_-	BH9A	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 00_-	BH9A	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 00_-	BH9A	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 00_-	BH9A	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 01_-	BH9A	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 01_-	BH9A	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 01_-	BH9A	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 02_-	BH9A	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 02_-	BH9A	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 02_-	BH9A	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 02_-	BH9A	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 03_-	BH9A	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 03_-	BH9A	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 03_-	BH9A	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 03_-	BH9A	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 04_-	BH9A	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 04_-	BH9A	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 04_-	BH9A	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Oct 04_-	BH9A	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 05_-	BH9A	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Apr 05_-	BH9A	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jul 05_-	BH9A	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9A_01 Jan 07_-	BH9A	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9B_01 Jul 05_-	BH9B	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9B_01 Oct 06_-	BH9B	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9B_01 Jan 07_-	BH9B	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9B_01 Apr 07_-	BH9B	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_17 Apr 13_-	BH9C	17/04/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_09 Jul 13_-	BH9C	9/07/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_29 Oct 13_-	BH9C	29/10/2013	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_28 Jan 14_-	BH9C	28/01/2014	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH9C_16 Apr 14_-	BH9C	16/04/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_07 Jul 14_-	BH9C	7/07/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_15 Oct 14_-	BH9C	15/10/2014	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_20 Jan 15_-	BH9C	20/01/2015	water	<0.2	<0.2	<0.2	-	-	-	-	-	-	-	-	-	<50	-
BH9C_22 Apr 15_-	BH9C	22/04/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_21 Jul 15_-	BH9C	21/07/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_20 Oct 15_-	BH9C	20/10/2015	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_20 Jan 16_-	BH9C	20/01/2016	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH9C_14 Apr 16_-	BH9C	14/04/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				OP Pesticides								Chlorinated Hydrocarbons	Phenols - tota	
	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Ronnel	Chlorobenzene	Phenolics Total	Phenols
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												10		
ADWG 2011 Health (v3.5 updated 2018)			300	10	10		4	7	4	7		300		
NHMRC Recreational Guidelines 2008 - Health			3000	100	100		40	70	40	70		3000		
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand														
2-4m														
4-8m														
>8m														

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type														
BH9C_13 Jul 16_-	BH9C	13/07/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_18 Oct 16_-	BH9C	18/10/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_19 Jan 17_-	BH9C	19/01/2017	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH9C_02 Jul 19_-	BH9C	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_24 Oct 19_-	BH9C	24/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH9C_13 Jan 20_-	BH9C	13/01/2020	water	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<50	-
BH9C_23 Apr 20_-	BH9C	23/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistical Summary

Number of Results	105	105	105	85	85	85	85	85	85	85	85	4	105	2
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Minimum Concentration	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5	<50	3
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
Maximum Concentration	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5	<50	8
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8
Average Concentration	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.5	25	
Median Concentration	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.5	25	5.5
Standard Deviation	0	0	0	0	0	0	0	0	0	0	0	0	0	
Number of Guideline Exceedances	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Env Stds Comments

#1:Natural concentrations generally <0.01 mg/L
#2:Not specifically guideline value: >500mg/L can have purgative effects
#3:Guideline value calculated by dividing Nitrate (as Nitrate) value (50 mg/L) by 4.42
#4:Guideline value calculated by dividing Nitrite (as Nitrite) value (0.3 mg/L) by molec
#5:Guideline value calculated by dividing Nitrite (as Nitrite) value (30 mg/L) by molec
#6:Not limiting: Derived water HSL exceeds water solubility limit

Appendix G Table G2a - Historical surface water results - ecological assessment criteria

	Field Parameters		Inorganics					Cyanide	Acidity & Alkalinity		Major Ions									Nutrients								Organic Indicators		Metals					
	pH (Field)	Electrical conductivity (field)	pH (Lab)	Total Dissolved Solids	Total Dissolved Solids (Filtered)	Total Suspended Solids	COD	Cyanide (Total)	Alkalinity (total as CaCO3)	Hardness as CaCO3	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Nitrogen (Total Oxidised) (as N)	Nitrogen (Total)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Phosphorus (Total)	BOD	Dissolved Organic Carbon (Filtered)	Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury
	pH units	µS/cm	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
LOR			0.1	10		1	25	0.005		5	0.5	0.5	0.5	0.5	1	5	0.5			0.01	0.02	0.02	0.05	0.2	0.2		0.01	5		0.001	0.0002	0.001	0.001	0.001	0.0001
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine	*7-8.5*		*7-8.5*			*0.5*														*0.015*[#1]			*0.015*	*0.3*		*0.03*								
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs	**6.5-8**	**20-30**	**6.5-8**			**5**														**0.01**[#1]			**0.01**	**0.35**			**0.01**								
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.007[#2]												0.9[#3]									0.013[#4]	0.0002	0.001[#5]	0.0014	0.0034	0.0006
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																		
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)								0.004[#2]												0.91[#6]										0.0055	0.0044[#7]	0.0013	0.0044	0.0004
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																		

Sample ID	Location Code	Date	Matrix Type																																	
CRP_01 Jan 98_-	CRP	1/01/1998	water	-	-	-	-	880	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.7	0.11	-	-	18	0.005	-	<0.001	0.003	<0.001	-
CRP_01 Jul 98_-	CRP	1/07/1998	water	-	-	-	-	496	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	-	-	0.6	1.9	-	-	9	0.002	-	<0.001	0.004	0.001	-
CRP_01 Oct 98_-	CRP	1/10/1998	water	-	-	-	-	1670	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.62***	-	-	-	-	6.5	0.02	-	-	67	<0.01	-	0.003	0.006	0.002	-
CRP_01 Jan 99_-	CRP	1/01/1999	water	**8**	**1650**	-	-	1050	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	-	-	2.2	0.01	-	-	37	0.007	-	<0.001	0.004	<0.001	-
CRP_01 Jul 99_-	CRP	1/07/1999	water	***9.4***	-	-	-	681	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.11***	-	-	-	-	1	0.98	-	-	10	0.002	-	0.014	0.011	<0.001	-
CRP_01 Oct 99_-	CRP	1/10/1999	water	**8**	-	-	-	622	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.07***	-	-	-	-	1.6	0.02	-	-	14	0.007	-	0.005	0.003	<0.001	-
CRP_01 Apr 00_-	CRP	1/04/2000	water	7.1	**970**	-	-	640	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	-	-	1	0.02	-	-	9	0.01	-	0.004	0.001	<0.001	-
CRP_01 Jul 00_-	CRP	1/07/2000	water	7.9	**1000**	-	-	610	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1	0.08	-	-	12	0.007	-	0.003	0.002	<0.001	-
CRP_01 Oct 00_-	CRP	1/10/2000	water	7.4	**930**	-	-	540	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.2	0.01	-	-	12	0.006	-	0.002	0.001	<0.001	-
CRP_01 Jan 01_-	CRP	1/01/2001	water	**8**	**950**	-	-	580	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.8	<0.01	-	-	15	0.009	-	0.003	0.001	<0.001	-
CRP_01 Apr 01_-	CRP	1/04/2001	water	**8.1**	**830**	-	-	550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.9	<0.01	-	-	11	0.009	-	0.001	0.003	<0.001	-
FRP_01 Jan 98_-	FRP	1/01/1998	water	-	-	-	-	472	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.6	0.16	-	-	10	0.002	-	<0.001	0.001	<0.001	-
FRP_01 Jul 98_-	FRP	1/07/1998	water	-	-	-	-	378	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.6	<0.01	-	-	9	0.001	-	<0.001	0.002	0.002	-
FRP_01 Oct 98_-	FRP	1/10/1998	water	-	-	-	-	508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***2.21***	-	-	-	-	4.1	25	-	-	17	<0.001	-	0.001	0.004	<0.001	-
FRP_01 Jan 99_-	FRP	1/01/1999	water	***8.7***	**797**	-	-	513	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.3	<0.01	-	-	51	0.003	-	0.002	0.003	<0.001	-
FRP_01 Jul 99_-	FRP	1/07/1999	water	7.8	-	-	-	805	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.8	0.04	-	-	9	0.002	-	0.003	0.002	<0.001	-
FRP_01 Oct 99_-	FRP	1/10/1999	water	**8.3**	-	-	-	583	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.7	0.03	-	-	12	0.007	-	0.004	0.008	<0.001	-
FRP_01 Jan 00_-	FRP	1/01/2000	water	7.9	**680**	-	-	410	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.4	-	-	-	14	0.002	-	0.001	<0.001	<0.001	-
FRP_01 Apr 00_-	FRP	1/04/2000	water	7.5	**880**	-	-	510	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.8	<0.01	-	-	16	0.004	-	0.004	0.003	<0.001	-
FRP_01 Jul 00_-	FRP	1/07/2000	water	**8.3**	**910**	-	-	510	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.6	<0.01	-	-	15	0.003	-	0.002	0.001	<0.001	-
FRP_01 Oct 00_-	FRP	1/10/2000	water	**8.1**	**870**	-	-	460	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.6	<0.01	-	-	19	0.003	-	0.003	<0.001	<0.001	-
FRP_01 Jan 01_-	FRP	1/01/2001	water	7.8	**1000**	-	-	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	-	-	1.8	0.05	-	-	26	0.005	-	0.005	0.002	<0.001	-
FRP_01 Apr 01_-	FRP	1/04/2001	water	***8.7***	**920**	-	-	560	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	2	<0.01	-	-	20	0.004	-	0.001	0.002	<0.001	-
FRP_01 Jul 01_-	FRP	1/07/2001	water	7.6	**900**	-	-	510	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1	<0.01	-	-	14	0.002	-	0.002	0.002	<0.001	-
FRP_01 Oct 01_-	FRP	1/10/2001	water	7.5	**770**	-	-	420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1	<0.01	-	-	14	0.002	-	<0.001	<0.001	<0.001	-
FRP_01 Jan 02_-	FRP	1/01/2002	water	7.4	**940**	-	-	540	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	-	-	1.4	<0.01	-	-	19	<0.001	-	<0.001	<0.001	<0.001	-
FRP_01 Apr 02_-	FRP	1/04/2002	water	7.8	**740**	-	-	460	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.8	<0.01	-	-	10	0.003	-	<0.001	<0.001	<0.001	-
FRP_01 Jul 02_-	FRP	1/07/2002	water	7.9	**730**	-	-	440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.06***	-	-	-	-	0.5	0.02	-	-	6	0.001	-	<0.001	<0.001	<0.001	-
FRP_01 Oct 02_-	FRP	1/10/2002	water	**8.1**	**750**	-	-	420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	-	-	1	0.04	-	-	9	0.002	-	0.001	<0.001	<0.001	-
FRP_01 Jan 03_-	FRP	1/01/2003	water	**8.25**	**710**	-	-	430	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.05***	-	-	-	-	0.7	0.06	-	-	30	0.003	-	<0.001	0.002	<0.001	-
FRP_01 Apr 03_-	FRP	1/04/2003	water	**8.32**	**1010**	-	-	584	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	-	-	1.3	<0.01	-	-	27	0.003	-	<0.001	0.001	<0.001	-
FRP_01 Jul 03_-	FRP	1/07/2003	water	7.87	**840**	-	-	568	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	-	-	2.4	0.34	-	-	10	0.002	-	<0.001	0.005	0.001	-
FRP_01 Oct 03_-	FRP	1/10/2003	water	**8.25**	**654**	-	-	482	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.3	<0.01	-	-	13	0.002	-	<0.001	0.001	<0.001	-
FRP_01 Jan 04_-	FRP	1/01/2004	water	***9.09***	**606**	-	-	396	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	-	-	1.9	<0.01	-	-	21	0.002	-	0.001	<0.001	<0.001	-
FRP_01 Apr 04_-	FRP	1/04/2004	water	7.86	-	-	-	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.33***	-	-	-	-	-	<0.01	-	-	16	0.002	-	-	-	-	-
FRP_01 Jul 04_-	FRP	1/07/2004	water	**8.39**	-	-	-	408	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	-	-	-	0.02	-	-	14	0.001	-	-	-	-	-
FRP_01 Oct 04_-	FRP	1/10/2004	water	**8.13**	-	-	-	386	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.12***	-	-	-	-	-	<0.01	-	-	16	0.001	-	-	-	-	-
FRP_01 Jan 05_-	FRP	1/01/2005	water	7.84	-	-	-	524	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.175***	-	-	-	-	-	<0.01	-	-	8	0.04	-	<0.01	<0.01	<0.01	-
FRP_01 Apr 05_-	FRP	1/04/2005	water	**8.15**	-	-	-	492	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.086***	-	-	-	-	-	0.01	-	-	21	<0.001	-	-	-	-	-
FRP_01 Jul 05_-	FRP	1/07/2005	water	**8.49**	-	-	-	484	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.074***	-	-	-	-	-	<0.01	-	-	14	<0.001	-	-	-	-	-
FRP_01 Oct 05_-	FRP	1/10/2005	water	**8.49**	-	-	-	470	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.086***	-	-	-	-	-	<0.01	-	-	15	<0.001	-	-	-	-	-
FRP_01 Jan 06_-	FRP	1/01/2006	water	**8.03**	-	-	-	572	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.118***	-	-	-	-	-	0.058	-	-	24	0.001	-	<0.001	0.002	<0.001	-
FRP_01 Apr 06_-	FRP	1/04/2006	water	7.51	-	-	-	712	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.074***	-	-	-	-	-	<0.01	-	-	26	0.001	-	-	-	-	-
FRP_01 Jul 06_-	FRP	1/07/2006	water	7.7	-	-	-	590	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.027***	-	-	-	-	-	<0.01	-	-	20	<0.001	-	-	-	-	-
FRP_01 Oct 06_-	FRP	1/10/2006	water	7.66	-	-	-	528	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.015***	-	-	-	-	-	<0.01	-	-	16	<0.001	-	-	-	-	-
FRP_01 Jan 07_-	FRP	1/01/2007	water	7.69	-	-	-	608	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.011**	-	-	-	-	-	0.013	-	-	26	<0.001	-	<0.001	0.001	<0.001	-
FRP_01 Apr 07_-	FRP	1/04/2007	water	7.6	-	-	-	642	-	-	-	300	-	67	25	11	125	186	48	-	11.2	12.2	***0.08***	0.021	<0.01	-	-	-	-	-	-	-	27	<0.001	-	-	-	-	-
Lot 1124_01 Jan 98_-	Lot 1124	1/01/1998	water	-	-	-	-	474	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	9.9	0.09	-	-	21	0.002	-	<0.001	0.002	<0.001	-
Lot 1124_01 Jul 98_-	Lot 1124	1/07/1998	water	-	-	-	-	444	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.5	0.43	-	-	7	0.006	-	<0.001	<0.001	0.002	-
Lot 1124_01 Oct 98_-	Lot 1124	1/10/1998	water	-	-	-	-	412	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	-	-	0.4	0.48	-	-	8	<0.001	-	<0.001	0.001	<0.001	-
Lot 1124_01 Jan 99_-	Lot 1124	1/01/1999	water	***8.5***	**754**	-	-	432	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.3	0.08	-	-	6	0.008	-	<0.001	0.003	<0.001	-
Lot 1124_01 Jul 99_-	Lot 1124	1/07/1999	water	**8.3**	-	-	-	390	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	0.15	-	-	7	0.009	-	0.002	0.001	<0.001	-
Lot 1124_01 Oct 99_-	Lot 1124	1/10/1999	water	**8.4**	-	-	-	394	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.5	0.12	-	-	8	0.008	-	0.001	0.007	<0.001	-
Lot 1124_01 Apr 00_-	Lot 1124	1/04/2000	water	7.1	**690**	-	-	420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	-	-	0.9	0.09	-	-	9	0.009	-	0.003	0.001	<0.001	-
Lot 1124_01 Jul 00_-	Lot 1124	1/07/2000	water	7.6	**670**	-	-	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.2	0.13	-	-	6	0.01	-	0.002	0.002	0.003	-
Lot 1124_01 Oct 00_-	Lot 1124	1/10/2000	water	7.7	**690**	-	-	430	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.8	0.1	-	-	6	0.007	-	0.001	0.001	<0.001	-
Lot 1124_01 Jan 01_-	Lot 1124	1/01/2001	water	***8.5***	**680**	-	-	420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.3	<0.01	-	-	8	0.009	-	0.005	0.002	<0.001	-
Lot 1124_01 Apr 01_-	Lot 1124	1/04/2001	water	**8.3**	**680**	-	-	450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	-	-	0.5	0.01	-	-	6	0.009	-	<0.001	0.001	<0.001	-
Lot 1124_01 Jul 01_-	Lot 1124	1/07/2001	water	**8.1**	**680**	-	-	390	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.4	0.05	-	-	6	0.008	-	0.002	0.002	<0.001	-
Lot 1124_01 Oct 01_-	Lot 1124	1/10/2001	water	**8.2**	**650**	-	-	390	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.4	0.02	-	-	5	0.004	-	<0.001	0.001	<0.001	-

Appendix G Table G2a - Historical surface water results - ecological assessment criteria

	Field Parameters		Inorganics					Cyanide	Acidity & Alkalinity		Major Ions									Nutrients								Organic Indicators		Metals					
	pH (Field)	Electrical conductivity (field)	pH (Lab)	Total Dissolved Solids	Total Dissolved Solids (Filtered)	Total Suspended Solids	COD	Cyanide (Total)	Alkalinity (total as CaCO3)	Hardness as CaCO3	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Nitrogen (Total Oxidised) (as N)	Nitrogen (Total)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Phosphorus (Total)	BOD	Dissolved Organic Carbon (Filtered)	Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury
	pH units	µS/cm	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
LOR			0.1	10		1	25	0.005		5	0.5	0.5	0.5	0.5	1	5	0.5			0.01	0.02	0.02	0.05	0.2	0.2		0.01	5		0.001	0.0002	0.001	0.001	0.001	0.0001
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine	*7-8.5*		*7-8.5*			*0.5*														*0.015*[#1]			*0.015*	*0.3*		*0.03*								
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs	**6.5-8**	**20-30**	**6.5-8**			**5**														**0.01**[#1]			**0.01**	**0.35**			**0.01**								
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.007[#2]												0.9[#3]										0.013[#4]	0.0002	0.001[#5]	0.0014	0.0034	0.0006
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																			
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)								0.004[#2]												0.91[#6]										0.0055	0.0044[#7]	0.0013	0.0044	0.0004
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																			

Sample ID	Location Code	Date	Matrix Type																																	
Lot 1124_01 Jan 02_-	Lot 1124	1/01/2002	water	**8.3**	**730**	-	-	430	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.5	<0.01	-	-	5	<0.001	-	<0.001	0.001	<0.001	-
Lot 1124_01 Apr 02_-	Lot 1124	1/04/2002	water	**8.2**	**650**	-	-	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.3	<0.01	-	-	6	0.003	-	<0.001	<0.001	<0.001	-
Lot 1124_01 Jul 02_-	Lot 1124	1/07/2002	water	**8.1**	**620**	-	-	370	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.3	0.12	-	-	3	0.005	-	<0.001	<0.001	<0.001	-
Lot 1124_01 Oct 02_-	Lot 1124	1/10/2002	water	**8.4**	**670**	-	-	390	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	-	-	0.4	0.11	-	-	4	0.005	-	0.002	0.002	<0.001	-
Lot 1124_01 Jan 03_-	Lot 1124	1/01/2003	water	**8.14**	**620**	-	-	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	-	-	0.4	0.03	-	-	6	0.005	-	<0.001	0.002	<0.001	-
Lot 1124_01 Apr 03_-	Lot 1124	1/04/2003	water	**8.17**	**738**	-	-	452	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.3	<0.01	-	-	14	0.006	-	<0.001	0.001	<0.001	-
Lot 1124_01 Jul 03_-	Lot 1124	1/07/2003	water	**8.08**	**660**	-	-	390	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.2	0.39	-	-	7	0.005	-	<0.001	0.001	<0.001	-
Lot 1124_01 Oct 03_-	Lot 1124	1/10/2003	water	**8.16**	**681**	-	-	510	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	-	-	0.3	0.46	-	-	7	0.006	-	<0.001	0.001	<0.001	-
Lot 1124_01 Jan 04_-	Lot 1124	1/01/2004	water	**8.4**	**726**	-	-	460	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.5	0.36	-	-	11	0.003	-	0.001	0.002	<0.001	-
Lot 1124_01 Apr 04_-	Lot 1124	1/04/2004	water	**8.18**	-	-	-	384	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	-	-	-	0.43	-	-	7	0.007	-	-	-	-	-
Lot 1124_01 Jul 04_-	Lot 1124	1/07/2004	water	**8.09**	-	-	-	466	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	0.35	-	-	<1	0.012	-	-	-	-	-
Lot 1124_01 Oct 04_-	Lot 1124	1/10/2004	water	**8.11**	-	-	-	496	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.15***	-	-	-	-	-	0.33	-	-	9	0.007	-	-	-	-	-
Lot 1124_01 Jan 05_-	Lot 1124	1/01/2005	water	**8.27**	-	-	-	542	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.298***	-	-	-	-	-	0.205	-	-	7	0.03	-	<0.01	<0.01	<0.01	-
Lot 1124_01 Apr 05_-	Lot 1124	1/04/2005	water	7.95	-	-	-	446	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.071***	-	-	-	-	-	0.107	-	-	6	0.01	-	-	-	-	-
Lot 1124_01 Jul 05_-	Lot 1124	1/07/2005	water	**8.25**	-	-	-	460	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.034***	-	-	-	-	-	0.291	-	-	7	0.006	-	-	-	-	-
Lot 1124_01 Oct 05_-	Lot 1124	1/10/2005	water	***8.61***	-	-	-	492	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.042***	-	-	-	-	-	0.093	-	-	4	0.005	-	-	-	-	-
Lot 1124_01 Jan 06_-	Lot 1124	1/01/2006	water	**8.28**	-	-	-	520	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.041***	-	-	-	-	-	<0.01	-	-	6	0.004	-	<0.001	0.001	<0.001	-
Lot 1124_01 Apr 06_-	Lot 1124	1/04/2006	water	**8.12**	-	-	-	506	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.095***	-	-	-	-	-	0.01	-	-	7	0.002	-	-	-	-	-
Lot 1124_01 Jul 06_-	Lot 1124	1/07/2006	water	**8.15**	-	-	-	494	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.021***	-	-	-	-	-	<0.01	-	-	9	0.002	-	-	-	-	-
Lot 1124_01 Oct 06_-	Lot 1124	1/10/2006	water	**8.1**	-	-	-	508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.011**	-	-	-	-	-	0.013	-	-	7	0.002	-	-	-	-	-
Lot 1124_01 Jan 07_-	Lot 1124	1/01/2007	water	***8.5***	-	-	-	532	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	0.064	-	-	6	0.002	-	<0.001	0.001	<0.001	-
Lot 1124_01 Apr 07_-	Lot 1124	1/04/2007	water	7.98	-	-	-	580	-	-	114	-	80	17	6	56	92.3	164	-	7.98	8.3	***0.094***	<0.01	<0.01	-	-	-	-	-	-	8	0.002	-	-	-	-	-
S20-Jn21405	SW1	11/06/2020	water	-	-	**8**	170	-	***14***	<25		-	77	22	5.7	1.3	22	20	36	<0.5	-	-	***0.05***	2.1	0.03	***2.2***	***2.6***	0.4	-	***0.03***	<5	-	<0.001	<0.0002	0.002	0.007	<0.001	<0.0001
S20-Jn21410	SW1	11/06/2020	water	-	-	7.9	150	-	***10***	<25		-	79	22	6	1.3	22	21	35	<0.5	-	-	***0.06***	2.1	0.03	***2.1***	***2.4***	0.3	-	<0.01	<5	-	<0.001	<0.0002	0.002	0.008	<0.001	<0.0001
S20-Jn21406	SW2	11/06/2020	water	-	-	7.9	320	-	***41***	<25		-	180	58	8.4	4.1	33	47	98	<0.5	-	-	***0.05***	0.12	<0.02	***0.14***	***0.74***	0.6	-	<0.01	<5	-	0.002	<0.0002	0.003	0.003	0.003	<0.0001
S20-Jn21407	SW3	11/06/2020	water	-	-	7.9	380	-	***26***	<25		-	200	65	8.8	5.2	34	51	99	<0.5	-	-	***0.16***	0.23	0.03	***0.26***	***1.16***	0.9	-	**0.01**	<5	-	0.004	<0.0002	0.003	0.003	0.003	<0.0001
S20-Jn21408	SW4	11/06/2020	water	-	-	**8.2**	1400	-	***50***	270	0.007	-	410	95	42	60	230	340	230	<0.5	-	-	***87***	<1	<1		***96***	96	-	**0.02**	<5	-	0.004	<0.0002	0.012	0.009	0.004	<0.0001
S20-Jn21409	SW5	11/06/2020	water	-	-	7.9	270	-	***42***	<25		-	170	58	4.6	3.1	20	28	120	<0.5	-	-	***0.04***	0.14	<0.02	***0.14***	***0.74***	0.6	-	**0.01**	<5	-	0.001	<0.0002	0.003	0.005	0.005	<0.0001
WWP_01 Jan 98_-	WWP	1/01/1998	water	-	-	-	-	870	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.6	0.47	-	-	8	0.006	-	<0.001	0.005	<0.001	-
WWP_01 Jul 98_-	WWP	1/07/1998	water	-	-	-	-	862	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	-	-	0.7	<0.01	-	-	16	0.005	-	<0.001	0.01	0.001	-
WWP_01 Oct 98_-	WWP	1/10/1998	water	-	-	-	-	436	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	-	-	0.6	0.1	-	-	9	<0.001	-	<0.001	0.008	<0.001	-
WWP_01 Jan 99_-	WWP	1/01/1999	water	***8.8***	**887**	-	-	609	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.4	<0.01	-	-	28	0.006	-	0.004	0.005	<0.001	-
WWP_01 Jul 99_-	WWP	1/07/1999	water	**8.2**	-	-	-	603	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.5	<0.01	-	-	9	0.003	-	0.003	0.008	<0.001	-
WWP_01 Oct 99_-	WWP	1/10/1999	water	**8.3**	-	-	-	612	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.1***	-	-	-	-	0.9	<0.01	-	-	12	0.005	-	0.004	0.008	<0.001	-
WWP_01 Apr 00_-	WWP	1/04/2000	water	7.8	**1200**	-	-	850	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.05***	-	-	-	-	0.6	0.05	-	-	10	0.005	-	0.003	0.006	<0.001	-
WWP_01 Jul 00_-	WWP	1/07/2000	water	**8.1**	**1500**	-	-	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	-	-	1.6	0.09	-	-	12	0.004	-	0.003	0.012	<0.001	-
WWP_01 Oct 00_-	WWP	1/10/2000	water	7.6	**1700**	-	-	1200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	-	-	1.2	0.01	-	-	13	0.004	-	0.002	0.007	<0.001	-
WWP_01 Jan 01_-	WWP	1/01/2001	water	7.8	**1600**	-	-	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.07***	-	-	-	-	1.2	<0.01	-	-	19	0.008	-	0.006	0.004	<0.001	-
WWP_01 Apr 01_-	WWP	1/04/2001	water	**8.1**	**1400**	-	-	940	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	-	-	1.2	0.01	-	-	12	0.005	-	0.001	0.007	<0.001	-
WWP_01 Jul 01_-	WWP	1/07/2001	water	7.9	**780**	-	-	530	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	-	-	0.7	0.03	-	-	9	0.002	-	0.002	0.006	<0.001	-
WWP_01 Oct 01_-	WWP	1/10/2001	water	**8.1**	**1200**	-	-	650	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.5	<0.01	-	-	8	0.003	-	<0.001	0.006	<0.001	-
WWP_01 Jan 02_-	WWP	1/01/2002	water	7.8	**1900**	-	-	1200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.07***	-	-	-	-	1.2	0.41	-	-	13	<0.001	-	<0.001	0.004	<0.001	-
WWP_01 Apr 02_-	WWP	1/04/2002	water	**8.3**	**870**	-	-	540	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.2	0.15	-	-	9	0.002	-	<0.001	0.005	<0.001	-
WWP_01 Jul 02_-	WWP	1/07/2002	water	**8.1**	**960**	-	-	740	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	0.2	-	-	8	0.003	-	<0.001	0.006	<0.001	-
WWP_01 Oct 02_-	WWP	1/10/2002	water	**8.1**	**1400**	-	-	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.05***	-	-	-	-	1.2	0.08	-	-	11	0.004	-	0.002	0.005	<0.001	-
WWP_01 Jan 03_-	WWP	1/01/2003	water	7.95	**1400**	-	-	950	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.14***	-	-	-	-	-	0.08	-	-	12	0.005	-	<0.001	0.006	<0.001	-
WWP_01 Apr 03_-	WWP	1/04/2003	water	**8.08**	**1650**	-	-	1280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.23***	-	-	-	-	1.3	0.17	-	-	23	0.005	-	<0.001	0.006	<0.001	-
WWP_01 Jul 03_-	WWP	1/07/2003	water	**8.05**	**1170**	-	-	878	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.23***	-	-	-	-	1.8	0.65	-	-	23	0.002	-	<0.001	0.008	<0.001	-
WWP_01 Oct 03_-	WWP	1/10/2003	water	**8.16**	**1350**	-	-	740	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.06***	-	-	-	-	1.1	0.19	-	-	16	0.003	-	<0.001	0.007	<0.001	-
WWP_01 Jan 04_-	WWP	1/01/2004	water	**8.2**	**1430**	-	-	1110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.05***	-	-	-	-	1.3	0.02	-	-	20	0.005	-	0.001	0.005	<0.001	-
WWP_01 Apr 04_-	WWP	1/04/2004	water	**8.17**	-	-	-	956	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.11***	-	-	-	-	-	0.02	-	-	16	0.005	-	-	-	-	-
WWP_01 Jul 04_-	WWP	1/07/2004	water	**8.06**	-	-	-	1060	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.08***	-	-	-	-	-	0.09	-	-	13	0.003	-	-	-	-	-
WWP_01 Oct 04_-	WWP	1/10/2004	water	**8.32**	-	-	-	806	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.42***	-	-	-	-	-	1.02	-	-	16	0.002	-	-	-	-	-
WWP_01 Jan 05_-	WWP	1/01/2005	water	**8.03**	-	-	-	1150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.36***	-	-	-	-	-	0.041	-	-	14	0.02	-	<0.01	<0.01	<0.01	-
WWP_01 Apr 05_-	WWP	1/04/2005	water	**8.08**	-	-	-	956	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.114***	-	-	-	-	-	0.148	-	-	14	0.003	-	-	-	-	-
WWP_01 Jul 05_-	WWP	1/07/2005	water	**8.27**	-	-	-	790	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.087***	-	-	-	-	-	0.993	-	-	13	0.002	-	-	-	-	-
WWP_01 Oct 05_-	WWP	1/10/2005	water	**8.09**	-	-	-	1030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.139***	-	-	-	-	-	0.235	-	-	10	0.003	-	-	-	-	-
WWP_01 Jan 06_-	WWP	1/01/2006	water	**8.24**	-	-	-	1070	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.046***	-	-	-	-	-	<0.01	-	-	17	0.003	-	<0.001	0.009	<0.001	-
WWP_01 Apr 06_-	WWP	1/04/2006	water	7.84	-	-	-	1140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.235***	-	-	-	-	-	0.18	-	-	16	0.004	-	-	-	-	-
WWP_01 Jun 06_-	WWP	1/06/2006	water	**8**	-	-	-	528	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.043***	-	-	-	-	-	0.485	-	-	11	0.002	-	-	-	-	-

Appendix G Table G2a - Historical surface water results - ecological assessment criteria

	Field Parameters		Inorganics					Cyanide	Acidity & Alkalinity		Major Ions									Nutrients								Organic Indicators		Metals					
	pH (Field)	Electrical conductivity (field)	pH (Lab)	Total Dissolved Solids	Total Dissolved Solids (Filtered)	Total Suspended Solids	COD	Cyanide (Total)	Alkalinity (total as CaCO3)	Hardness as CaCO3	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Nitrogen (Total Oxidised) (as N)	Nitrogen (Total)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Phosphorus (Total)	BOD	Dissolved Organic Carbon (Filtered)	Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury
	pH units	µS/cm	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
LOR			0.1	10		1	25	0.005		5	0.5	0.5	0.5	0.5	1	5	0.5			0.01	0.02	0.02	0.05	0.2	0.2		0.01	5		0.001	0.0002	0.001	0.001	0.001	0.0001
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine	*7-8.5*		*7-8.5*			*0.5*														*0.015*[#1]			*0.015*	*0.3*		*0.03*								
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs	**6.5-8**	**20-30**	**6.5-8**			**5**														**0.01**[#1]			**0.01**	**0.35**			**0.01**								
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.007[#2]												0.9[#3]									0.013[#4]	0.0002	0.001[#5]	0.0014	0.0034	0.0006
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																		
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)								0.004[#2]												0.91[#6]										0.0055	0.0044[#7]	0.0013	0.0044	0.0004
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																		
Sample ID	**Location Code**	**Date**	**Matrix Type**																																
WWP_01 Oct 06_-	WWP	1/10/2006	water	**8.03**	-	-	-	508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.113***	-	-	-	-	-	0.117	-	-	10	0.002	-	-	-	-	-
WWP_01 Jan 07_-	WWP	1/01/2007	water	**8.03**	-	-	-	842	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	0.048	-	-	12	0.005	-	<0.001	0.004	<0.001	-
WWP_01 Apr 07_-	WWP	1/04/2007	water	7.78	-	-	-	968	-	-	-	226	-	173	17	14	94	92.5	370	-	14.5	14.8	***0.145***	0.017	<0.01	-	-	-	-	-	-	17	0.003	-	-	-	-	-
Statistical Summary																																				
Number of Results	105	58	6	6	117	6	6	6	3	6	9	9	9	9	9	9	6	3	3	123	9	9	6	6	81	113	6	6	117	123	6	93	93	93	6
Number of Detects	105	58	6	6	117	6	1	1	3	6	9	9	9	9	9	9	0	3	3	79	7	3	5	6	81	77	4	0	116	107	0	47	79	11	0
Minimum Concentration	7.1	606	7.9	150	370	10	<25	<0.005	114	77	22	4.6	1.3	20	20	35	<0.5	7.98	8.3	<0.01	<0.01	<0.01	0.14	0.74	0.2	<0.01	<0.01	<5	<1	<0.001	<0.0002	<0.001	<0.001	<0.001	<0.0001
Minimum Detect	7.1	606	7.9	150	370	10	270	0.007	114	77	22	4.6	1.3	20	20	35	ND	7.98	8.3	0.01	0.017	0.03	0.14	0.74	0.2	0.01	0.01	ND	3	0.001	ND	0.001	0.001	0.001	ND
Maximum Concentration	9.4	1900	8.2	1400	1670	50	270	0.007	300	410	173	42	60	230	340	370	<0.5	14.5	14.8	87	2.1	<1	<2.5	96	96	25	0.03	<5	67	0.04	<0.0002	0.014	0.012	<0.01	<0.0001
Maximum Detect	9.4	1900	8.2	1400	1670	50	270	0.007	300	410	173	42	60	230	340	370	ND	14.5	14.8	87	2.1	0.03	2.2	96	96	25	0.03	ND	67	0.04	ND	0.014	0.012	0.005	ND
Average Concentration	8.1	949	8	448	624	31	55	0.0033	213	186	71	15	12	71	98	133	0.25	11	12	0.8	0.58	0.069	1	17	2.3	0.36	0.013	2.5	13	0.0045	0.0001	0.0019	0.0035	0.00088	0.00005
Median Concentration	8.1	855	7.9	295	528	33.5	12.5	0.0025	226	175	65	8.8	5.2	34	51	99	0.25	11.2	12.2	0.03	0.14	0.01	0.755	1.78	0.9	0.04	0.01	2.5	12	0.003	0.0001	0.001	0.003	0.0005	0.00005
Standard Deviation	0.35	330	0.12	474	252	16	105	0.0018	94	122	45	12	19	70	105	109	0	3.3	3.3	7.8	0.87	0.16	0.97	39	11	2.4	0.0098	0	8.9	0.005	0	0.0022	0.0028	0.0011	0
Number of Guideline Exceedances	72	58	2	0	0	6	0	6	0	0	0	0	0	0	0	0	0	0	0	79	0	0	6	6	0	0	4	0	0	3	0	50	62	5	0
Number of Guideline Exceedances(Detects Only)	72	58	2	0	0	6	0	1	0	0	0	0	0	0	0	0	0	0	0	79	0	0	5	6	0	0	4	0	0	3	0	47	59	2	0

Env Stds Comments

#1:assumed same as NH4
#2:Cyanide as un-ionised HCN, measured as [CN].
#3:Measured as NH3-N at pH 8
#4:In absence of total As guideline, As (V) guideline has been adopted.
#5:Guideline for Cr (VI) adopted
#6:Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#7:In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#8:Freshwater DGV adopted (insufficient marine toxicity data)

Appendix G Table G2a - Historical surface water results - ecological assessment criteria

	Metals						BTEXN							TRH - NEPM 2013							TRH - NEPM 1999					PAHs - standard 16												PAHs - standard 16			
	Molybdenum	Nickel	Selenium	Silver	Tin	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Naphthalene (BTEXN suite)	F1 (C6-C10 minus BTEX)	C6-C10 Fraction	F2 (>C10-C16 minus Naphthalene)	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	>C10-C40 (Sum of Total)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 (Sum of Total)	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benzo(a)pyrene	Benzo[b+j]fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene-PAH	Phenanthrene	Pyrene	PAHs (Sum of total) - Lab calc	Organochlorine pesticides EPAVic
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
LOR	0.005	0.001	0.001	0.005	0.005	0.005	1	1	1	1	2	3	10	20	20	50	50	100	100	100	20	50	100	100	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																										
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																										
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)		0.011	0.011	0.00005		0.008	950	180	80	350			16															0.4		0.2						1.4			16	2			
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)	0.034																																									
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)		0.07		0.0014		0.015	700	180	80				70																	0.2					1.4			70	2			
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)										350																																

Sample ID	Location Code	Date	Matrix Type																																									
CRP_01 Jan 98_-	CRP	1/01/1998	water	-	-	-	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Jul 98_-	CRP	1/07/1998	water	-	-	-	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Oct 98_-	CRP	1/10/1998	water	-	-	-	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Jan 99_-	CRP	1/01/1999	water	-	-	-	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Jul 99_-	CRP	1/07/1999	water	-	-	-	-	-	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Oct 99_-	CRP	1/10/1999	water	-	-	-	-	-	0.023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Apr 00_-	CRP	1/04/2000	water	-	-	-	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Jul 00_-	CRP	1/07/2000	water	-	-	-	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Oct 00_-	CRP	1/10/2000	water	-	-	-	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Jan 01_-	CRP	1/01/2001	water	-	-	-	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Apr 01_-	CRP	1/04/2001	water	-	-	-	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 98_-	FRP	1/01/1998	water	-	-	-	-	-	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 98_-	FRP	1/07/1998	water	-	-	-	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 98_-	FRP	1/10/1998	water	-	-	-	-	-	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 99_-	FRP	1/01/1999	water	-	-	-	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 99_-	FRP	1/07/1999	water	-	-	-	-	-	0.006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 99_-	FRP	1/10/1999	water	-	-	-	-	-	0.006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 00_-	FRP	1/01/2000	water	-	-	-	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 00_-	FRP	1/04/2000	water	-	-	-	-	-	0.048	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 00_-	FRP	1/07/2000	water	-	-	-	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 00_-	FRP	1/10/2000	water	-	-	-	-	-	<0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 01_-	FRP	1/01/2001	water	-	-	-	-	-	0.023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 01_-	FRP	1/04/2001	water	-	-	-	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 01_-	FRP	1/07/2001	water	-	-	-	-	-	0.044	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 01_-	FRP	1/10/2001	water	-	-	-	-	-	0.032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 02_-	FRP	1/01/2002	water	-	-	-	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 02_-	FRP	1/04/2002	water	-	-	-	-	-	0.271	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 02_-	FRP	1/07/2002	water	-	-	-	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 02_-	FRP	1/10/2002	water	-	-	-	-	-	0.031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 03_-	FRP	1/01/2003	water	-	-	-	-	-	0.055	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 03_-	FRP	1/04/2003	water	-	-	-	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 03_-	FRP	1/07/2003	water	-	-	-	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 03_-	FRP	1/10/2003	water	-	-	-	-	-	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 04_-	FRP	1/01/2004	water	-	-	-	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 04_-	FRP	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 04_-	FRP	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 04_-	FRP	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 05_-	FRP	1/01/2005	water	-	-	-	-	-	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 05_-	FRP	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 05_-	FRP	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 05_-	FRP	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 06_-	FRP	1/01/2006	water	-	-	-	-	-	0.031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 06_-	FRP	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 06_-	FRP	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 06_-	FRP	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 07_-	FRP	1/01/2007	water	-	-	-	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 07_-	FRP	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 98_-	Lot 1124	1/01/1998	water	-	-	-	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 98_-	Lot 1124	1/07/1998	water	-	-	-	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 98_-	Lot 1124	1/10/1998	water	-	-	-	-	-	0.018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 99_-	Lot 1124	1/01/1999	water	-	-	-	-	-	0.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 99_-	Lot 1124	1/07/1999	water	-	-	-	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 99_-	Lot 1124	1/10/1999	water	-	-	-	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 00_-	Lot 1124	1/04/2000	water	-	-	-	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 00_-	Lot 1124	1/07/2000	water	-	-	-	-	-	0.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 00_-	Lot 1124	1/10/2000	water	-	-	-	-	-	<0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 01_-	Lot 1124	1/01/2001	water	-	-	-	-	-	0.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 01_-	Lot 1124	1/04/2001	water	-	-	-	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 01_-	Lot 1124	1/07/2001	water	-	-	-	-	-	0.034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 01_-	Lot 1124	1/10/2001	water	-	-	-	-	-	0.019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G2a - Historical surface water results - ecological assessment criteria

	Metals						BTEXN							TRH - NEPM 2013							TRH - NEPM 1999					PAHs - standard 16														PAHs - standard 16			
	Molybdenum	Nickel	Selenium	Silver	Tin	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Naphthalene (BTEXN suite)	F1 (C6-C10 minus BTEX)	C6-C10 Fraction	F2 (>C10-C16 minus Naphthalene)	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	>C10-C40 (Sum of Total)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 (Sum of Total)	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benzo(a)pyrene	Benzo[b+j]fluoranthene	Benzo[k]fluoranthene	Benzo[g,h,i]perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene-PAH	Phenanthrene	Pyrene	PAHs (Sum of total) - Lab calc	Organochlorine pesticides EPAVic
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
LOR	0.005	0.001	0.001	0.005	0.005	0.005	1	1	1	1	2	3	10	20	20	50	50	100	100	100	20	50	100	100	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																										
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																										
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)		0.011	0.011	0.00005		0.008	950	180	80	350			16															0.4		0.2						1.4			16	2			
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)	0.034																																										
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)		0.07		0.0014		0.015	700	180	80				70																	0.2						1.4			70	2			
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)										350																																	

Sample ID	Location Code	Date	Matrix Type																																										
Lot 1124_01 Jan 02_-	Lot 1124	1/01/2002	water	-	-	-	-	-	0.021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 02_-	Lot 1124	1/04/2002	water	-	-	-	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 02_-	Lot 1124	1/07/2002	water	-	-	-	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 02_-	Lot 1124	1/10/2002	water	-	-	-	-	-	0.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 03_-	Lot 1124	1/01/2003	water	-	-	-	-	-	0.042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 03_-	Lot 1124	1/04/2003	water	-	-	-	-	-	0.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 03_-	Lot 1124	1/07/2003	water	-	-	-	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 03_-	Lot 1124	1/10/2003	water	-	-	-	-	-	0.042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 04_-	Lot 1124	1/01/2004	water	-	-	-	-	-	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 04_-	Lot 1124	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 04_-	Lot 1124	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 04_-	Lot 1124	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 05_-	Lot 1124	1/01/2005	water	-	-	-	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 05_-	Lot 1124	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 05_-	Lot 1124	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 05_-	Lot 1124	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 06_-	Lot 1124	1/01/2006	water	-	-	-	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 06_-	Lot 1124	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 06_-	Lot 1124	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 06_-	Lot 1124	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 07_-	Lot 1124	1/01/2007	water	-	-	-	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 07_-	Lot 1124	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S20-Jn21405	SW1	11/06/2020	water	<0.005	0.001	<0.001	<0.005	<0.005	<0.005	<1	<1	<1	<1	<2	<3	<10	<20	<20	<50	<50	<100	<100	<100	<20	<50	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
S20-Jn21410	SW1	11/06/2020	water	<0.005	0.001	<0.001	<0.005	<0.005	<0.005	<1	<1	<1	<1	<2	<3	<10	<20	<20	<50	<50	<100	<100	<100	<20	<50	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
S20-Jn21406	SW2	11/06/2020	water	<0.005	0.002	<0.001	<0.005	<0.005	0.006	<1	<1	<1	<1	<2	<3	<10	<20	<20	<50	<50	<100	<100	<100	<20	<50	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
S20-Jn21407	SW3	11/06/2020	water	0.007	0.002	<0.001	<0.005	<0.005	0.005	<1	<1	<1	<1	<2	<3	<10	<20	<20	<50	<50	<100	<100	<100	<20	<50	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
S20-Jn21408	SW4	11/06/2020	water	<0.005	0.008	<0.001	<0.005	<0.005	0.015	<1	<1	<1	<1	<2	<3	<10	<20	<20	<50	<50	<100	<100	<100	<20	<50	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
S20-Jn21409	SW5	11/06/2020	water	<0.005	0.002	<0.001	<0.005	<0.005	0.01	<1	<1	<1	<1	<2	<3	<10	<20	<20	<50	<50	<100	<100	<100	<20	<50	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
WWP_01 Jan 98_-	WWP	1/01/1998	water	-	-	-	-	-	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 98_-	WWP	1/07/1998	water	-	-	-	-	-	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 98_-	WWP	1/10/1998	water	-	-	-	-	-	0.025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 99_-	WWP	1/01/1999	water	-	-	-	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 99_-	WWP	1/07/1999	water	-	-	-	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 99_-	WWP	1/10/1999	water	-	-	-	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 00_-	WWP	1/04/2000	water	-	-	-	-	-	0.028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 00_-	WWP	1/07/2000	water	-	-	-	-	-	0.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 00_-	WWP	1/10/2000	water	-	-	-	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 01_-	WWP	1/01/2001	water	-	-	-	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 01_-	WWP	1/04/2001	water	-	-	-	-	-	0.021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 01_-	WWP	1/07/2001	water	-	-	-	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 01_-	WWP	1/10/2001	water	-	-	-	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 02_-	WWP	1/01/2002	water	-	-	-	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 02_-	WWP	1/04/2002	water	-	-	-	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 02_-	WWP	1/07/2002	water	-	-	-	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 02_-	WWP	1/10/2002	water	-	-	-	-	-	0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 03_-	WWP	1/01/2003	water	-	-	-	-	-	0.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 03_-	WWP	1/04/2003	water	-	-	-	-	-	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 03_-	WWP	1/07/2003	water	-	-	-	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 03_-	WWP	1/10/2003	water	-	-	-	-	-	0.023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 04_-	WWP	1/01/2004	water	-	-	-	-	-	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 04_-	WWP	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 04_-	WWP	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 04_-	WWP	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 05_-	WWP	1/01/2005	water	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 05_-	WWP	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 05_-	WWP	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 05_-	WWP	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 06_-	WWP	1/01/2006	water	-	-	-	-	-	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 06_-	WWP	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jun 06_-	WWP	1/06/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Appendix G Table G2a - Historical surface water results - ecological assessment criteria

	OC Pesticides																								PCBs							
	Other organochlorine pesticides EPAVic	4,4'-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	4,4 DDD	4,4 DDT	DDT+DDE+DDD - Lab Calc	Dieldrin	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Total)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
LOR	1	0.1	0.1	0.1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	10	1	1	1	1	1	1	1	1
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)							0.08			0.01						0.02			0.2	0.09		0.1		0.2				0.6		0.03		
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)				0.001								0.01											0.005									
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																0.008						0.1										
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)				0.003			0.001			0.0004		0.01[RS]							0.007	0.0004			0.004	0.0006				0.3		0.01		

Sample ID	Location Code	Date	Matrix Type																															
CRP_01 Jan 98_-	CRP	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Jul 98_-	CRP	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Oct 98_-	CRP	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Jan 99_-	CRP	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Jul 99_-	CRP	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Oct 99_-	CRP	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Apr 00_-	CRP	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Jul 00_-	CRP	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Oct 00_-	CRP	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Jan 01_-	CRP	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Apr 01_-	CRP	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 98_-	FRP	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 98_-	FRP	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 98_-	FRP	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 99_-	FRP	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 99_-	FRP	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 99_-	FRP	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 00_-	FRP	1/01/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 00_-	FRP	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 00_-	FRP	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 00_-	FRP	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 01_-	FRP	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 01_-	FRP	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 01_-	FRP	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 01_-	FRP	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 02_-	FRP	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 02_-	FRP	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 02_-	FRP	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 02_-	FRP	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 03_-	FRP	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 03_-	FRP	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 03_-	FRP	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 03_-	FRP	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 04_-	FRP	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 04_-	FRP	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 04_-	FRP	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 04_-	FRP	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 05_-	FRP	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 05_-	FRP	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 05_-	FRP	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 05_-	FRP	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 06_-	FRP	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 06_-	FRP	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 06_-	FRP	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 06_-	FRP	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 07_-	FRP	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 07_-	FRP	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 98_-	Lot 1124	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 98_-	Lot 1124	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 98_-	Lot 1124	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 99_-	Lot 1124	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 99_-	Lot 1124	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 99_-	Lot 1124	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 00_-	Lot 1124	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 00_-	Lot 1124	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 00_-	Lot 1124	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 01_-	Lot 1124	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 01_-	Lot 1124	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 01_-	Lot 1124	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 01_-	Lot 1124	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G2a - Historical surface water results - ecological assessment criteria

		OC Pesticides																								PCBs							
		Other organochlorine pesticides EPAVic	4,4'-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	4,4 DDD	4,4 DDT	DDT+DDE+DDD - Lab Calc	Dieldrin	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Total)
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
LOR		1	0.1	0.1	0.1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	10	1	1	1	1	1	1	1	1
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																	
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																	
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.08			0.01						0.02			0.2	0.09		0.1		0.2				0.6		0.03		
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)					0.001								0.01											0.005									
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																	0.008						0.1										
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)					0.003			0.001			0.0004		0.01[RS]							0.007	0.0004			0.004	0.0006				0.3		0.01		
Sample ID	**Location Code**	**Date**	**Matrix Type**																															
Lot 1124_01 Jan 02_-	Lot 1124	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 02_-	Lot 1124	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 02_-	Lot 1124	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 02_-	Lot 1124	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 03_-	Lot 1124	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 03_-	Lot 1124	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 03_-	Lot 1124	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 03_-	Lot 1124	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 04_-	Lot 1124	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 04_-	Lot 1124	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 04_-	Lot 1124	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 04_-	Lot 1124	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 05_-	Lot 1124	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 05_-	Lot 1124	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 05_-	Lot 1124	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 05_-	Lot 1124	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 06_-	Lot 1124	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 06_-	Lot 1124	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 06_-	Lot 1124	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 06_-	Lot 1124	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 07_-	Lot 1124	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 07_-	Lot 1124	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S20-Jn21405	SW1	11/06/2020	water	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1
S20-Jn21410	SW1	11/06/2020	water	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1
S20-Jn21406	SW2	11/06/2020	water	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1
S20-Jn21407	SW3	11/06/2020	water	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1
S20-Jn21408	SW4	11/06/2020	water	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1
S20-Jn21409	SW5	11/06/2020	water	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1
WWP_01 Jan 98_-	WWP	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 98_-	WWP	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 98_-	WWP	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 99_-	WWP	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 99_-	WWP	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 99_-	WWP	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 00_-	WWP	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 00_-	WWP	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 00_-	WWP	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 01_-	WWP	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 01_-	WWP	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 01_-	WWP	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 01_-	WWP	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 02_-	WWP	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 02_-	WWP	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 02_-	WWP	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 02_-	WWP	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 03_-	WWP	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 03_-	WWP	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 03_-	WWP	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 03_-	WWP	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 04_-	WWP	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 04_-	WWP	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 04_-	WWP	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 04_-	WWP	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 05_-	WWP	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 05_-	WWP	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 05_-	WWP	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 05_-	WWP	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 06_-	WWP	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 06_-	WWP	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jun 06_-	WWP	1/06/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G2a - Historical surface water results - ecological assessment criteria

								OC Pesticides																								PCBs					
		Other organochlorine pesticides EPAVic	4,4'-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	4,4 DDD	4,4 DDT	DDT+DDE+DDD - Lab Calc	Dieldrin	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Total)
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
LOR		1	0.1	0.1	0.1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	10	1	1	1	1	1	1	1	1
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																		
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																		
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)								0.08			0.01							0.02			0.2	0.09		0.1		0.2				0.6		0.03		
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)				0.001									0.01											0.005									
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																		0.008						0.1										
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)				0.003				0.001			0.0004		0.01[#8]								0.007	0.0004			0.004	0.0006				0.3		0.01		
Sample ID	**Location Code**	**Date**	**Matrix Type**																																	
WWP_01 Oct 06_-	WWP	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 07_-	WWP	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 07_-	WWP	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistical Summary																																				
Number of Results		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Number of Detects		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration		<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Maximum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration		0.5	0.05	0.05	0.05	0.05	0.05	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Median Concentration		0.5	0.05	0.05	0.05	0.05	0.05	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Standard Deviation		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances		0	0	0	6	0	0	6	0	0	6	0	6	0	0	0	6	0	0	6	6	0	0	6	6	0	0	0	6	0	6	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Env Stds Comments

#1:assumed same as NH4
#2:Cyanide as un-ionised HCN, measured as [CN].
#3:Measured as NH3-N at pH 8
#4:In absence of total As guideline, As (V) guideline has been adopted.
#5:Guideline for Cr (VI) adopted
#6:Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#7:In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#8:Freshwater DGV adopted (insufficient marine toxicity data)

Appendix G Table G2b - Historical surface water results - human health assessment criteria

	Field parameters		Inorganics						Unassigned	Alkalinity & Alkalin		Major Ions									Nutrients								Organic Indicators	Metals										
	pH (Field)	Electrical conductivity (field)	pH (Lab)	Total Dissolved Solids	Total Dissolved Solids (Filtered)	Total Suspended Solids	COD	Cyanide (Total)	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Hardness as CaCO3	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Nitrogen (Total Oxidised) (as N)	Nitrogen (Total)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Phosphorus (Total)	BOD	Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Tin
	pH Units	µS/cm	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL			0.1	10		1	25	0.005			5	0.5	0.5	0.5	0.5	1	5	0.5			0.01	0.02	0.02	0.05	0.2	0.2		0.01	5	0.001	0.0002	0.001	0.001	0.001	0.0001	0.005	0.001	0.001	0.005	0.005
ADWG 2011 Aesthetic (v3.5 updated 2018)	6.5-8.5		6.5-8.5	600	600						200				180	250	250				0.411												1								
ADWG 2011 Health (v3.5 updated 2018)								0.08									500[#2]	1.5				11.29[#3]	0.91[#4]				50			0.01	0.002		2	0.01	0.001	0.05	0.02	0.01	0.1	
NHMRC Recreational Guidelines 2008 - Health								0.8									5000[#2]	15				112.9[#3]	9.1[#5]				500			0.1	0.02		20	0.1	0.01	0.5	0.2	0.1	1	
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																							
2-4m																																							
4-8m																																							
>8m																																							
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																							
2-4m																																							
4-8m																																							
>8m																																							
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																							
2-4m																																							
4-8m																																							
>8m																																							
SampleCode	**Location_Code**	**Sampled_Date**	**Matrix_Type**																																					
CRP_01 Jan 98_-	CRP	1/01/1998	Surface water	-	-	-	-	880	-	-	-	18	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.7	0.11	-	-	0.005	-	<0.001	0.003	<0.001	-	-	-	-	-
CRP_01 Jul 98_-	CRP	1/07/1998	Surface water	-	-	-	-	496	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	-	0.6	1.9	-	-	0.002	-	<0.001	0.004	0.001	-	-	-	-	-
CRP_01 Oct 98_-	CRP	1/10/1998	Surface water	-	-	-	-	1670	-	-	-	67	-	-	-	-	-	-	-	-	-	-	2.62	-	-	-	-	6.5	0.02	-	-	<0.01	-	0.003	0.006	0.002	-	-	-	-	-
CRP_01 Jan 99_-	CRP	1/01/1999	Surface water	8	1650	-	-	1050	-	-	-	37	-	-	-	-	-	-	-	-	-	-	0.03	-	-	-	-	2.2	0.01	-	-	0.007	-	<0.001	0.004	<0.001	-	-	-	-	-
CRP_01 Jul 99_-	CRP	1/07/1999	Surface water	9.4	-	-	-	681	-	-	-	10	-	-	-	-	-	-	-	-	-	-	0.11	-	-	-	-	1	0.98	-	-	0.002	-	0.014	0.011	<0.001	-	-	-	-	-
CRP_01 Oct 99_-	CRP	1/10/1999	Surface water	8	-	-	-	622	-	-	-	14	-	-	-	-	-	-	-	-	-	-	0.07	-	-	-	-	1.6	0.02	-	-	0.007	-	0.005	0.003	<0.001	-	-	-	-	-
CRP_01 Apr 00_-	CRP	1/04/2000	Surface water	7.1	970	-	-	640	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.02	-	-	-	-	1	0.02	-	-	0.01	-	0.004	0.001	<0.001	-	-	-	-	-
CRP_01 Jul 00_-	CRP	1/07/2000	Surface water	7.9	1000	-	-	610	-	-	-	12	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1	0.08	-	-	0.007	-	0.003	0.002	<0.001	-	-	-	-	-
CRP_01 Oct 00_-	CRP	1/10/2000	Surface water	7.4	930	-	-	540	-	-	-	12	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.2	0.01	-	-	0.006	-	0.002	0.001	<0.001	-	-	-	-	-
CRP_01 Jan 01_-	CRP	1/01/2001	Surface water	8	950	-	-	580	-	-	-	15	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.8	<0.01	-	-	0.009	-	0.003	0.001	<0.001	-	-	-	-	-
CRP_01 Apr 01_-	CRP	1/04/2001	Surface water	8.1	830	-	-	550	-	-	-	11	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.9	<0.01	-	-	0.009	-	0.001	0.003	<0.001	-	-	-	-	-
FRP_01 Jan 98_-	FRP	1/01/1998	Surface water	-	-	-	-	472	-	-	-	10	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.6	0.16	-	-	0.002	-	<0.001	0.001	<0.001	-	-	-	-	-
FRP_01 Jul 98_-	FRP	1/07/1998	Surface water	-	-	-	-	378	-	-	-	9	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.6	<0.01	-	-	0.001	-	<0.001	0.002	0.002	-	-	-	-	-
FRP_01 Oct 98_-	FRP	1/10/1998	Surface water	-	-	-	-	508	-	-	-	17	-	-	-	-	-	-	-	-	-	-	2.21	-	-	-	-	4.1	25	-	-	<0.001	-	0.001	0.004	<0.001	-	-	-	-	-
FRP_01 Jan 99_-	FRP	1/01/1999	Surface water	8.7	797	-	-	513	-	-	-	51	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.3	<0.01	-	-	0.003	-	0.002	0.003	<0.001	-	-	-	-	-
FRP_01 Jul 99_-	FRP	1/07/1999	Surface water	7.8	-	-	-	805	-	-	-	9	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.8	0.04	-	-	0.002	-	0.003	0.002	<0.001	-	-	-	-	-
FRP_01 Oct 99_-	FRP	1/10/1999	Surface water	8.3	-	-	-	583	-	-	-	12	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.7	0.03	-	-	0.007	-	0.004	0.008	<0.001	-	-	-	-	-
FRP_01 Jan 00_-	FRP	1/01/2000	Surface water	7.9	680	-	-	410	-	-	-	14	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.4	-	-	-	0.002	-	0.001	<0.001	<0.001	-	-	-	-	-
FRP_01 Apr 00_-	FRP	1/04/2000	Surface water	7.5	880	-	-	510	-	-	-	16	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.8	<0.01	-	-	0.004	-	0.004	0.003	<0.001	-	-	-	-	-
FRP_01 Jul 00_-	FRP	1/07/2000	Surface water	8.3	910	-	-	510	-	-	-	15	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.6	<0.01	-	-	0.003	-	0.002	0.001	<0.001	-	-	-	-	-
FRP_01 Oct 00_-	FRP	1/10/2000	Surface water	8.1	870	-	-	460	-	-	-	19	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.6	<0.01	-	-	0.003	-	0.003	<0.001	<0.001	-	-	-	-	-
FRP_01 Jan 01_-	FRP	1/01/2001	Surface water	7.8	1000	-	-	600	-	-	-	26	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	-	1.8	0.05	-	-	0.005	-	0.005	0.002	<0.001	-	-	-	-	-
FRP_01 Apr 01_-	FRP	1/04/2001	Surface water	8.7	920	-	-	560	-	-	-	20	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	2	<0.01	-	-	0.004	-	0.001	0.002	<0.001	-	-	-	-	-
FRP_01 Jul 01_-	FRP	1/07/2001	Surface water	7.6	900	-	-	510	-	-	-	14	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1	<0.01	-	-	0.002	-	0.002	0.002	<0.001	-	-	-	-	-
FRP_01 Oct 01_-	FRP	1/10/2001	Surface water	7.5	770	-	-	420	-	-	-	14	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1	<0.01	-	-	0.002	-	<0.001	<0.001	<0.001	-	-	-	-	-
FRP_01 Jan 02_-	FRP	1/01/2002	Surface water	7.4	940	-	-	540	-	-	-	19	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	-	1.4	<0.01	-	-	<0.001	-	<0.001	<0.001	<0.001	-	-	-	-	-
FRP_01 Apr 02_-	FRP	1/04/2002	Surface water	7.8	740	-	-	460	-	-	-	10	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.8	<0.01	-	-	0.003	-	<0.001	<0.001	<0.001	-	-	-	-	-
FRP_01 Jul 02_-	FRP	1/07/2002	Surface water	7.9	730	-	-	440	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.06	-	-	-	-	0.5	0.02	-	-	0.001	-	<0.001	<0.001	<0.001	-	-	-	-	-
FRP_01 Oct 02_-	FRP	1/10/2002	Surface water	8.1	750	-	-	420	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	-	1	0.04	-	-	0.002	-	0.001	<0.001	<0.001	-	-	-	-	-
FRP_01 Jan 03_-	FRP	1/01/2003	Surface water	8.25	710	-	-	430	-	-	-	30	-	-	-	-	-	-	-	-	-	-	0.05	-	-	-	-	0.7	0.06	-	-	0.003	-	<0.001	0.002	<0.001	-	-	-	-	-
FRP_01 Apr 03_-	FRP	1/04/2003	Surface water	8.32	1010	-	-	584	-	-	-	27	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	-	1.3	<0.01	-	-	0.003	-	<0.001	0.001	<0.001	-	-	-	-	-
FRP_01 Jul 03_-	FRP	1/07/2003	Surface water	7.87	840	-	-	568	-	-	-	10	-	-	-	-	-	-	-	-	-	-	0.04	-	-	-	-	2.4	0.34	-	-	0.002	-	<0.001	0.005	0.001	-	-	-	-	-
FRP_01 Oct 03_-	FRP	1/10/2003	Surface water	8.25	654	-	-	482	-	-	-	13	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.3	<0.01	-	-	0.002	-	<0.001	0.001	<0.001	-	-	-	-	-
FRP_01 Jan 04_-	FRP	1/01/2004	Surface water	9.09	606	-	-	396	-	-	-	21	-	-	-	-	-	-	-	-	-	-	0.03	-	-	-	-	1.9	<0.01	-	-	0.002	-	0.001	<0.001	<0.001	-	-	-	-	-
FRP_01 Apr 04_-	FRP	1/04/2004	Surface water	7.86	-	-	-	400	-	-	-	16	-	-	-	-	-	-	-	-	-	-	0.33	-	-	-	-	-	<0.01	-	-	0.002	-	-	-	-	-	-	-	-	-
FRP_01 Jul 04_-	FRP	1/07/2004	Surface water	8.39	-	-	-	408	-	-	-	14	-	-	-	-	-	-	-	-	-	-	0.03	-	-	-	-	-	0.02	-	-	0.001	-	-	-	-	-	-	-	-	-
FRP_01 Oct 04_-	FRP	1/10/2004	Surface water	8.13	-	-	-	386	-	-	-	16	-	-	-	-	-	-	-	-	-	-	0.12	-	-	-	-	-	<0.01	-	-	0.001	-	-	-	-	-	-	-	-	-
FRP_01 Jan 05_-	FRP	1/01/2005	Surface water	7.84	-	-	-	524	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.175	-	-	-	-	-	<0.01	-	-	0.04	-	<0.01	<0.01	<0.01	-	-	-	-	-
FRP_01 Apr 05_-	FRP	1/04/2005	Surface water	8.15	-	-	-	492	-	-	-	21	-	-	-	-	-	-	-	-	-	-	0.086	-	-	-	-	-	0.01	-	-	<0.001	-	-	-	-	-	-	-	-	-
FRP_01 Jul 05_-	FRP	1/07/2005	Surface water	8.49	-	-	-	484	-	-	-	14	-	-	-	-	-	-	-	-	-	-	0.074	-	-	-	-	-	<0.01	-	-	<0.001	-	-	-	-	-	-	-	-	-
FRP_01 Oct 05_-	FRP	1/10/2005	Surface water	8.49	-	-	-	470	-	-	-	15	-	-	-	-	-	-	-	-	-	-	0.086	-	-	-	-	-	<0.01	-	-	<0.001	-	-	-	-	-	-	-	-	-
FRP_01 Jan 06_-	FRP	1/01/2006	Surface water	8.03	-	-	-	572	-	-	-	24	-	-	-	-	-	-	-	-	-	-	0.118	-	-	-	-	-	0.058	-	-	0.001	-	<0.001	0.002	<0.001	-	-	-	-	-
FRP_01 Apr 06_-	FRP	1/04/2006	Surface water	7.51	-	-	-	712	-	-	-	26	-	-	-	-	-	-	-	-	-	-	0.074	-	-	-	-	-	<0.01	-	-	0.001	-	-	-	-	-	-	-	-	-
FRP_01 Jul 06_-	FRP	1/07/2006	Surface water	7.7	-	-	-	590	-	-	-	20	-	-	-	-	-	-	-	-	-	-	0.027	-	-	-	-	-	<0.01	-	-	<0.001	-	-	-	-	-	-	-	-	-
FRP_01 Oct 06_-	FRP	1/10/2006	Surface water	7.66	-	-	-	528	-	-	-	16	-	-	-	-	-	-	-	-	-	-	0.015	-	-	-	-	-	<0.01	-	-	<0.001	-	-	-	-	-	-	-	-	-
FRP_01 Jan 07_-	FRP	1/01/2007	Surface water	7.69	-	-	-	608	-	-	-	26	-	-	-	-	-	-	-	-	-	-	0.011	-	-	-	-	-	0.013	-	-	<0.001	-	<0.001	0.001	<0.001	-	-	-	-	-
FRP_01 Apr 07_-	FRP	1/04/2007	Surface water	7.6	-	-	-	642	-	-	-	27	300	-	67	25	11	125	186	48	-	11.2	12.2	0.08	0.021	<0.01	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 98_-	Lot 1124	1/01/1998	Surface water	-	-	-	-	474	-	-	-	21	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	9.9	0.09	-	-	0.002	-	<0.001	0.002	<0.001	-	-	-	-	-
Lot 1124_01 Jul 98_-	Lot 1124	1/07/1998	Surface water	-	-	-	-	444	-	-	-	7	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.5	0.43	-	-	0.006	-	<0.001	<0.001	0.002	-	-	-	-	-
Lot 1124_01 Oct 98_-	Lot 1124	1/10/1998	Surface water	-	-	-	-	412	-	-	-	8	-	-	-	-	-	-	-	-	-	-	0.03	-	-	-	-	0.4	0.48	-	-	<0.001	-	<0.001	0.001	<0.001	-	-	-	-	-
Lot 1124_01 Jan 99_-	Lot 1124	1/01/1999	Surface water	8.5	754	-	-	432	-	-	-	6	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.3	0.08	-	-	0.008	-	<0.001	0.003	<0.001	-	-	-	-	-
Lot 1124_01 Jul 99_-	Lot 1124	1/07/1999	Surface water	8.3	-	-	-	390	-	-	-	7	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	0.15	-	-	0.009	-	0.002	0.001	<0.001	-	-	-	-	-
Lot 1124_01 Oct 99_-	Lot 1124	1/10/1999	Surface water	8.4	-	-	-	394	-	-	-	8	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.5	0.12	-	-	0.008	-	0.001	0.007	<0.001	-	-	-	-	-
Lot 1124_01 Apr 00_-	Lot 1124	1/04/2000	Surface water	7.1	690	-	-	420	-	-	-	9	-	-	-	-	-	-	-	-	-	-	0.04	-	-	-	-	0.9	0.09	-	-	0.009	-	0.003	0.001	<0.001	-	-	-	-	-
Lot 1124_01 Jul 00_-	Lot 1124	1/07/2000	Surface water	7.6	670	-	-	400	-	-	-	6	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	1.2	0.13	-	-	0.01	-	0.002	0.002	0.003	-	-	-	-	-
Lot 1124_01 Oct 00_-	Lot 1124	1/10/2000	Surface water	7.7	690	-	-	430	-	-	-	6	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.8	0.1	-	-	0.007	-	0.001	0.001	<0.001	-	-	-	-	-
Lot 1124_01 Jan 01_-	Lot 1124	1/01/2001	Surface water	8.5	680	-	-	420	-	-	-	8	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.3	<0.01	-	-	0.009	-	0.005	0.002	<0.001	-	-	-	-	-
Lot 1124_01 Apr 01_-	Lot 1124	1/04/2001	Surface water	8.3	680	-	-	450	-	-	-	6	-	-	-	-	-	-	-	-	-	-	0.03	-	-	-	-	0.5	0.01	-	-	0.009	-	<0.001	0.001	<0.001	-	-	-	-	-
Lot 1124_01 Jul 01_-	Lot 1124	1/07/2001	Surface water	8.1	680	-	-	390	-	-	-	6	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.4	0.05	-	-	0.008	-	0.002	0.002	<0.001	-	-	-	-	-

	Field parameters		Inorganics						Unassigned	Acidity & Alkalin		Major Ions									Nutrients							Organic Indicators	Metals										
	pH (Field)	Electrical conductivity (field)	pH (Lab)	Total Dissolved Solids	Total Dissolved Solids (Filtered)	Total Suspended Solids	COD	Cyanide (Total)	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Hardness as CaCO3	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Nitrogen (Total Oxidised) (as N)	Nitrogen (Total)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Phosphorus (Total)	BOD	Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Tin
	pH Units	µS/cm	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL			0.1	10		1	25	0.005			5	0.5	0.5	0.5	0.5	1	5	0.5			0.01	0.02	0.02	0.05	0.2	0.2		0.01	5	0.001	0.0002	0.001	0.001	0.001	0.0001	0.005	0.001	0.001	0.005	0.005
ADWG 2011 Aesthetic (v3.5 updated 2018)	6.5-8.5		6.5-8.5	600	600						200				180	250	250				0.411												1							
ADWG 2011 Health (v3.5 updated 2018)								0.08									500[#2]	1.5				11.29[#3]	0.91[#4]				50			0.01	0.002		2	0.01	0.001	0.05	0.02	0.01	0.1	
NHMRC Recreational Guidelines 2008 - Health								0.8									5000[#2]	15				112.9[#3]	9.1[#5]				500			0.1	0.02		20	0.1	0.01	0.5	0.2	0.1	1	
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																							
2-4m																																							
4-8m																																							
>8m																																							
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																							
2-4m																																							
4-8m																																							
>8m																																							
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																							
2-4m																																							
4-8m																																							
>8m																																							

SampleCode	Location_Code	Sampled_Date	Matrix_Type																																				
Lot 1124_01 Oct 01_-_	Lot 1124	1/10/2001	Surface water	8.2	650	-	-	390	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.4	0.02	-	-	0.004	-	<0.001	0.001	<0.001	-	-	-	-	-	-
Lot 1124_01 Jan 02_-_	Lot 1124	1/01/2002	Surface water	8.3	730	-	-	430	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.5	<0.01	-	-	<0.001	-	<0.001	0.001	<0.001	-	-	-	-	-	-
Lot 1124_01 Apr 02_-_	Lot 1124	1/04/2002	Surface water	8.2	650	-	-	400	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.3	<0.01	-	-	0.003	-	<0.001	<0.001	<0.001	-	-	-	-	-	-
Lot 1124_01 Jul 02_-_	Lot 1124	1/07/2002	Surface water	8.1	620	-	-	370	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.3	0.12	-	-	0.005	-	<0.001	<0.001	<0.001	-	-	-	-	-	-
Lot 1124_01 Oct 02_-_	Lot 1124	1/10/2002	Surface water	8.4	670	-	-	390	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	0.4	0.11	-	-	0.005	-	0.002	0.002	<0.001	-	-	-	-	-	-
Lot 1124_01 Jan 03_-_	Lot 1124	1/01/2003	Surface water	8.14	620	-	-	400	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03	-	-	-	0.4	0.03	-	-	0.005	-	<0.001	0.002	<0.001	-	-	-	-	-	-
Lot 1124_01 Apr 03_-_	Lot 1124	1/04/2003	Surface water	8.17	738	-	-	452	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.3	<0.01	-	-	0.006	-	<0.001	0.001	<0.001	-	-	-	-	-	-
Lot 1124_01 Jul 03_-_	Lot 1124	1/07/2003	Surface water	8.08	660	-	-	390	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.2	0.39	-	-	0.005	-	<0.001	0.001	<0.001	-	-	-	-	-	-
Lot 1124_01 Oct 03_-_	Lot 1124	1/10/2003	Surface water	8.16	681	-	-	510	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	-	-	-	0.3	0.46	-	-	0.006	-	<0.001	0.001	<0.001	-	-	-	-	-	-
Lot 1124_01 Jan 04_-_	Lot 1124	1/01/2004	Surface water	8.4	726	-	-	460	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.5	0.36	-	-	0.003	-	0.001	0.002	<0.001	-	-	-	-	-	-
Lot 1124_01 Apr 04_-_	Lot 1124	1/04/2004	Surface water	8.18	-	-	-	384	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	-	-	-	-	0.43	-	-	0.007	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 04_-_	Lot 1124	1/07/2004	Surface water	8.09	-	-	-	466	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.35	-	-	0.012	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 04_-_	Lot 1124	1/10/2004	Surface water	8.11	-	-	-	496	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15	-	-	-	-	0.33	-	-	0.007	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 05_-_	Lot 1124	1/01/2005	Surface water	8.27	-	-	-	542	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	0.298	-	-	-	-	0.205	-	-	0.03	-	<0.01	<0.01	<0.01	-	-	-	-	-	-
Lot 1124_01 Apr 05_-_	Lot 1124	1/04/2005	Surface water	7.95	-	-	-	446	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	0.071	-	-	-	-	0.107	-	-	0.01	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 05_-_	Lot 1124	1/07/2005	Surface water	8.25	-	-	-	460	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	0.034	-	-	-	-	0.291	-	-	0.006	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 05_-_	Lot 1124	1/10/2005	Surface water	8.61	-	-	-	492	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	0.042	-	-	-	-	0.093	-	-	0.005	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 06_-_	Lot 1124	1/01/2006	Surface water	8.28	-	-	-	520	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	0.041	-	-	-	-	<0.01	-	-	0.004	-	<0.001	0.001	<0.001	-	-	-	-	-	-
Lot 1124_01 Apr 06_-_	Lot 1124	1/04/2006	Surface water	8.12	-	-	-	506	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	0.095	-	-	-	-	0.01	-	-	0.002	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 06_-_	Lot 1124	1/07/2006	Surface water	8.15	-	-	-	494	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	0.021	-	-	-	-	<0.01	-	-	0.002	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 06_-_	Lot 1124	1/10/2006	Surface water	8.1	-	-	-	508	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	0.011	-	-	-	-	0.013	-	-	0.002	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 07_-_	Lot 1124	1/01/2007	Surface water	8.5	-	-	-	532	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.064	-	-	0.002	-	<0.001	0.001	<0.001	-	-	-	-	-	-
Lot 1124_01 Apr 07_-_	Lot 1124	1/04/2007	Surface water	7.98	-	-	-	580	-	-	-	8	114	-	80	17	6	56	92.3	164	-	7.98	8.3	0.094	<0.01	<0.01	-	-	-	-	-	-	0.002	-	-	-	-	-	-	-	-	-	-
S20-Jn21405	SW1	11/06/2020	Surface water	-	-	8	170	-	14	<25	<0.005	-	-	77	22	5.7	1.3	22	20	36	<0.5	-	-	0.05	2.1	0.03	2.2	2.6	0.4	-	0.03	<5	<0.001	<0.0002	0.002	0.007	<0.001	<0.0001	<0.005	0.001	<0.001	<0.005	<0.005
S20-Jn21410	SW1	11/06/2020	Surface water	-	-	7.9	150	-	10	<25	<0.005	-	-	79	22	6	1.3	22	21	35	<0.5	-	-	0.06	2.1	0.03	2.1	2.4	0.3	-	<0.01	<5	<0.001	<0.0002	0.002	0.008	<0.001	<0.0001	<0.005	0.001	<0.001	<0.005	<0.005
S20-Jn21406	SW2	11/06/2020	Surface water	-	-	7.9	320	-	41	<25	<0.005	-	-	180	58	8.4	4.1	33	47	98	<0.5	-	-	0.05	0.12	<0.02	0.14	0.74	0.6	-	<0.01	<5	0.002	<0.0002	0.003	0.003	0.003	<0.0001	<0.005	0.002	<0.001	<0.005	<0.005
S20-Jn21407	SW3	11/06/2020	Surface water	-	-	7.9	380	-	26	<25	<0.005	-	-	200	65	8.8	5.2	34	51	99	<0.5	-	-	0.16	0.23	0.03	0.26	1.16	0.9	-	0.01	<5	0.004	<0.0002	0.003	0.003	0.003	<0.0001	0.007	0.002	<0.001	<0.005	<0.005
S20-Jn21408	SW4	11/06/2020	Surface water	-	-	8.2	1400	-	50	270	0.007	-	-	410	95	42	60	230	340	230	<0.5	-	-	87	<1	<1	<2.5	96	96	-	0.02	<5	0.004	<0.0002	0.012	0.009	0.004	<0.0001	<0.005	0.008	<0.001	<0.005	<0.005
S20-Jn21409	SW5	11/06/2020	Surface water	-	-	7.9	270	-	42	<25	<0.005	-	-	170	58	4.6	3.1	20	28	120	<0.5	-	-	0.04	0.14	<0.02	0.14	0.74	0.6	-	0.01	<5	0.001	<0.0002	0.003	0.005	0.005	<0.0001	<0.005	0.002	<0.001	<0.005	<0.005
WWP_01 Jan 98_-_	WWP	1/01/1998	Surface water	-	-	-	-	870	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.6	0.47	-	-	0.006	-	<0.001	0.005	<0.001	-	-	-	-	-	-
WWP_01 Jul 98_-_	WWP	1/07/1998	Surface water	-	-	-	-	862	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	0.7	<0.01	-	-	0.005	-	<0.001	0.01	0.001	-	-	-	-	-	-
WWP_01 Oct 98_-_	WWP	1/10/1998	Surface water	-	-	-	-	436	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04	-	-	-	0.6	0.1	-	-	<0.001	-	<0.001	0.008	<0.001	-	-	-	-	-	-
WWP_01 Jan 99_-_	WWP	1/01/1999	Surface water	8.8	887	-	-	609	-	-	-	28	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.4	<0.01	-	-	0.006	-	0.004	0.005	<0.001	-	-	-	-	-	-
WWP_01 Jul 99_-_	WWP	1/07/1999	Surface water	8.2	-	-	-	603	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.5	<0.01	-	-	0.003	-	0.003	0.008	<0.001	-	-	-	-	-	-
WWP_01 Oct 99_-_	WWP	1/10/1999	Surface water	8.3	-	-	-	612	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	0.9	<0.01	-	-	0.005	-	0.004	0.008	<0.001	-	-	-	-	-	-
WWP_01 Apr 00_-_	WWP	1/04/2000	Surface water	7.8	1200	-	-	850	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05	-	-	-	0.6	0.05	-	-	0.005	-	0.003	0.006	<0.001	-	-	-	-	-	-
WWP_01 Jul 00_-_	WWP	1/07/2000	Surface water	8.1	1500	-	-	1000	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03	-	-	-	1.6	0.09	-	-	0.004	-	0.003	0.012	<0.001	-	-	-	-	-	-
WWP_01 Oct 00_-_	WWP	1/10/2000	Surface water	7.6	1700	-	-	1200	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	-	-	-	1.2	0.01	-	-	0.004	-	0.002	0.007	<0.001	-	-	-	-	-	-
WWP_01 Jan 01_-_	WWP	1/01/2001	Surface water	7.8	1600	-	-	1100	-	-	-	19	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07	-	-	-	1.2	<0.01	-	-	0.008	-	0.006	0.004	<0.001	-	-	-	-	-	-
WWP_01 Apr 01_-_	WWP	1/04/2001	Surface water	8.1	1400	-	-	940	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03	-	-	-	1.2	0.01	-	-	0.005	-	0.001	0.007	<0.001	-	-	-	-	-	-
WWP_01 Jul 01_-_	WWP	1/07/2001	Surface water	7.9	780	-	-	530	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03	-	-	-	0.7	0.03	-	-	0.002	-	0.002	0.006	<0.001	-	-	-	-	-	-
WWP_01 Oct 01_-_	WWP	1/10/2001	Surface water	8.1	1200	-	-	650	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.5	<0.01	-	-	0.003	-	<0.001	0.006	<0.001	-	-	-	-	-	-
WWP_01 Jan 02_-_	WWP	1/01/2002	Surface water	7.8	1900	-	-	1200	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07	-	-	-	1.2	0.41	-	-	<0.001	-	<0.001	0.004	<0.001	-	-	-	-	-	-
WWP_01 Apr 02_-_	WWP	1/04/2002	Surface water	8.3	870	-	-	540	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	1.2	0.15	-	-	0.002	-	<0.001	0.005	<0.001	-	-	-	-	-	-
WWP_01 Jul 02_-_	WWP	1/07/2002	Surface water	8.1	960	-	-	740	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	0.2	-	-	0.003	-	<0.001	0.006	<0.001	-	-	-	-	-	-
WWP_01 Oct 02_-_	WWP	1/10/2002	Surface water	8.1	1400	-	-	1100	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05	-	-	-	1.2	0.08	-	-	0.004	-	0.002	0.005	<0.001	-	-	-	-	-	-
WWP_01 Jan 03_-_	WWP	1/01/2003	Surface water	7.95	1400	-	-	950	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	0.14	-	-	-	-	0.08	-	-	0.005	-	<0.001	0.006	<0.001	-	-	-	-	-	-
WWP_01 Apr 03_-_	WWP	1/04/2003	Surface water	8.08	1650	-	-	1280	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-	-	0.23	-	-	-	1.3	0.17	-	-	0.005	-	<0.001	0.006	<0.001	-	-	-	-	-	-
WWP_01 Jul 03_-_	WWP	1/07/2003	Surface water	8.05	1170	-	-	878	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-	-	0.23	-	-	-	1.8	0.65	-	-	0.002	-	<0.001	0.008	<0.001	-	-	-	-	-	-
WWP_01 Oct 03_-_	WWP	1/10/2003	Surface water	8.16	1350	-	-	740	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06	-	-	-	1.1	0.19	-	-	0.003	-	<0.001	0.007	<0.001	-	-	-	-	-	-
WWP_01 Jan 04_-_	WWP	1/01/2004	Surface water	8.2	1430	-	-	1110	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05	-	-	-	1.3	0.02	-	-	0.005	-	0.001	0.005	<0.001	-	-	-	-	-	-
WWP_01 Apr 04_-_	WWP	1/04/2004	Surface water	8.17	-	-	-	956	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11	-	-	-	-	0.02	-	-	0.005	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 04_-_	WWP	1/07/2004	Surface water	8.06	-	-	-	1060	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08	-	-	-	-	0.09	-	-	0.003	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 04_-_	WWP	1/10/2004	Surface water	8.32	-	-	-	806	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-	0.42	-	-	-	-	1.02	-	-	0.002	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 05_-_	WWP	1/01/2005	Surface water	8.03	-	-	-	1150	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	0.36	-	-	-	-	0.041	-	-	0.02	-	<0.01	<0.01	<0.01	-	-	-	-	-	-
WWP_01 Apr 05_-_	WWP	1/04/2005	Surface water	8.08	-	-	-	956	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	0.114	-	-	-	-	0.148	-	-	0.003	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 05_-_	WWP	1/07/2005	Surface water	8.27	-	-	-	790	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-	0.087	-	-	-	-	0.993	-	-	0.002	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 05_-_	WWP	1/10/2005	Surface water	8.09	-	-	-	1030	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	0.139	-	-	-	-	0.235	-	-	0.003	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 06_-_	WWP	1/01/2006	Surface water	8.24	-	-	-	1070	-	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-	-	0.046	-	-	-	-	<0.01	-	-	0.003	-	<0.001	0.009	<0.001	-	-	-	-	-	-

Appendix G Table G2b - Historical surface water results - human health assessment criteria

	Field parameters		Inorganics						Unassigned	Alkalinity & Alkalin		Major Ions									Nutrients								Organic Indicators	Metals										
	pH (Field)	Electrical conductivity (field)	pH (Lab)	Total Dissolved Solids	Total Dissolved Solids (Filtered)	Total Suspended Solids	COD	Cyanide (Total)	Dissolved Organic Carbon (Filtered)	Alkalinity (total as CaCO3)	Hardness as CaCO3	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Nitrogen (Total Oxidised) (as N)	Nitrogen (Total)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Phosphorus (Total)	BOD	Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Tin
	pH Units	µS/cm	pH Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL			0.1	10		1	25	0.005			5	0.5	0.5	0.5	0.5	1	5	0.5			0.01	0.02	0.02	0.05	0.2	0.2		0.01	5	0.001	0.0002	0.001	0.001	0.001	0.0001	0.005	0.001	0.001	0.005	0.005
ADWG 2011 Aesthetic (v3.5 updated 2018)	6.5-8.5		6.5-8.5	600	600						200				180	250	250				0.411												1							
ADWG 2011 Health (v3.5 updated 2018)								0.08									500[#2]	1.5				11.29[#3]	0.91[#4]				50			0.01	0.002		2	0.01	0.001	0.05	0.02	0.01	0.1	
NHMRC Recreational Guidelines 2008 - Health								0.8									5000[#2]	15				112.9[#3]	9.1[#5]				500			0.1	0.02		20	0.1	0.01	0.5	0.2	0.1	1	
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																							
2-4m																																							
4-8m																																							
>8m																																							
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																							
2-4m																																							
4-8m																																							
>8m																																							
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																							
2-4m																																							
4-8m																																							
>8m																																							

SampleCode	Location_Code	Sampled_Date	Matrix_Type																																					
WWP_01 Apr 06_-	WWP	1/04/2006	Surface water	7.84	-	-	-	1140	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	0.235	-	-	-	-	-	0.18	-	-	0.004	-	-	-	-	-	-	-	-
WWP_01 Jun 06_-	WWP	1/06/2006	Surface water	8	-	-	-	528	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	0.043	-	-	-	-	-	0.485	-	-	0.002	-	-	-	-	-	-	-	-
WWP_01 Oct 06_-	WWP	1/10/2006	Surface water	8.03	-	-	-	508	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	0.113	-	-	-	-	-	0.117	-	-	0.002	-	-	-	-	-	-	-	-
WWP_01 Jan 07_-	WWP	1/01/2007	Surface water	8.03	-	-	-	842	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	0.048	-	-	0.005	-	<0.001	0.004	<0.001	-	-	-	-
WWP_01 Apr 07_-	WWP	1/04/2007	Surface water	7.78	-	-	-	968	-	-	-	17	226	-	173	17	14	94	92.5	370	-	14.5	14.8	0.145	0.017	<0.01	-	-	-	-	-	-	0.003	-	-	-	-	-	-	-	-

Statistical Summary																																							
Number of Results	105	58	6	6	117	6	6	6	117	3	6	9	9	9	9	9	9	6	3	3	123	9	9	6	6	81	113	6	6	123	6	93	93	93	6	6	6	6	6	6
Number of Detects	105	58	6	6	117	6	1	1	116	3	6	9	9	9	9	9	9	0	3	3	79	7	3	5	6	81	77	4	0	107	0	47	79	11	0	1	6	0	0	0
Minimum Concentration	7.1	606	7.9	150	370	10	<25	<0.005	<1	114	77	22	4.6	1.3	20	20	35	<0.5	7.98	8.3	<0.01	<0.01	<0.01	0.14	0.74	0.2	<0.01	<0.01	<5	<0.001	<0.0002	<0.001	<0.001	<0.001	<0.0001	<0.005	0.001	<0.001	<0.005	<0.005
Minimum Detect	7.1	606	7.9	150	370	10	270	0.007	3	114	77	22	4.6	1.3	20	20	35	ND	7.98	8.3	0.01	0.017	0.03	0.14	0.74	0.2	0.01	0.01	ND	0.001	ND	0.001	0.001	0.001	ND	0.007	0.001	ND	ND	ND
Maximum Concentration	9.4	1900	8.2	1400	1670	50	270	0.007	67	300	410	173	42	60	230	340	370	<0.5	14.5	14.8	87	2.1	<1	<2.5	96	96	25	0.03	<5	0.04	<0.0002	0.014	0.012	<0.01	<0.0001	0.007	0.008	<0.001	<0.005	<0.005
Maximum Detect	9.4	1900	8.2	1400	1670	50	270	0.007	67	300	410	173	42	60	230	340	370	ND	14.5	14.8	87	2.1	0.03	2.2	96	96	25	0.03	ND	0.04	ND	0.014	0.012	0.005	ND	0.007	0.008	ND	ND	ND
Average Concentration	8.1	949	8	448	624	31	55	0.0033	13	213	186	71	15	12	71	98	133	0.25	11	12	0.8	0.58	0.069	1	17	2.3	0.36	0.013	2.5	0.0045	0.0001	0.0019	0.0035	0.00088	0.00005	0.0033	0.0027	0.0005	0.0025	0.0025
Median Concentration	8.1	855	7.9	295	528	33.5	12.5	0.0025	12	226	175	65	8.8	5.2	34	51	99	0.25	11.2	12.2	0.03	0.14	0.01	0.755	1.78	0.9	0.04	0.01	2.5	0.003	0.0001	0.001	0.003	0.0005	0.00005	0.0025	0.002	0.0005	0.0025	0.0025
Standard Deviation	0.35	330	0.12	474	252	16	105	0.0018	8.9	94	122	45	12	19	70	105	109	0	3.3	3.3	7.8	0.87	0.16	0.97	39	11	2.4	0.0098	0	0.005	0	0.0022	0.0028	0.0011	0	0.0018	0.0027	0	0	0
Number of Guideline Exceedances	9	0	0	1	42	0	0	0	0	0	2	0	0	0	1	1	1	0	0	0	4	0	1	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)	9	0	0	1	42	0	0	0	0	0	2	0	0	0	1	1	1	0	0	0	4	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0

Env Stds Comments

#1:Natural concentrations generally <0.01 mg/L
#2:Not specifically guideline value: >500mg/L can have purgative effects
#3:Guideline value calculated by dividing Nitrate (as Nitrate) value (50 mg/L) by 4.427
#4:Guideline value calculated by dividing Nitrite (as Nitrite) value (0.3 mg/L) by molecular weight (3.2967033).
#5:Guideline value calculated by dividing Nitrite (as Nitrite) value (30 mg/L) by molecular weight (3.2967033).
#6:Not limiting: Derived water HSL exceeds water solubility limit
#7:To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.

		BTEXN						TRH - NEPM 2013							TRH - NEPM 1999					PAHs - standard 16														OC Pesticides																	
	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	F1 (C6-C10 minus BTEX)	C6-C10 Fraction	F2 (>C10-C16 minus Naphthalene)	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	>C10-C40 (Sum of Total)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 (Sum of Total)	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo[b+j]fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene-PAH	Phenanthrene	Pyrene	PAHs (Sum of total) - Lab calc	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4'-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	4,4 DDD	4,4 DDT	DDT+DDE+DDD - Lab Calc	Dieldrin	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde
	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.005	1	1	1	1	2	3	20	20	50	50	100	100	100	20	50	100	100	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.1	0.1	0.1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
ADWG 2011 Aesthetic (v3.5 updated 2018)	3[#1]		25	3			20																																											
ADWG 2011 Health (v3.5 updated 2018)		1	800	300			600																	0.01											0.01					0.3		2			9						
NHMRC Recreational Guidelines 2008 - Health		10	8000	3000			6000																	0.1																	3		20			90						
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																																		
2-4m		**NL[#6]**	**NL[#6]**	**NL[#6]**			**NL[#6]**	**NL[#5]**		**NL[#6]**																							**NL[#6]**																		
4-8m		**NL[#6]**	**NL[#6]**	**NL[#6]**			**NL[#6]**	**NL[#5]**		**NL[#6]**																							**NL[#6]**																		
>8m		**NL[#6]**	**NL[#6]**	**NL[#6]**			**NL[#6]**	**NL[#5]**		**NL[#6]**																							**NL[#6]**																		
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																																		
2-4m		*NL [#6]*	*NL [#6]*	*NL [#6]*			*NL [#6]*	*NL [#5]*		*NL [#6]*																							*NL [#6]*																		
4-8m		*NL [#6]*	*NL [#6]*	*NL [#6]*			*NL [#6]*	*NL [#5]*		*NL [#6]*																							*NL [#6]*																		
>8m		*NL [#6]*	*NL [#6]*	*NL [#6]*			*NL [#6]*	*NL [#5]*		*NL [#6]*																							*NL [#6]*																		
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																																		
2-4m		5000	NL[#6]	NL[#6]			NL[#6]	6000[#7]		NL[#6]																							NL[#6]																		
4-8m		5000	NL[#6]	NL[#6]			NL[#6]	6000[#7]		NL[#6]																							NL[#6]																		
>8m		5000	NL[#6]	NL[#6]			NL[#6]	7000[#7]		NL[#6]																							NL[#6]																		

| SampleCode | Location_Code | Sampled_Date | Matrix_Type | | | | | | | | | | | | | | | | | | |

Appendix G Table G2b - Historical surface water results - human health assessment criteria

		BTEXN						TRH - NEPM 2013							TRH - NEPM 1999					PAHs - standard 16																OC Pesticides																	
	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	F1 (C6-C10 minus BTEX)	C6-C10 Fraction	F2 (>C10-C16 minus Naphthalene)	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	>C10-C40 (Sum of Total)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 (Sum of Total)	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo[b+j]fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene-PAH	Phenanthrene	Pyrene	PAHs (Sum of total) - Lab calc	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4'-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	4,4 DDD	4,4 DDT	DDT+DDE+DDD - Lab Calc	Dieldrin	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde
	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.005	1	1	1	1	2	3	20	20	50	50	100	100	100	20	50	100	100	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.1	0.1	0.1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
ADWG 2011 Aesthetic (v3.5 updated 2018)	3[#1]		25	3			20																																												
ADWG 2011 Health (v3.5 updated 2018)		1	800	300			600																	0.01											0.01					0.3		2			9						
NHMRC Recreational Guidelines 2008 - Health		10	8000	3000			6000																	0.1																3		20			90						
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																																			
2-4m		**NL[#6]**	**NL[#6]**	**NL[#6]**			**NL[#6]**	**NL[#5]**		**NL[#6]**																							**NL[#6]**																			
4-8m		**NL[#6]**	**NL[#6]**	**NL[#6]**			**NL[#6]**	**NL[#5]**		**NL[#6]**																							**NL[#6]**																			
>8m		**NL[#6]**	**NL[#6]**	**NL[#6]**			**NL[#6]**	**NL[#5]**		**NL[#6]**																							**NL[#6]**																			
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																																			
2-4m		*NL[#6]*	*NL[#6]*	*NL[#6]*			*NL[#6]*	*NL[#5]*		*NL[#6]*																							*NL[#6]*																			
4-8m		*NL[#6]*	*NL[#6]*	*NL[#6]*			*NL[#6]*	*NL[#5]*		*NL[#6]*																							*NL[#6]*																			
>8m		*NL[#6]*	*NL[#6]*	*NL[#6]*			*NL[#6]*	*NL[#5]*		*NL[#6]*																							*NL[#6]*																			
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																																			
2-4m		5000	NL[#6]	NL[#6]			NL[#6]	6000[#7]		NL[#6]																							NL[#6]																			
4-8m		5000	NL[#6]	NL[#6]			NL[#6]	6000[#7]		NL[#6]																							NL[#6]																			
>8m		5000	NL[#6]	NL[#6]			NL[#6]	7000[#7]		NL[#6]																							NL[#6]																			

SampleCode	Location_Code	Sampled_Date	Matrix_Type																																																			
Lot 1124_01 Oct 01_-_	Lot 1124	1/10/2001	Surface water	0.019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 02_-_	Lot 1124	1/01/2002	Surface water	0.021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 02_-_	Lot 1124	1/04/2002	Surface water	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 02_-_	Lot 1124	1/07/2002	Surface water	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 02_-_	Lot 1124	1/10/2002	Surface water	0.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 03_-_	Lot 1124	1/01/2003	Surface water	0.042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 03_-_	Lot 1124	1/04/2003	Surface water	0.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 03_-_	Lot 1124	1/07/2003	Surface water	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 03_-_	Lot 1124	1/10/2003	Surface water	0.042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 04_-_	Lot 1124	1/01/2004	Surface water	0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 04_-_	Lot 1124	1/04/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 04_-_	Lot 1124	1/07/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 04_-_	Lot 1124	1/10/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 05_-_	Lot 1124	1/01/2005	Surface water	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 05_-_	Lot 1124	1/04/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 05_-_	Lot 1124	1/07/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 05_-_	Lot 1124	1/10/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 06_-_	Lot 1124	1/01/2006	Surface water	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 06_-_	Lot 1124	1/04/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 06_-_	Lot 1124	1/07/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 06_-_	Lot 1124	1/10/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 07_-_	Lot 1124	1/01/2007	Surface water	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 07_-_	Lot 1124	1/04/2007	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S20-Jn21405	SW1	11/06/2020	Surface water	<0.005	<1	<1	<1	<1	<2	<3	<20	<20	<50	<50	<100	<100	<100	<20	<50	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
S20-Jn21410	SW1	11/06/2020	Surface water	<0.005	<1	<1	<1	<1	<2	<3	<20	<20	<50	<50	<100	<100	<100	<20	<50	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
S20-Jn21406	SW2	11/06/2020	Surface water	0.006	<1	<1	<1	<1	<2	<3	<20	<20	<50	<50	<100	<100	<100	<20	<50	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
S20-Jn21407	SW3	11/06/2020	Surface water	0.005	<1	<1	<1	<1	<2	<3	<20	<20	<50	<50	<100	<100	<100	<20	<50	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
S20-Jn21408	SW4	11/06/2020	Surface water	0.015	<1	<1	<1	<1	<2	<3	<20	<20	<50	<50	<100	<100	<100	<20	<50	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
S20-Jn21409	SW5	11/06/2020	Surface water	0.01	<1	<1	<1	<1	<2	<3	<20	<20	<50	<50	<100	<100	<100	<20	<50	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
WWP_01 Jan 98_-_	WWP	1/01/1998	Surface water	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 98_-_	WWP	1/07/1998	Surface water	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 98_-_	WWP	1/10/1998	Surface water	0.025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 99_-_	WWP	1/01/1999	Surface water	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 99_-_	WWP	1/07/1999	Surface water	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 99_-_	WWP	1/10/1999	Surface water	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 00_-_	WWP	1/04/2000	Surface water	0.028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 00_-_	WWP	1/07/2000	Surface water	0.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 00_-_	WWP	1/10/2000	Surface water	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 01_-_	WWP	1/01/2001	Surface water	0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 01_-_	WWP	1/04/2001	Surface water	0.021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 01_-_	WWP	1/07/2001	Surface water	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 01_-_	WWP	1/10/2001	Surface water	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 02_-_	WWP	1/01/2002	Surface water	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 02_-_	WWP	1/04/2002	Surface water	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 02_-_	WWP	1/07/2002	Surface water	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 02_-_	WWP	1/10/2002	Surface water	0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 03_-_	WWP	1/01/2003	Surface water	0.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 03_-_	WWP	1/04/2003	Surface water	0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 03_-_	WWP	1/07/2003	Surface water	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 03_-_	WWP	1/10/2003	Surface water	0.023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 04_-_	WWP	1/01/2004	Surface water	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 04_-_	WWP	1/04/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 04_-_	WWP	1/07/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 04_-_	WWP	1/10/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 05_-_	WWP	1/01/2005	Surface water	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 05_-_	WWP	1/04/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 05_-_	WWP	1/07/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 05_-_	WWP	1/10/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 06_-_	WWP	1/01/2006	Surface water	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G2b - Historical surface water results - human health assessment criteria

Breen Resources Pty Ltd
Kurnell Landfill Facility
Breen Resource Facility - EIS

		BTEXN						TRH - NEPM 2013							TRH - NEPM 1999				
	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	F1 (C6-C10 minus BTEX)	C6-C10 Fraction	F2 (>C10-C16 minus Naphthalene)	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	>C10-C40 (Sum of Total)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 (Sum of Total)
	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.005	1	1	1	1	2	3	20	20	50	50	100	100	100	20	50	100	100	100
ADWG 2011 Aesthetic (v3.5 updated 2018)	3[#1]		25	3			20												
ADWG 2011 Health (v3.5 updated 2018)		1	800	300			600												
NHMRC Recreational Guidelines 2008 - Health		10	8000	3000			6000												
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																			
2-4m		**NL[#6]**	**NL[#6]**	**NL[#6]**			**NL[#6]**	**NL[#5]**		**NL[#6]**									
4-8m		**NL[#6]**	**NL[#6]**	**NL[#6]**			**NL[#6]**	**NL[#5]**		**NL[#6]**									
>8m		**NL[#6]**	**NL[#6]**	**NL[#6]**			**NL[#6]**	**NL[#5]**		**NL[#6]**									
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																			
2-4m		*NL[#6]*	*NL[#6]*	*NL[#6]*			*NL[#6]*	*NL[#5]*		*NL[#6]*									
4-8m		*NL[#6]*	*NL[#6]*	*NL[#6]*			*NL[#6]*	*NL[#5]*		*NL[#6]*									
>8m		*NL[#6]*	*NL[#6]*	*NL[#6]*			*NL[#6]*	*NL[#5]*		*NL[#6]*									
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																			
2-4m		5000	NL[#6]	NL[#6]			NL[#6]	6000[#7]		NL[#6]									
4-8m		5000	NL[#6]	NL[#6]			NL[#6]	6000[#7]		NL[#6]									
>8m		5000	NL[#6]	NL[#6]			NL[#6]	7000[#7]		NL[#6]									

		PAHs - standard 16																		
	Zinc	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo[b+j]fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene-PAH	Phenanthrene	Pyrene	PAHs (Sum of total) - Lab calc
	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.005	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ADWG 2011 Aesthetic (v3.5 updated 2018)	3[#1]																	
ADWG 2011 Health (v3.5 updated 2018)						0.01												0.01
NHMRC Recreational Guidelines 2008 - Health						0.1												
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																		
2-4m															**NL[#6]**			
4-8m															**NL[#6]**			
>8m															**NL[#6]**			
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																		
2-4m															*NL[#6]*			
4-8m															*NL[#6]*			
>8m															*NL[#6]*			
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																		
2-4m															NL[#6]			
4-8m															NL[#6]			
>8m															NL[#6]			

		OC Pesticides																		
	Zinc	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4'-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	4,4 DDD	4,4 DDT	DDT+DDE+DDD - Lab Calc	Dieldrin	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde
	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.005	1	1	0.1	0.1	0.1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
ADWG 2011 Aesthetic (v3.5 updated 2018)	3[#1]																			
ADWG 2011 Health (v3.5 updated 2018)							0.3		2			9								
NHMRC Recreational Guidelines 2008 - Health							3		20			90								
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																				
2-4m																				
4-8m																				
>8m																				
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																				
2-4m																				
4-8m																				
>8m																				
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																				
2-4m																				
4-8m																				
>8m																				

SampleCode	Location_Code	Sampled_Date	Matrix_Type	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	F1 (C6-C10 minus BTEX)	C6-C10 Fraction	F2 (>C10-C16 minus Naphthalene)	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	>C10-C40 (Sum of Total)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 (Sum of Total)
				mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WWP_01 Apr 06_-_	WWP	1/04/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jun 06_-_	WWP	1/06/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 06_-_	WWP	1/10/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 07_-_	WWP	1/01/2007	Surface water	0.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 07_-_	WWP	1/04/2007	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

		PAHs - standard 16																		
SampleCode	Zinc	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo[b+j]fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene-PAH	Phenanthrene	Pyrene	PAHs (Sum of total) - Lab calc
	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WWP_01 Apr 06_-_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jun 06_-_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 06_-_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 07_-_	0.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 07_-_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

		OC Pesticides																		
SampleCode	Zinc	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4'-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	4,4 DDD	4,4 DDT	DDT+DDE+DDD - Lab Calc	Dieldrin	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde
	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WWP_01 Apr 06_-_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jun 06_-_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 06_-_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 07_-_	0.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 07_-_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistical Summary

	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	F1 (C6-C10 minus BTEX)	C6-C10 Fraction	F2 (>C10-C16 minus Naphthalene)	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	>C10-C40 (Sum of Total)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 (Sum of Total)
Number of Results	93	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Number of Detects	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.002	<1	<1	<1	<1	<2	<3	<20	<20	<50	<50	<100	<100	<100	<20	<50	<100	<100	<100
Minimum Detect	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	0.271	<1	<1	<1	<1	<2	<3	<20	<20	<50	<50	<100	<100	<100	<20	<50	<100	<100	<100
Maximum Detect	0.271	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration	0.017	0.5	0.5	0.5	0.5	1	1.5	10	10	25	25	50	50	50	10	25	50	50	50
Median Concentration	0.01	0.5	0.5	0.5	0.5	1	1.5	10	10	25	25	50	50	50	10	25	50	50	50
Standard Deviation	0.029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	PAHs - standard 16																		
	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo[b+j]fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene-PAH	Phenanthrene	Pyrene	PAHs (Sum of total) - Lab calc
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Median Concentration	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Standard Deviation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	6	0
Number of Guideline Exceedances(Detects Only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	OC Pesticides																		
	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4'-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	4,4 DDD	4,4 DDT	DDT+DDE+DDD - Lab Calc	Dieldrin	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration	0.5	0.5	0.05	0.05	0.05	0.05	0.05	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Median Concentration	0.5	0.5	0.05	0.05	0.05	0.05	0.05	0.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Standard Deviation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Env Stds Comments

#1:Natural concentrations generally <0.01 mg/L
#2:Not specifically guideline value: >500mg/L can have purgative effects
#3:Guideline value calculated by dividing Nitrate (as Nitrate) value (50 mg/L) by 4.427
#4:Guideline value calculated by dividing Nitrite (as Nitrite) value (0.3 mg/L) by molecula
#5:Guideline value calculated by dividing Nitrite (as Nitrite) value (30 mg/L) by molecula
#6:Not limiting: Derived water HSL exceeds water solubility limit
#7:To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.

								PCBs							
	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Total)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.1	0.1	0.1	0.1	0.1	0.1	10	1	1	1	1	1	1	1	1
ADWG 2011 Aesthetic (v3.5 updated 2018)															
ADWG 2011 Health (v3.5 updated 2018)		10	0.3			300									
NHMRC Recreational Guidelines 2008 - Health		100	3			3000									
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand															
2-4m															
4-8m															
>8m															
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand															
2-4m															
4-8m															
>8m															
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand															
2-4m															
4-8m															
>8m															

SampleCode	Location_Code	Sampled_Date	Matrix_Type															
CRP_01 Jan 98_-	CRP	1/01/1998	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Jul 98_-	CRP	1/07/1998	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Oct 98_-	CRP	1/10/1998	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Jan 99_-	CRP	1/01/1999	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Jul 99_-	CRP	1/07/1999	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Oct 99_-	CRP	1/10/1999	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Apr 00_-	CRP	1/04/2000	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Jul 00_-	CRP	1/07/2000	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Oct 00_-	CRP	1/10/2000	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Jan 01_-	CRP	1/01/2001	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CRP_01 Apr 01_-	CRP	1/04/2001	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 98_-	FRP	1/01/1998	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 98_-	FRP	1/07/1998	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 98_-	FRP	1/10/1998	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 99_-	FRP	1/01/1999	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 99_-	FRP	1/07/1999	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 99_-	FRP	1/10/1999	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 00_-	FRP	1/01/2000	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 00_-	FRP	1/04/2000	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 00_-	FRP	1/07/2000	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 00_-	FRP	1/10/2000	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 01_-	FRP	1/01/2001	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 01_-	FRP	1/04/2001	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 01_-	FRP	1/07/2001	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 01_-	FRP	1/10/2001	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 02_-	FRP	1/01/2002	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 02_-	FRP	1/04/2002	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 02_-	FRP	1/07/2002	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 02_-	FRP	1/10/2002	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 03_-	FRP	1/01/2003	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 03_-	FRP	1/04/2003	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 03_-	FRP	1/07/2003	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 03_-	FRP	1/10/2003	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 04_-	FRP	1/01/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 04_-	FRP	1/04/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 04_-	FRP	1/07/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 04_-	FRP	1/10/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 05_-	FRP	1/01/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 05_-	FRP	1/04/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 05_-	FRP	1/07/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 05_-	FRP	1/10/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 06_-	FRP	1/01/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 06_-	FRP	1/04/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jul 06_-	FRP	1/07/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Oct 06_-	FRP	1/10/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Jan 07_-	FRP	1/01/2007	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRP_01 Apr 07_-	FRP	1/04/2007	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 98_-	Lot 1124	1/01/1998	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 98_-	Lot 1124	1/07/1998	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 98_-	Lot 1124	1/10/1998	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 99_-	Lot 1124	1/01/1999	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 99_-	Lot 1124	1/07/1999	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 99_-	Lot 1124	1/10/1999	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 00_-	Lot 1124	1/04/2000	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 00_-	Lot 1124	1/07/2000	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 00_-	Lot 1124	1/10/2000	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 01_-	Lot 1124	1/01/2001	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 01_-	Lot 1124	1/04/2001	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 01_-	Lot 1124	1/07/2001	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

								PCBs							
	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Total)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.1	0.1	0.1	0.1	0.1	0.1	10	1	1	1	1	1	1	1	1
ADWG 2011 Aesthetic (v3.5 updated 2018)															
ADWG 2011 Health (v3.5 updated 2018)		10	0.3			300									
NHMRC Recreational Guidelines 2008 - Health		100	3			3000									
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand															
2-4m															
4-8m															
>8m															
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand															
2-4m															
4-8m															
>8m															
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand															
2-4m															
4-8m															
>8m															

SampleCode	Location_Code	Sampled_Date	Matrix_Type															
Lot 1124_01 Oct 01_-_-	Lot 1124	1/10/2001	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 02_-_-	Lot 1124	1/01/2002	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 02_-_-	Lot 1124	1/04/2002	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 02_-_-	Lot 1124	1/07/2002	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 02_-_-	Lot 1124	1/10/2002	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 03_-_-	Lot 1124	1/01/2003	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 03_-_-	Lot 1124	1/04/2003	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 03_-_-	Lot 1124	1/07/2003	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 03_-_-	Lot 1124	1/10/2003	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 04_-_-	Lot 1124	1/01/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 04_-_-	Lot 1124	1/04/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 04_-_-	Lot 1124	1/07/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 04_-_-	Lot 1124	1/10/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 05_-_-	Lot 1124	1/01/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 05_-_-	Lot 1124	1/04/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 05_-_-	Lot 1124	1/07/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 05_-_-	Lot 1124	1/10/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 06_-_-	Lot 1124	1/01/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 06_-_-	Lot 1124	1/04/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 06_-_-	Lot 1124	1/07/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 06_-_-	Lot 1124	1/10/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 07_-_-	Lot 1124	1/01/2007	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 07_-_-	Lot 1124	1/04/2007	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S20-Jn21405	SW1	11/06/2020	Surface water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1
S20-Jn21410	SW1	11/06/2020	Surface water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1
S20-Jn21406	SW2	11/06/2020	Surface water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1
S20-Jn21407	SW3	11/06/2020	Surface water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1
S20-Jn21408	SW4	11/06/2020	Surface water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1
S20-Jn21409	SW5	11/06/2020	Surface water	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1	<1
WWP_01 Jan 98_-_-	WWP	1/01/1998	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 98_-_-	WWP	1/07/1998	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 98_-_-	WWP	1/10/1998	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 99_-_-	WWP	1/01/1999	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 99_-_-	WWP	1/07/1999	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 99_-_-	WWP	1/10/1999	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 00_-_-	WWP	1/04/2000	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 00_-_-	WWP	1/07/2000	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 00_-_-	WWP	1/10/2000	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 01_-_-	WWP	1/01/2001	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 01_-_-	WWP	1/04/2001	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 01_-_-	WWP	1/07/2001	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 01_-_-	WWP	1/10/2001	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 02_-_-	WWP	1/01/2002	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 02_-_-	WWP	1/04/2002	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 02_-_-	WWP	1/07/2002	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 02_-_-	WWP	1/10/2002	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 03_-_-	WWP	1/01/2003	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 03_-_-	WWP	1/04/2003	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 03_-_-	WWP	1/07/2003	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 03_-_-	WWP	1/10/2003	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 04_-_-	WWP	1/01/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 04_-_-	WWP	1/04/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 04_-_-	WWP	1/07/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 04_-_-	WWP	1/10/2004	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 05_-_-	WWP	1/01/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 05_-_-	WWP	1/04/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jul 05_-_-	WWP	1/07/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 05_-_-	WWP	1/10/2005	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 06_-_-	WWP	1/01/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

								PCBs							
	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Total)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.1	0.1	0.1	0.1	0.1	0.1	10	1	1	1	1	1	1	1	1
ADWG 2011 Aesthetic (v3.5 updated 2018)															
ADWG 2011 Health (v3.5 updated 2018)		10	0.3			300									
NHMRC Recreational Guidelines 2008 - Health		100	3			3000									
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand															
2-4m															
4-8m															
>8m															
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand															
2-4m															
4-8m															
>8m															
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand															
2-4m															
4-8m															
>8m															
SampleCode	**Location_Code**	**Sampled_Date**	**Matrix_Type**														
WWP_01 Apr 06_-	WWP	1/04/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jun 06_-	WWP	1/06/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Oct 06_-	WWP	1/10/2006	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Jan 07_-	WWP	1/01/2007	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWP_01 Apr 07_-	WWP	1/04/2007	Surface water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Statistical Summary																	
Number of Results				6	6	6	6	6	6	6	6	6	6	6	6	6	6
Number of Detects				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1
Minimum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<1	<1	<1	<1	<1	<1	<1
Maximum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration				0.05	0.05	0.05	0.05	0.05	0.05	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Median Concentration				0.05	0.05	0.05	0.05	0.05	0.05	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Standard Deviation				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances				0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)				0	0	0	0	0	0	0	0	0	0	0	0	0	0

Env Stds Comments

#1:Natural concentrations generally <0.01 mg/L
#2:Not specifically guideline value: >500mg/L can have purgative effects
#3:Guideline value calculated by dividing Nitrate (as Nitrate) value (50 mg/L) by 4.427
#4:Guideline value calculated by dividing Nitrite (as Nitrite) value (0.3 mg/L) by molecula
#5:Guideline value calculated by dividing Nitrite (as Nitrite) value (30 mg/L) by molecular
#6:Not limiting: Derived water HSL exceeds water solubility limit
#7:To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.

Appendix G Table G3a - Historical leachate results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity					Major Ions									Nutrients							Organic Indicators	
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (Hydroxide as CaCO3)	Alkalinity (total as CaCO3)	Alkalinity (total)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Phosphate	Phosphorus (Total)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*															*0.015* [#2]						*0.03*		
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**															**0.01** [#2]						**0.01**		
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																								0.9 [#3]								
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																								0.91 [#7]								
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																

Sample ID	Location Code	Date	Matrix Type																														
LB01_01 Jan 02_-	LB01	1/01/2002	water	-	7.1	**3800**	-	-	-	-	2200	-	-	-	-	-	-	-	-	-	-	-	-	-	***25.2***	-	-	31	0.01	-	-	85	-
LB01_01 Apr 02_-	LB01	1/04/2002	water	-	7.3	**2900**	-	-	-	-	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	***22***	-	-	28	<0.01	-	-	88	-
LB01_01 Jul 02_-	LB01	1/07/2002	water	-	7.5	**2900**	-	-	-	-	2200	-	-	-	-	-	-	-	-	-	-	-	-	-	***24.9***	-	-	28	<0.01	-	-	94	-
LB01_01 Oct 02_-	LB01	1/10/2002	water	-	7.4	**3400**	-	-	-	-	2300	-	-	-	-	-	-	-	-	-	-	-	-	-	***32.9***	-	-	33	0.01	-	-	94	-
LB01_01 Jan 03_-	LB01	1/01/2003	water	-	7.57	**3000**	-	-	-	-	2400	-	-	-	-	-	-	-	-	-	-	-	-	-	***33***	-	-	34	0.16	-	-	100	-
LB01_01 Apr 03_-	LB01	1/04/2003	water	-	7.41	**3280**	-	-	-	-	2450	-	-	-	-	-	-	-	-	-	-	-	-	-	***10.7***	-	-	35.1	0.01	-	-	126	-
LB01_01 Jul 03_-	LB01	1/07/2003	water	-	7.55	**3340**	-	-	-	-	2490	-	-	-	-	-	-	-	-	-	-	-	-	-	***31.6***	-	-	27.2	0.01	-	-	116	-
LB01_01 Oct 03_-	LB01	1/10/2003	water	-	7.51	**3370**	-	-	-	-	2340	-	-	-	-	-	-	-	-	-	-	-	-	-	***21.4***	-	-	25.4	0.02	-	-	100	-
LB01_01 Jan 04_-	LB01	1/01/2004	water	-	7.83	**3240**	-	-	-	-	2210	-	-	-	-	-	-	-	-	-	-	-	-	-	***26.3***	-	-	30.8	0.01	-	-	103	-
LB01_01 Apr 04_-	LB01	1/04/2004	water	-	-	**3640**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***31.1***	-	-	-	0.07	-	-	-	-
LB01_01 Apr 05_-	LB01	1/04/2005	water	-	-	**3320**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.015	-	-	-	-
LB01_01 May 05_-	LB01	1/05/2005	water	-	*6.98*	-	-	-	-	-	2220	-	-	-	-	-	-	-	-	-	-	-	-	-	***45.2***	-	-	43.9	0.01	-	-	70	-
LB01_01 Jul 05_-	LB01	1/07/2005	water	-	-	**3080**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.021	-	-	-	-
LB01_01 Oct 05_-	LB01	1/10/2005	water	-	-	**2650**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	-
LB01_01 Feb 06_-	LB01	1/02/2006	water	-	7.01	-	-	-	-	-	2420	-	-	-	-	-	-	-	-	-	-	-	-	-	***25.7***	-	-	-	0.019	-	-	155	-
LB01_01 Apr 06_-	LB01	1/04/2006	water	-	-	**3430**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.012	-	-	-	-
LB01_01 Jul 06_-	LB01	1/07/2006	water	-	-	**3130**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-
LB01_01 Oct 06_-	LB01	1/10/2006	water	-	-	**4830**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-
LB01_01 Jan 07_-	LB01	1/01/2007	water	-	7.2	-	-	-	-	-	2910	-	-	-	-	-	-	-	-	-	-	-	-	-	***60.4***	-	-	-	0.011	-	-	164	-
LB01_01 Apr 07_-	LB01	1/04/2007	water	-	-	**4380**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.017	0.013	-	-	-	-	-	-
LB02_02 Jul 19_-	LB02	2/07/2019	water	17.8	7.14	**2974**	***6.09***	-61.1	21.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB02_25 Oct 19_-	LB02	25/10/2019	water	17.5	*6.96*	**3918**	***3.01***	-9.5	24.6	-	-	-	1900	<5	-	-	-	170	74	150	430	310	27	0.2	-	-	***160***	-	-	-	-	-	-	-	-
LB02_13 Jan 20_-	LB02	13/01/2020	water	15.74	7.38	**4712**	***5***	-159.7	26.1	7.2	2200	***110***	2100	<5	-	-	-	140	76	140	420	370	19	0.2	-	-	***300***	<0.005	<0.005	-	-	-	-	-	180
LB02_22 Apr 20_-	LB02	22/04/2020	water	15.26	7.09	**5240**	***0.8***	-103.6	25.5	-	-	-	2200	<5	-	-	-	130	77	130	450	380	1	0.2	-	-	***300***	-	-	-	-	-	-	-	-
LD002_21 Jan 15_-	LD002	21/01/2015	water	-	7.03	**3.9**	***0.81***	-112	28.5	7.4	2500	-	1900	<5	<5	-	1900	130	87	180	600	570	15	0.15	-	-	***230***	<0.01	0.005	-	-	-	-	-	130
LD002_25 Jan 17_-	LD002	25/01/2017	water	15.64	7.04	**5320**	***0.21***	-136	27.2	7.6	2600	***1400***	2400	<5	-	-	-	240	81	170	610	520	26	0.1	-	-	***220***	0.04	<0.005	-	-	-	***0.4***	-	210
Lot 1124_01 Jan 98_-	Lot 1124	1/01/1998	water	-	-	-	-	-	-	-	474	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	9.9	0.09	-	-	21	-
Lot 1124_01 Jul 98_-	Lot 1124	1/07/1998	water	-	-	-	-	-	-	-	444	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.5	0.43	-	-	7	-
Lot 1124_01 Oct 98_-	Lot 1124	1/10/1998	water	-	-	-	-	-	-	-	412	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	0.4	0.48	-	-	8	-
Lot 1124_01 Jan 99_-	Lot 1124	1/01/1999	water	-	***8.5***	**754**	-	-	-	-	432	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.3	0.08	-	-	6	-
Lot 1124_01 Jul 99_-	Lot 1124	1/07/1999	water	-	**8.3**	-	-	-	-	-	390	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.15	-	-	7	-
Lot 1124_01 Oct 99_-	Lot 1124	1/10/1999	water	-	**8.4**	-	-	-	-	-	394	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.5	0.12	-	-	8	-
Lot 1124_01 Apr 00_-	Lot 1124	1/04/2000	water	-	7.1	**690**	-	-	-	-	420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.04***	-	-	0.9	0.09	-	-	9	-
Lot 1124_01 Jul 00_-	Lot 1124	1/07/2000	water	-	7.6	**670**	-	-	-	-	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	1.2	0.13	-	-	6	-
Lot 1124_01 Oct 00_-	Lot 1124	1/10/2000	water	-	7.7	**690**	-	-	-	-	430	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.8	0.1	-	-	6	-
Lot 1124_01 Jan 01_-	Lot 1124	1/01/2001	water	-	***8.5***	**680**	-	-	-	-	420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.3	<0.01	-	-	8	-
Lot 1124_01 Apr 01_-	Lot 1124	1/04/2001	water	-	**8.3**	**680**	-	-	-	-	450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	0.5	0.01	-	-	6	-
Lot 1124_01 Jul 01_-	Lot 1124	1/07/2001	water	-	**8.1**	**680**	-	-	-	-	390	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.4	0.05	-	-	6	-
Lot 1124_01 Oct 01_-	Lot 1124	1/10/2001	water	-	**8.2**	**650**	-	-	-	-	390	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.4	0.02	-	-	5	-
Lot 1124_01 Jan 02_-	Lot 1124	1/01/2002	water	-	**8.3**	**730**	-	-	-	-	430	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.5	<0.01	-	-	5	-
Lot 1124_01 Apr 02_-	Lot 1124	1/04/2002	water	-	**8.2**	**650**	-	-	-	-	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.3	<0.01	-	-	6	-
Lot 1124_01 Jul 02_-	Lot 1124	1/07/2002	water	-	**8.1**	**620**	-	-	-	-	370	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.3	0.12	-	-	3	-
Lot 1124_01 Oct 02_-	Lot 1124	1/10/2002	water	-	**8.4**	**670**	-	-	-	-	390	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.01**	-	-	0.4	0.11	-	-	4	-
Lot 1124_01 Jan 03_-	Lot 1124	1/01/2003	water	-	**8.14**	**620**	-	-	-	-	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.03***	-	-	0.4	0.03	-	-	6	-
Lot 1124_01 Apr 03_-	Lot 1124	1/04/2003	water	-	**8.17**	**738**	-	-	-	-	452	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.3	<0.01	-	-	14	-
Lot 1124_01 Jul 03_-	Lot 1124	1/07/2003	water	-	**8.08**	**660**	-	-	-	-	390	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.2	0.39	-	-	7	-
Lot 1124_01 Oct 03_-	Lot 1124	1/10/2003	water	-	**8.16**	**681**	-	-	-	-	510	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	0.3	0.46	-	-	7	-
Lot 1124_01 Jan 04_-	Lot 1124	1/01/2004	water	-	**8.4**	**726**	-	-	-	-	460	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	0.5	0.36	-	-	11	-
Lot 1124_01 Apr 04_-	Lot 1124	1/04/2004	water	-	**8.18**	-	-	-	-	-	384	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.02***	-	-	-	0.43	-	-	7	-
Lot 1124_01 Jul 04_-	Lot 1124	1/07/2004	water	-	**8.09**	-	-	-	-	-	466	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.35	-	-	<1	-
Lot 1124_01 Oct 04_-	Lot 1124	1/10/2004	water	-	**8.11**	-	-	-	-	-	496	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.15***	-	-	-	0.33	-	-	9	-
Lot 1124_01 Jan 05_-	Lot 1124	1/01/2005	water	-	**8.27**	-	-	-	-	-	542	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.298***	-	-	-	0.205	-	-	7	-
Lot 1124_01 Apr 05_-	Lot 1124	1/04/2005	water	-	7.95	-	-	-	-	-	446	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.071***	-	-	-	0.107	-	-	6	-
Lot 1124_01 Jul 05_-	Lot 1124	1/07/2005	water	-	**8.25**	-	-	-	-	-	460	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.034***	-	-	-	0.291	-	-	7	-
Lot 1124_01 Oct 05_-	Lot 1124	1/10/2005	water	-	***8.61***	-	-	-	-	-	492	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.042***	-	-	-	0.093	-	-	4	-
Lot 1124_01 Jan 06_-	Lot 1124	1/01/2006	water	-	**8.28**	-	-	-	-	-	520	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.041***	-	-	-	<0.01	-	-	6	-
Lot 1124_01 Apr 06_-	Lot 1124	1/04/2006	water	-	**8.12**	-	-	-	-	-	506	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.095***	-	-	-	0.01	-	-	7	-
Lot 1124_01 Jul 06_-	Lot 1124	1/07/2006	water	-	**8.15**	-	-	-	-	-	494	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***0.021***	-	-	-	<0.01	-	-	9	-
Lot 1124_01 Oct 06_-	Lot 1124	1/10/2006	water	-	**8.1**	-	-	-	-	-	508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.011**	-	-	-	0.013	-	-	7	-

Appendix G Table G3a - Historical leachate results - ecological assessment criteria

	Field data	Field Parameters					Inorganics			Acidity & Alkalinity					Major Ions									Nutrients							Organic Indicators	
	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	Alkalinity (Hydroxide as CaCO3)	Alkalinity (total as CaCO3)	Alkalinity (total)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Cations Total	Anions Total	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Phosphate	Phosphorus (Total)	Dissolved Organic Carbon (Filtered)	Total Organic Carbon
	m bTOC	pH units	µS/cm	mg/L	mV	°C	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine		*7-8.5*		*6.61-9.09* [#1]			*7-8.5*		*0.5*															*0.015* [#2]						*0.03*		
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs		**6.5-8**	**20-30**	**7.44-9.09** [#1]			**6.5-8**		**5**															**0.01** [#2]						**0.01**		
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)																								0.9 [#3]								
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																																
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																								0.91 [#7]								
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																																

Sample ID	Location Code	Date	Matrix Type																														
Lot 1124_01 Jan 07_-	Lot 1124	1/01/2007	water	-	***8.5***	-	-	-	-	-	532	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.064	-	-	6	-
Lot 1124_01 Apr 07_-	Lot 1124	1/04/2007	water	-	7.98	-	-	-	-	-	580	-	-	-	-	114	-	80	17	6	56	92.3	164	-	7.98	8.3	***0.094***	<0.01	<0.01	-	-	-	-	8	-
LW01_20 Dec 16_-	LW01	20/12/2016	water	-	*6.85*	**4061**	***0.6***	-138.1	29.9	-	2100	***46***	2000	<5	<5	2000	-	210	75	140	300	360	40	0.2	-	-	***190***	<0.005	<0.005	-	-	0.12	-	-	130
LW01_11 Jan 17_-	LW01	11/01/2017	water	-	*6.76*	**4270**	***0.83***	-128	31.6	-	2000	***67***	1500	<5	<5	1500	-	230	70	110	350	330	190	0.2	-	-	***130***	<0.005	<0.005	-	-	0.13	-	-	130
LW02_20 Dec 16_-	LW02	20/12/2016	water	-	*6.88*	**5834**	***0.14***	-124.9	26.5	-	3100	***61***	2400	<5	<5	2400	-	150	79	180	590	1000	33	0.2	-	-	***350***	<0.01	<0.01	-	-	0.11	-	-	200
LW02_11 Jan 17_-	LW02	11/01/2017	water	-	*6.8*	**6340**	***1.63***	-126	28.8	-	2900	***72***	2200	<5	<5	2200	-	170	78	190	610	750	36	0.2	-	-	***310***	<0.05	<0.05	-	-	0.12	-	-	200
LW03_20 Dec 16_-	LW03	20/12/2016	water	-	*6.74*	**4518**	***1.22***	-272.4	24.5	-	2400	***27***	2200	<5	<5	2200	-	230	92	140	320	420	30	0.2	-	-	***260***	<0.05	<0.05	-	-	0.12	-	-	160
LW03_11 Jan 17_-	LW03	11/01/2017	water	-	*6.76*	**4590**	***0.28***	-291	28.1	-	2500	***49***	2100	<5	<5	2100	-	210	80	130	380	430	47	0.1	-	-	***200***	<0.005	<0.005	-	-	0.19	-	-	150
LW04_20 Dec 16_-	LW04	20/12/2016	water	-	*6.85*	**4703**	***0.33***	-154	22.2	-	2800	***39***	2400	<5	<5	2400	-	270	88	140	520	510	9	0.2	-	-	***220***	<0.05	<0.05	-	-	0.085	-	-	190
LW04_11 Jan 17_-	LW04	11/01/2017	water	-	*6.84*	**4890**	***0.13***	-216	26	-	2600	***130***	2200	<5	<5	2200	-	290	93	130	570	590	59	0.2	-	-	***150***	<0.005	<0.005	-	-	0.12	-	-	210
LW05_20 Dec 16_-	LW05	20/12/2016	water	-	*6.92*	**5541**	***1.12***	-228.6	26.3	-	1800		2400	<5	<5	2400	-	130	50	94	290	380	18	0.2	-	-	***410***	<0.05	<0.05	-	-	0.093	-	-	170
LW05_11 Jan 17_-	LW05	11/01/2017	water	-	*6.94*	**5320**	***0.08***	-332	30.4	-	2200	***18***	2300	<5	<5	2300	-	110	43	91	330	410	23	0.2	-	-	***460***	<0.05	<0.05	-	-	0.14	-	-	160
LW06_20 Dec 16_-	LW06	20/12/2016	water	-	7.06	**11,200**	***1.26***	-288.9	32.2	-	3700	***580***	4300	<5	<5	4300	-	110	82	230	740	940	18	0.4	-	-	***780***	<0.05	<0.05	-	-	1	-	-	470
LW06_11 Jan 17_-	LW06	11/01/2017	water	-	7.13	**9710**	***0.05***	-324	37.8	-	4100	***1000***	4000	<5	<5	4000	-	110	86	190	730	910	47	0.3	-	-	***830***	<0.05	<0.05	-	-	0.77	-	-	600

Statistical Summary

Number of Results	5	62	52	18	18	18	3	62	14	17	17	13	13	1	18	18	18	18	18	18	17	1	1	65	17	17	31	53	12	1	47	15
Number of Detects	5	62	52	18	18	18	3	62	13	17	0	0	13	1	18	18	18	18	18	18	17	1	1	47	2	2	31	43	12	1	46	15
Minimum Concentration	15.26	6.74	3.9	0.05	-332	21.4	7.2	370	<5	1500	<5	<5	114	1900	80	17	6	56	92.3	1	0.1	7.98	8.3	<0.01	<0.005	<0.005	0.2	<0.01	0.085	0.4	<1	130
Minimum Detect	15.26	6.74	3.9	0.05	ND	21.4	7.2	370	18	1500	ND	ND	114	1900	80	17	6	56	92.3	1	0.1	7.98	8.3	0.01	0.017	0.005	0.2	0.01	0.085	0.4	3	130
Maximum Concentration	17.8	8.61	11200	6.09	0	37.8	7.6	4100	1400	4300	<5	<5	4300	1900	290	93	230	740	1000	190	0.4	7.98	8.3	830	<0.05	<0.05	43.9	0.48	1	0.4	164	600
Maximum Detect	17.8	8.61	11200	6.09	ND	37.8	7.6	4100	1400	4300	ND	ND	4300	1900	290	93	230	740	1000	190	0.4	7.98	8.3	830	0.04	0.013	43.9	0.48	1	0.4	164	600
Average Concentration	16	7.7	3124	1.3	-178	28	7.4	1344	257	2382	2.5	2.5	2316		173	74	141	461	515	45	0.2			91	0.015	0.013	11	0.1	0.25		33	219
Median Concentration	15.74	7.65	3260	0.805	-146.05	26.85	7.4	515	64	2200	2.5	2.5	2200	1900	160	78.5	140	440	425	28.5	0.2	7.98	8.3	0.095	0.017	0.005	0.5	0.021	0.12	0.4	7	180
Standard Deviation	1.2	0.6	2336	1.7	93	3.9	0.2	1080	431	706	0	0	1020		62	19	49	176	242	50	0.067			173	0.012	0.011	15	0.14	0.3		47	133
Number of Guideline Exceedances	0	39	52	18	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	0	0	0	0	0	1	0	0
Number of Guideline Exceedances(Detects Only)	0	39	52	18	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	0	0	0	0	0	1	0	0

Env Stds Comments

#1:calculated from % Saturation
#2:assumed same as NH4
#3:Measured as NH3-N at pH 8
#4:(pH >6.5)
#5:In absence of total As guideline, As (V) guideline has been adopted.
#6:Guideline for Cr (VI) adopted
#7:Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#8:In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#9:Freshwater DGV adopted (insufficient marine toxicity data)
#10:There were limited marine data, and a marine low reliability DGV of 0.05 µg/L was adopted from the freshwater DGV.

Appendix G Table G3a - Historical leachate results - ecological assessment criteria

	Metals																								BTEXN						
	Aluminium	Aluminium (Filtered)	Arsenic	Arsenic (Filtered)	Barium	Barium (Filtered)	Cadmium	Cadmium (Filtered)	Chromium (III+VI)	Chromium (III+VI) (Filtered)	Chromium (hexavalent)	Cobalt	Cobalt (Filtered)	Copper	Copper (Filtered)	Lead	Lead (Filtered)	Manganese	Mercury	Mercury (Filtered)	Nickel (Filtered)	Zinc	Zinc (Filtered)	Manganese (soluble) (Filtered)	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene (m)	Naphthalene (BTEXN suite)
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																															
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																															
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.055[#4]	0.055[#4]	0.013[#5]	0.013[#5]			0.0002	0.0002	0.001[#6]	0.001[#6]	0.001			0.0014	0.0014	0.0034	0.0034	1.9	0.0006	0.0006	0.011	0.008	0.008		950	180	80	350		75	16
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)												0.0014	0.0014																		
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)							0.0055	0.0055	0.0044[#8]	0.0044[#8]	0.0044	0.001	0.001	0.0013	0.0013	0.0044	0.0044		0.0004	0.0004	0.07	0.015	0.015		700	180	80			75	70
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																		0.08										350			

Sample ID	Location Code	Date	Matrix Type																													
LB01_01 Jan 02_-	LB01	1/01/2002	water	-	-	0.007	-	-	-	-	-	0.008	-	-	-	-	0.003	-	0.001	-	-	-	-	-	0.03	-	-	-	-	-	-	-	-
LB01_01 Apr 02_-	LB01	1/04/2002	water	-	-	0.008	-	-	-	-	-	0.008	-	-	-	-	0.002	-	<0.001	-	-	-	-	-	0.01	-	-	-	-	-	-	-	-
LB01_01 Jul 02_-	LB01	1/07/2002	water	-	-	0.007	-	-	-	-	-	0.009	-	-	-	-	0.002	-	<0.001	-	-	-	-	-	0.009	-	-	-	-	-	-	-	-
LB01_01 Oct 02_-	LB01	1/10/2002	water	-	-	0.005	-	-	-	-	-	0.011	-	-	-	-	0.001	-	<0.001	-	-	-	-	-	0.028	-	-	-	-	-	-	-	-
LB01_01 Jan 03_-	LB01	1/01/2003	water	-	-	0.009	-	-	-	-	-	0.016	-	-	-	-	0.004	-	<0.001	-	-	-	-	-	0.053	-	-	-	-	-	-	-	-
LB01_01 Apr 03_-	LB01	1/04/2003	water	-	-	0.001	-	-	-	-	-	0.003	-	-	-	-	0.003	-	0.001	-	-	-	-	-	0.011	-	-	-	-	-	-	-	-
LB01_01 Jul 03_-	LB01	1/07/2003	water	-	-	0.002	-	-	-	-	-	0.005	-	-	-	-	0.003	-	0.001	-	-	-	-	-	0.026	-	-	-	-	-	-	-	-
LB01_01 Oct 03_-	LB01	1/10/2003	water	-	-	0.002	-	-	-	-	-	0.002	-	-	-	-	0.002	-	0.001	-	-	-	-	-	0.025	-	-	-	-	-	-	-	-
LB01_01 Jan 04_-	LB01	1/01/2004	water	-	-	0.001	-	-	-	-	-	0.005	-	-	-	-	0.001	-	0.001	-	-	-	-	-	0.008	-	-	-	-	-	-	-	-
LB01_01 Apr 04_-	LB01	1/04/2004	water	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 05_-	LB01	1/04/2005	water	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 May 05_-	LB01	1/05/2005	water	-	-	0.002	-	-	-	-	-	-	-	-	-	-	0.002	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jul 05_-	LB01	1/07/2005	water	-	-	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Oct 05_-	LB01	1/10/2005	water	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Feb 06_-	LB01	1/02/2006	water	-	-	0.005	-	-	-	-	-	<0.005	-	-	-	-	0.001	-	<0.001	-	-	-	-	-	0.011	-	-	-	-	-	-	-	-
LB01_01 Apr 06_-	LB01	1/04/2006	water	-	-	0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jul 06_-	LB01	1/07/2006	water	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Oct 06_-	LB01	1/10/2006	water	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jan 07_-	LB01	1/01/2007	water	-	-	0.002	-	-	-	-	-	<0.01	-	-	-	-	0.002	-	<0.001	-	-	-	-	-	0.012	-	-	-	-	-	-	-	-
LB01_01 Apr 07_-	LB01	1/04/2007	water	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB02_02 Jul 19_-	LB02	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB02_25 Oct 19_-	LB02	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB02_13 Jan 20_-	LB02	13/01/2020	water	0.01	-	0.002	-	0.7	-	<0.0001	-	0.013	-	<0.05	0.004	-	<0.001	-	<0.001	-	0.078	<0.00005	-	-	0.001	-	-	<1	<1	<1	<1	-	<2	-
LB02_22 Apr 20_-	LB02	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LD002_21 Jan 15_-	LD002	21/01/2015	water	-	0.01	-	0.004	-	0.49	-	<0.0001	-	0.022	<0.05	-	0.005	-	<0.001	-	<0.001	-	<0.00005	-	-	-	0.005	0.091	11	1	<1	<1	<2	-	-
LD002_25 Jan 17_-	LD002	25/01/2017	water	0.02	-	0.003	-	0.58	-	<0.0001	-	0.019	-	<0.05	0.004	-	<0.001	-	<0.001	-	0.088	<0.00005	-	-	0.011	-	-	7	<1	<1	-	-	<2	-
Lot 1124_01 Jan 98_-	Lot 1124	1/01/1998	water	-	-	0.002	-	-	-	-	-	<0.001	-	-	-	-	0.002	-	<0.001	-	-	-	-	-	0.008	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 98_-	Lot 1124	1/07/1998	water	-	-	0.006	-	-	-	-	-	<0.001	-	-	-	-	<0.001	-	0.002	-	-	-	-	-	0.002	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 98_-	Lot 1124	1/10/1998	water	-	-	<0.001	-	-	-	-	-	<0.001	-	-	-	-	0.001	-	<0.001	-	-	-	-	-	0.018	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 99_-	Lot 1124	1/01/1999	water	-	-	0.008	-	-	-	-	-	<0.001	-	-	-	-	0.003	-	<0.001	-	-	-	-	-	0.029	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 99_-	Lot 1124	1/07/1999	water	-	-	0.009	-	-	-	-	-	0.002	-	-	-	-	0.001	-	<0.001	-	-	-	-	-	0.007	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 99_-	Lot 1124	1/10/1999	water	-	-	0.008	-	-	-	-	-	0.001	-	-	-	-	0.007	-	<0.001	-	-	-	-	-	0.005	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 00_-	Lot 1124	1/04/2000	water	-	-	0.009	-	-	-	-	-	0.003	-	-	-	-	0.001	-	<0.001	-	-	-	-	-	0.007	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 00_-	Lot 1124	1/07/2000	water	-	-	0.01	-	-	-	-	-	0.002	-	-	-	-	0.002	-	0.003	-	-	-	-	-	0.017	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 00_-	Lot 1124	1/10/2000	water	-	-	0.007	-	-	-	-	-	0.001	-	-	-	-	0.001	-	<0.001	-	-	-	-	-	<0.002	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 01_-	Lot 1124	1/01/2001	water	-	-	0.009	-	-	-	-	-	0.005	-	-	-	-	0.002	-	<0.001	-	-	-	-	-	0.017	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 01_-	Lot 1124	1/04/2001	water	-	-	0.009	-	-	-	-	-	<0.001	-	-	-	-	0.001	-	<0.001	-	-	-	-	-	0.004	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 01_-	Lot 1124	1/07/2001	water	-	-	0.008	-	-	-	-	-	0.002	-	-	-	-	0.002	-	<0.001	-	-	-	-	-	0.034	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 01_-	Lot 1124	1/10/2001	water	-	-	0.004	-	-	-	-	-	<0.001	-	-	-	-	0.001	-	<0.001	-	-	-	-	-	0.019	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 02_-	Lot 1124	1/01/2002	water	-	-	<0.001	-	-	-	-	-	<0.001	-	-	-	-	0.001	-	<0.001	-	-	-	-	-	0.021	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 02_-	Lot 1124	1/04/2002	water	-	-	0.003	-	-	-	-	-	<0.001	-	-	-	-	<0.001	-	<0.001	-	-	-	-	-	0.005	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 02_-	Lot 1124	1/07/2002	water	-	-	0.005	-	-	-	-	-	<0.001	-	-	-	-	<0.001	-	<0.001	-	-	-	-	-	0.008	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 02_-	Lot 1124	1/10/2002	water	-	-	0.005	-	-	-	-	-	0.002	-	-	-	-	0.002	-	<0.001	-	-	-	-	-	0.037	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 03_-	Lot 1124	1/01/2003	water	-	-	0.005	-	-	-	-	-	<0.001	-	-	-	-	0.002	-	<0.001	-	-	-	-	-	0.042	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 03_-	Lot 1124	1/04/2003	water	-	-	0.006	-	-	-	-	-	<0.001	-	-	-	-	0.001	-	<0.001	-	-	-	-	-	0.029	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 03_-	Lot 1124	1/07/2003	water	-	-	0.005	-	-	-	-	-	<0.001	-	-	-	-	0.001	-	<0.001	-	-	-	-	-	0.009	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 03_-	Lot 1124	1/10/2003	water	-	-	0.006	-	-	-	-	-	<0.001	-	-	-	-	0.001	-	<0.001	-	-	-	-	-	0.042	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 04_-	Lot 1124	1/01/2004	water	-	-	0.003	-	-	-	-	-	0.001	-	-	-	-	0.002	-	<0.001	-	-	-	-	-	0.014	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 04_-	Lot 1124	1/04/2004	water	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 04_-	Lot 1124	1/07/2004	water	-	-	0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 04_-	Lot 1124	1/10/2004	water	-	-	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 05_-	Lot 1124	1/01/2005	water	-	-	0.03	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	<0.01	-	-	-	-	-	0.01	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 05_-	Lot 1124	1/04/2005	water	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 05_-	Lot 1124	1/07/2005	water	-	-	0.006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 05_-	Lot 1124	1/10/2005	water	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 06_-	Lot 1124	1/01/2006	water	-	-	0.004	-	-	-	-	-	<0.001	-	-	-	-	0.001	-	<0.001	-	-	-	-	-	0.007	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 06_-	Lot 1124	1/04/2006	water	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 06_-	Lot 1124	1/07/2006	water	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 06_-	Lot 1124	1/10/2006	water	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G3a - Historical leachate results - ecological assessment criteria

	Metals																										BTEXN						
	Aluminium	Aluminium (Filtered)	Arsenic	Arsenic (Filtered)	Barium	Barium (Filtered)	Cadmium	Cadmium (Filtered)	Chromium (III+VI)	Chromium (III+VI) (Filtered)	Chromium (hexavalent)	Cobalt	Cobalt (Filtered)	Copper	Copper (Filtered)	Lead	Lead (Filtered)	Manganese	Mercury	Mercury (Filtered)	Nickel (Filtered)	Zinc	Zinc (Filtered)	Manganese (soluble) (Filtered)	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene (m)	Naphthalene (BTEXN suite)
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																															
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																															
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)	0.055[#4]	0.055[#4]	0.013[#5]	0.013[#5]			0.0002	0.0002	0.001[#6]	0.001[#6]	0.001			0.0014	0.0014	0.0034	0.0034	1.9	0.0006	0.0006	0.011	0.008	0.008		950	180	80	350		75	16
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)												0.0014	0.0014																		
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)							0.0055	0.0055	0.0044[#8]	0.0044[#8]	0.0044	0.001	0.001	0.0013	0.0013	0.0044	0.0044		0.0004	0.0004	0.07	0.015	0.015		700	180	80			75	70
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																		0.08										350			

Sample ID	Location Code	Date	Matrix Type																														
Lot 1124_01 Jan 07_-	Lot 1124	1/01/2007	water	-	-	0.002	-	-	-	-	-	<0.001	-	-	-	-	0.001	-	<0.001	-	-	-	-	-	0.005	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 07_-	Lot 1124	1/04/2007	water	-	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LW01_20 Dec 16_-	LW01	20/12/2016	water	-	-	-	0.001	-	-	-	<0.0001	-	0.005	-	-	-	-	<0.001	-	<0.001	-	-	<0.00005	0.005	-	<0.001	-	<1	<1	<1	<1	<2	-	<1
LW01_11 Jan 17_-	LW01	11/01/2017	water	-	-	-	0.002	-	-	-	<0.0001	-	0.004	-	-	-	-	<0.001	-	<0.001	-	-	<0.00005	0.009	-	0.003	-	<10	<10	<10	<10	<20	-	<10
LW02_20 Dec 16_-	LW02	20/12/2016	water	-	-	-	0.003	-	-	-	<0.0001	-	0.006	-	-	-	-	<0.001	-	<0.001	-	-	<0.00005	0.015	-	0.004	-	<1	<1	<1	<1	<2	-	<1
LW02_11 Jan 17_-	LW02	11/01/2017	water	-	-	-	0.003	-	-	-	<0.0001	-	0.007	-	-	-	-	<0.001	-	<0.001	-	-	<0.00005	0.021	-	0.005	-	<10	<10	<10	<10	<20	-	<10
LW03_20 Dec 16_-	LW03	20/12/2016	water	-	-	-	0.001	-	-	-	<0.0001	-	0.008	-	-	-	-	<0.001	-	<0.001	-	-	<0.00005	0.003	-	<0.001	-	<10	<10	<10	<10	<20	-	<10
LW03_11 Jan 17_-	LW03	11/01/2017	water	-	-	-	0.001	-	-	-	<0.0001	-	0.007	-	-	-	-	<0.001	-	<0.001	-	-	<0.00005	0.002	-	0.002	-	<10	<10	<10	<10	<20	-	<10
LW04_20 Dec 16_-	LW04	20/12/2016	water	-	-	-	0.004	-	-	-	<0.0001	-	0.009	-	-	-	-	<0.001	-	<0.001	-	-	<0.00005	0.003	-	<0.001	-	<10	<10	<10	<10	<20	-	<10
LW04_11 Jan 17_-	LW04	11/01/2017	water	-	-	-	0.005	-	-	-	<0.0001	-	0.009	-	-	-	-	<0.001	-	<0.001	-	-	<0.00005	0.004	-	0.002	-	<10	<10	<10	<10	<20	-	<10
LW05_20 Dec 16_-	LW05	20/12/2016	water	-	-	-	0.008	-	-	-	<0.0001	-	0.019	-	-	-	-	<0.001	-	<0.001	-	-	<0.00005	0.003	-	<0.001	-	<10	<10	<10	<10	<20	-	<10
LW05_11 Jan 17_-	LW05	11/01/2017	water	-	-	-	0.01	-	-	-	<0.0001	-	0.019	-	-	-	-	<0.001	-	<0.001	-	-	<0.00005	0.003	-	0.002	-	24	<10	<10	<10	<20	-	<10
LW06_20 Dec 16_-	LW06	20/12/2016	water	-	-	-	0.027	-	-	-	<0.0001	-	0.085	-	-	-	-	<0.001	-	<0.001	-	-	<0.00005	0.03	-	0.002	-	<10	<10	<10	<10	<20	-	<10
LW06_11 Jan 17_-	LW06	11/01/2017	water	-	-	-	0.032	-	-	-	<0.0001	-	0.098	-	-	-	-	<0.001	-	<0.001	-	-	<0.00005	0.024	-	0.005	-	<10	<10	10	<10	<20	-	<10

Statistical Summary

Number of Results	2	1	57	13	2	1	2	13	38	13	3	2	1	39	13	39	13	2	2	13	12	38	13	1	15	15	15	14	13	2	12
Number of Detects	2	1	55	13	2	1	0	0	20	13	0	2	1	33	0	8	0	2	0	0	12	37	9	1	3	1	1	0	0	0	0
Minimum Concentration	0.01	0.01	<0.001	0.001	0.58	0.49	<0.0001	<0.0001	<0.001	0.004	<0.05	0.004	0.005	<0.001	<0.001	<0.001	<0.001	0.078	<0.00005	<0.00005	0.002	0.001	<0.001	0.091	<1	<1	<1	<1	<2	<2	<1
Minimum Detect	0.01	0.01	0.001	0.001	0.58	0.49	ND	ND	0.001	0.004	ND	0.004	0.005	0.001	ND	0.001	ND	0.078	ND	ND	0.002	0.001	0.002	0.091	7	1	10	ND	ND	ND	ND
Maximum Concentration	0.02	0.01	0.03	0.032	0.7	0.49	<0.0001	<0.0001	0.019	0.098	<0.05	0.004	0.005	<0.01	<0.001	<0.01	<0.001	0.088	<0.00005	<0.00005	0.03	0.053	0.005	0.091	24	<10	10	<10	<20	<2	<10
Maximum Detect	0.02	0.01	0.03	0.032	0.7	0.49	ND	ND	0.019	0.098	ND	0.004	0.005	0.007	ND	0.003	ND	0.088	ND	ND	0.03	0.053	0.005	0.091	24	1	10	ND	ND	ND	ND
Average Concentration			0.0052	0.0078				0.00005	0.0036	0.023	0.025			0.0018	0.0005	0.00079	0.0005			0.000025	0.01	0.017	0.0025		5.9	3.5	3.8	3.7	7.9		4.3
Median Concentration	0.015	0.01	0.005	0.004	0.64	0.49	0.00005	0.00005	0.002	0.009	0.025	0.004	0.005	0.001	0.0005	0.0005	0.0005	0.083	0.000025	0.000025	0.0045	0.011	0.002	0.091	5	5	5	5	10	1	5
Standard Deviation			0.0044	0.01				0	0.0046	0.031	0			0.0013	0	0.00084	0			0	0.0098	0.013	0.0018		5.7	2.2	2.7	2.1	3.9		1.8
Number of Guideline Exceedances	0	0	1	2	0	0	0	0	23	13	3	2	1	19	0	1	0	1	0	0	4	28	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)	0	0	1	2	0	0	0	0	20	13	0	2	1	18	0	0	0	1	0	0	4	28	0	0	0	0	0	0	0	0	0

Env Stds Comments

#1:calculated from % Saturation
#2:assumed same as NH4
#3:Measured as NH3-N at pH 8
#4:(pH >6.5)
#5:In absence of total As guideline, As (V) guideline has been adopted.
#6:Guideline for Cr (VI) adopted
#7:Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#8:In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#9:Freshwater DGV adopted (insufficient marine toxicity data)
#10:There were limited marine data, and a marine low reliability DGV of 0.05 µg/L was adopted from the freshwater DGV.

Appendix G Table G3a - Historical leachate results - ecological assessment criteria

	TRH - NEPM 2013						TRH - NEPM 1999					PAHs - standard 16																PAHs - extended			Phenols - total
	F1 (C6-C10 minus BTEX)	C6-C10 Fraction	F2 (>C10-C16 minus Naphthalene)	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C6-C36 Fraction (Sum of Total) - Lab calc	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total) - Lab calc	Total 8 PAHs (as BaP TEQ)(zero LOR) - Lab Calc	Benzo(b+j+k)fluoranthene	Benzo(b)&(k)fluoranthene	Dibenzo(a,h)pyrene	Phenolics Total
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																															
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																															
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)														0.4		0.2				1.4			16	2						
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																															
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																0.2				1.4			70	2						
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																															

Sample ID	Location Code	Date	Matrix Type																															
LB01_01 Jan 02_-	LB01	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 02_-	LB01	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jul 02_-	LB01	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Oct 02_-	LB01	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jan 03_-	LB01	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 03_-	LB01	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jul 03_-	LB01	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Oct 03_-	LB01	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jan 04_-	LB01	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 04_-	LB01	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 05_-	LB01	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 May 05_-	LB01	1/05/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jul 05_-	LB01	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Oct 05_-	LB01	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Feb 06_-	LB01	1/02/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 06_-	LB01	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jul 06_-	LB01	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Oct 06_-	LB01	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jan 07_-	LB01	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 07_-	LB01	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB02_02 Jul 19_-	LB02	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB02_25 Oct 19_-	LB02	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB02_13 Jan 20_-	LB02	13/01/2020	water	-	<10	-	-	-	-	<10	600	4300	220	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	-	<2	-	<50
LB02_22 Apr 20_-	LB02	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LD002_21 Jan 15_-	LD002	21/01/2015	water	49	61	-	1600	5200	<100	51	1000	5800	130	-	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	2	<1	<1	-	<5	<2	-	<1	<50
LD002_25 Jan 17_-	LD002	25/01/2017	water	-	23	-	1100	3000	<100	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5	<1	<1	-	-	-	<2	-	<50
Lot 1124_01 Jan 98_-	Lot 1124	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 98_-	Lot 1124	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 98_-	Lot 1124	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 99_-	Lot 1124	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 99_-	Lot 1124	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 99_-	Lot 1124	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 00_-	Lot 1124	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 00_-	Lot 1124	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 00_-	Lot 1124	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 01_-	Lot 1124	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 01_-	Lot 1124	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 01_-	Lot 1124	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 01_-	Lot 1124	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 02_-	Lot 1124	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 02_-	Lot 1124	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 02_-	Lot 1124	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 02_-	Lot 1124	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 03_-	Lot 1124	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 03_-	Lot 1124	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 03_-	Lot 1124	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 03_-	Lot 1124	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 04_-	Lot 1124	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 04_-	Lot 1124	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 04_-	Lot 1124	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 04_-	Lot 1124	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 05_-	Lot 1124	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 05_-	Lot 1124	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 05_-	Lot 1124	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 05_-	Lot 1124	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 06_-	Lot 1124	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 06_-	Lot 1124	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 06_-	Lot 1124	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 06_-	Lot 1124	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G3a - Historical leachate results - ecological assessment criteria

Breen Resources Pty Ltd
Kurnell Landfill Facility
Breen Resource Facility - EIS

	TRH - NEPM 2013						TRH - NEPM 1999					PAHs - standard 16																PAHs - extended			Phenols - total
	F1 (C6-C10 minus BTEX)	C6-C10 Fraction	F2 (>C10-C16 minus Naphthalene)	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C6-C36 Fraction (Sum of Total) - Lab calc	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(e,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total) - Lab calc	Total 8 PAHs (as BaP TEQ)(zero LOR) - Lab Calc	Benzo(b+j+k)fluoranthene	Benzo(b)&(k)fluoranthene	Dibenzo(a,h)pyrene	Phenolics Total
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																															
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																															
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)														0.4		0.2				1.4			16	2							
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)																															
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)																0.2				1.4			70	2							
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)																															
Sample ID	**Location Code**	**Date**	**Matrix Type**																													
Lot 1124_01 Jan 07_-	Lot 1124	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 07_-	Lot 1124	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LW01_20 Dec 16_-	LW01	20/12/2016	water	<10	<10	480	480	1800	<100	<10	210	2000	<100	3260	<1	-	-	-	<1	-	-	-	<1	-	-	<1	<1	-	-	-	-	-	-	-
LW01_11 Jan 17_-	LW01	11/01/2017	water	-	<100	660	660	2400	<100	<100	310	2700	150	2320	<1	-	-	-	<1	-	-	-	<1	-	-	<1	<1	-	-	-	-	-	-	-
LW02_20 Dec 16_-	LW02	20/12/2016	water	<10	<10	740	740	2200	<100	<10	380	2500	<100	2900	<1	-	-	-	<1	-	-	-	<1	-	-	<1	<1	-	-	-	-	-	-	-
LW02_11 Jan 17_-	LW02	11/01/2017	water	-	<100	720	720	2000	<100	<100	400	2300	<100	2990	<1	-	-	-	<1	-	-	-	<1	-	-	<1	<1	-	-	-	-	-	-	-
LW03_20 Dec 16_-	LW03	20/12/2016	water	-	<100	-	460	1900	<100	<100	190	2100	<100	4250	<1	-	-	-	<1	-	-	-	<1	-	-	<1	<1	-	-	-	-	-	-	-
LW03_11 Jan 17_-	LW03	11/01/2017	water	-	<100	850	850	3200	<100	<100	450	3500	200	2490	<1	-	-	-	<1	-	-	-	<1	-	-	<1	<1	-	-	-	-	-	-	-
LW04_20 Dec 16_-	LW04	20/12/2016	water	-	<100	-	680	2200	120	<100	340	2400	200	2750	<1	-	-	-	<1	-	-	-	<1	-	-	<1	<1	-	-	-	-	-	-	-
LW04_11 Jan 17_-	LW04	11/01/2017	water	-	<100	650	650	1900	120	<100	360	2100	190	3040	<1	-	-	-	<1	-	-	-	<1	-	-	<1	<1	-	-	-	-	-	-	-
LW05_20 Dec 16_-	LW05	20/12/2016	water	-	<100	-	670	2700	<100	<100	360	2900	200	5030	<1	-	-	-	<1	-	-	-	<1	-	-	2	<1	-	2.4	-	-	-	-	-
LW05_11 Jan 17_-	LW05	11/01/2017	water	-	<100	1000	1000	3700	<100	<100	740	3900	290	3560	<1	-	-	-	<1	-	-	-	<1	-	-	<1	<1	-	-	-	-	-	-	-
LW06_20 Dec 16_-	LW06	20/12/2016	water	-	<100	-	3000	10,000	220	<100	2100	1100	550	21,520	<1	-	-	-	<1	-	-	-	<1	-	-	8	<1	-	7.9	-	-	-	-	-
LW06_11 Jan 17_-	LW06	11/01/2017	water	-	<100	4600	4600	16,000	220	<100	3500	17,000	920	13,750	<1	-	-	-	<1	-	-	-	<1	-	-	<1	<1	-	-	-	-	-	-	-
Statistical Summary																																
Number of Results	3	15	8	14	14	14	14	14	14	14	12	15	3	3	3	15	3	3	2	15	3	3	15	15	3	2	1	1	2	1	3
Number of Detects	1	2	8	14	14	4	1	14	14	10	12	0	0	0	0	0	0	0	0	0	0	0	4	0	0	2	0	0	0	0	0
Minimum Concentration	<10	<10	480	460	1800	<100	<10	190	1100	<100	2320	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.4	<5	<2	<2	<1	<50
Minimum Detect	49	23	480	460	1800	120	51	190	1100	130	2320	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	2.4	ND	ND	ND	ND	ND
Maximum Concentration	49	<100	4600	4600	16000	220	<100	3500	17000	920	21520	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	8	<1	<1	7.9	<5	<2	<2	<1	<50
Maximum Detect	49	61	4600	4600	16000	220	51	3500	17000	920	21520	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8	ND	ND	7.9	ND	ND	ND	ND	ND
Average Concentration	20	40	1213	1229	4157	84	40	781	3900	232	5655	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	1.5	0.5	0.5						25
Median Concentration	5	50	730	730	2550	50	50	390	2600	195	3150	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5.15	2.5	1	1	0.5	25
Standard Deviation	25	20	1377	1169	4031	63	19	923	3949	237	5884	0	0	0	0	0	0	0		0	0	0	2.2	0	0						0
Number of Guideline Exceedances	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Env Stds Comments

#1:calculated from % Saturation
#2:assumed same as NH4
#3:Measured as NH3-N at pH 8
#4:(pH >6.5)
#5:In absence of total As guideline, As (V) guideline has been adopted.
#6:Guideline for Cr (VI) adopted
#7:Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#8:In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#9:Freshwater DGV adopted (insufficient marine toxicity data)
#10:There were limited marine data, and a marine low reliability DGV of 0.05 µg/L was adopted from the freshwater DGV.

Appendix G Table G3a - Historical leachate results - ecological assessment criteria

	OC Pesticides																								OP Pesticides										SVOCs
	chlordane-alpha	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (gamma)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	DDE	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Azinphos methyl	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Malathion	Parathion	Ronnel	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																			
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																			
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)											0.01			0.2				0.02		0.2	0.09		0.1		0.02		0.01		0.01	0.15		0.2	0.05	0.004		
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)				0.001									0.01											0.005												
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)														0.01				0.008					0.1				0.009									
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)				0.003							0.0004		0.01[#9]							0.007	0.0004			0.004	0.01				0.01	0.15		0.001	0.05[#10]	0.004		
Sample ID	**Location Code**	**Date**	**Matrix Type**																																	
LB01_01 Jan 02_-	LB01	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 02_-	LB01	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jul 02_-	LB01	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Oct 02_-	LB01	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jan 03_-	LB01	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 03_-	LB01	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jul 03_-	LB01	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Oct 03_-	LB01	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jan 04_-	LB01	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 04_-	LB01	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 05_-	LB01	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 May 05_-	LB01	1/05/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jul 05_-	LB01	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Oct 05_-	LB01	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Feb 06_-	LB01	1/02/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 06_-	LB01	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jul 06_-	LB01	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Oct 06_-	LB01	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jan 07_-	LB01	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 07_-	LB01	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB02_02 Jul 19_-	LB02	2/07/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB02_25 Oct 19_-	LB02	25/10/2019	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB02_13 Jan 20_-	LB02	13/01/2020	water	-	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		-	-	<0.2	<0.2
LB02_22 Apr 20_-	LB02	22/04/2020	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LD002_21 Jan 15_-	LD002	21/01/2015	water	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<200	<0.2	<0.2		<0.2	<0.2	<0.2	-
LD002_25 Jan 17_-	LD002	25/01/2017	water	-	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2		<0.2	-	<0.2	<0.2	<0.2		<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		-	-	<0.2	<0.2
Lot 1124_01 Jan 98_-	Lot 1124	1/01/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 98_-	Lot 1124	1/07/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 98_-	Lot 1124	1/10/1998	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 99_-	Lot 1124	1/01/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 99_-	Lot 1124	1/07/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 99_-	Lot 1124	1/10/1999	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 00_-	Lot 1124	1/04/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 00_-	Lot 1124	1/07/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 00_-	Lot 1124	1/10/2000	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 01_-	Lot 1124	1/01/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 01_-	Lot 1124	1/04/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 01_-	Lot 1124	1/07/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 01_-	Lot 1124	1/10/2001	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 02_-	Lot 1124	1/01/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 02_-	Lot 1124	1/04/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 02_-	Lot 1124	1/07/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 02_-	Lot 1124	1/10/2002	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 03_-	Lot 1124	1/01/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 03_-	Lot 1124	1/04/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 03_-	Lot 1124	1/07/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 03_-	Lot 1124	1/10/2003	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 04_-	Lot 1124	1/01/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 04_-	Lot 1124	1/04/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 04_-	Lot 1124	1/07/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 04_-	Lot 1124	1/10/2004	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 05_-	Lot 1124	1/01/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 05_-	Lot 1124	1/04/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 05_-	Lot 1124	1/07/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 05_-	Lot 1124	1/10/2005	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jan 06_-	Lot 1124	1/01/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 06_-	Lot 1124	1/04/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Jul 06_-	Lot 1124	1/07/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Oct 06_-	Lot 1124	1/10/2006	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix G Table G3a - Historical leachate results - ecological assessment criteria

	OC Pesticides																								OP Pesticides										SVOCs
	chlordane-alpha	4,4'-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	Chlordane (gamma)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	DDE	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Azinphos methyl	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Malathion	Parathion	Ronnel	Hexachlorocyclohexane
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ANZECC 2000 South-east Australia (table 3.3.2) Estuarine																																			
ANZECC 2000 South-east Australia (table 3.3.2) Freshwater lakes and reservoirs																																			
ANZG (2018) - FW - 95% species protection (updated 15/10/2019)											0.01			0.2				0.02		0.2	0.09		0.1		0.02		0.01		0.01	0.15		0.2	0.05	0.004		
ANZG (2018) - FW - Unknown species protection (updated 15/10/2019)				0.001									0.01											0.005												
ANZG (2018) - MW - 95% species protection (updated 15/10/2019)														0.01				0.008					0.1				0.009									
ANZG (2018) - MW - Unknown species protection (updated 15/10/2019)				0.003							0.0004		0.01[#9]							0.007	0.0004			0.004	0.01				0.01	0.15		0.001	0.05[#10]	0.004		

Sample ID	Location Code	Date	Matrix Type																																		
Lot 1124_01 Jan 07_-	Lot 1124	1/01/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 1124_01 Apr 07_-	Lot 1124	1/04/2007	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LW01_20 Dec 16_-	LW01	20/12/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LW01_11 Jan 17_-	LW01	11/01/2017	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LW02_20 Dec 16_-	LW02	20/12/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LW02_11 Jan 17_-	LW02	11/01/2017	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LW03_20 Dec 16_-	LW03	20/12/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LW03_11 Jan 17_-	LW03	11/01/2017	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LW04_20 Dec 16_-	LW04	20/12/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LW04_11 Jan 17_-	LW04	11/01/2017	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LW05_20 Dec 16_-	LW05	20/12/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LW05_11 Jan 17_-	LW05	11/01/2017	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LW06_20 Dec 16_-	LW06	20/12/2016	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LW06_11 Jan 17_-	LW06	11/01/2017	water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Statistical Summary

Number of Results	1	2	1	3	3	2	1	2	3	2	2	1	3	2	3	1	3	3	3	3	3	3	3	3	1	3	3	2	3	3	3	3	1	1	3	2
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<200	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration				0.1	0.1				0.1				0.1		0.1		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1		33	0.1	0.1	0.1			0.1	
Median Concentration	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Standard Deviation				0	0				0				0		0		0	0	0	0	0	0	0	0		0	0		58	0	0	0			0	
Number of Guideline Exceedances	0	0	0	3	0	0	0	0	0	0	2	0	3	2	0	0	0	3	0	3	3	0	3	3	1	0	3	0	3	3	0	3	1	1	0	0
Number of Guideline Exceedances(Detects Only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Env Stds Comments

#1:calculated from % Saturation
#2:assumed same as NH4
#3:Measured as NH3-N at pH 8
#4:(pH >6.5)
#5:In absence of total As guideline, As (V) guideline has been adopted.
#6:Guideline for Cr (VI) adopted
#7:Ammonia as total ammonia, measured as [NH3-N] at pH 8.
#8:In absence of total Cr guideline, Cr (VI) guideline has been adopted.
#9:Freshwater DGV adopted (insufficient marine toxicity data)
#10:There were limited marine data, and a marine low reliability DGV of 0.05 µg/L was adopted from the freshwater DGV.

	Soluble Major Ions										Field Parameters						Inorganics					Unassigned		Acidity & Alkalinity			Major Ions							Nutrients							Organic Indicators	
	Arsenic (soluble) (Filtered)	Barium (soluble) (Filtered)	Cadmium (soluble) (Filtered)	Chromium (III+VI) (soluble) (Filtered)	Cobalt (soluble) (Filtered)	Copper (soluble) (Filtered)	Lead (soluble) (Filtered)	Mercury (soluble) (Filtered)	Nickel (soluble) (Filtered)	Zinc (soluble) (Filtered)	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	chlordane-alpha	Dissolved Organic Carbon (Filtered)	Alkalinity (Hydroxide as CaCO3)	Alkalinity (total as CaCO3)	Alkalinity (total)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Phosphate	Phosphorus (Total)	Total Organic Carbon	Aluminium
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												6.5-8.5					6.5-8.5	600												180	250	250		0.411								0.2
ADWG 2011 Health (v3.5 updated 2018)																															500[#2]	1.5		11.29[#3]	0.91[#4]		50				
NHMRC Recreational Guidelines 2008 - Health																															5000[#2]	15		112.9[#3]	9.1[#5]		500				
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																								
2-4m																																								
4-8m																																								
>8m																																								
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																								
2-4m																																								
4-8m																																								
>8m																																								
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																								
2-4m																																								
4-8m																																								
>8m																																								

SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																											
LB01_01 Jan 02_-	LB01	1/01/2002	Leachate	-	-	-	-	-	-	-	-	-	-	-	7.1	3800	-	-	-	-	2200	-	-	-	-	85	-	-	-	-	-	-	-	-	25.2	-	-	31	0.01	-	-	-	-
LB01_01 Apr 02_-	LB01	1/04/2002	Leachate	-	-	-	-	-	-	-	-	-	-	-	7.3	2900	-	-	-	-	2000	-	-	-	-	88	-	-	-	-	-	-	-	-	22	-	-	28	<0.01	-	-	-	-
LB01_01 Jul 02_-	LB01	1/07/2002	Leachate	-	-	-	-	-	-	-	-	-	-	-	7.5	2900	-	-	-	-	2200	-	-	-	-	94	-	-	-	-	-	-	-	-	24.9	-	-	28	<0.01	-	-	-	-
LB01_01 Oct 02_-	LB01	1/10/2002	Leachate	-	-	-	-	-	-	-	-	-	-	-	7.4	3400	-	-	-	-	2300	-	-	-	-	94	-	-	-	-	-	-	-	-	32.9	-	-	33	0.01	-	-	-	-
LB01_01 Jan 03_-	LB01	1/01/2003	Leachate	-	-	-	-	-	-	-	-	-	-	-	7.57	3000	-	-	-	-	2400	-	-	-	-	100	-	-	-	-	-	-	-	-	33	-	-	34	0.16	-	-	-	-
LB01_01 Apr 03_-	LB01	1/04/2003	Leachate	-	-	-	-	-	-	-	-	-	-	-	7.41	3280	-	-	-	-	2450	-	-	-	-	126	-	-	-	-	-	-	-	-	10.7	-	-	35.1	0.01	-	-	-	-
LB01_01 Jul 03_-	LB01	1/07/2003	Leachate	-	-	-	-	-	-	-	-	-	-	-	7.55	3340	-	-	-	-	2490	-	-	-	-	116	-	-	-	-	-	-	-	-	31.6	-	-	27.2	0.01	-	-	-	-
LB01_01 Oct 03_-	LB01	1/10/2003	Leachate	-	-	-	-	-	-	-	-	-	-	-	7.51	3370	-	-	-	-	2340	-	-	-	-	100	-	-	-	-	-	-	-	-	21.4	-	-	25.4	0.02	-	-	-	-
LB01_01 Jan 04_-	LB01	1/01/2004	Leachate	-	-	-	-	-	-	-	-	-	-	-	7.83	3240	-	-	-	-	2210	-	-	-	-	103	-	-	-	-	-	-	-	-	26.3	-	-	30.8	0.01	-	-	-	-
LB01_01 Apr 04_-	LB01	1/04/2004	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	3640	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31.1	-	-	-	0.07	-	-	-	-
LB01_01 Apr 05_-	LB01	1/04/2005	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	3320	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.015	-	-	-	-
LB01_01 May 05_-	LB01	1/05/2005	Leachate	-	-	-	-	-	-	-	-	-	-	6.98	-	-	-	-	-	-	2220	-	-	-	-	70	-	-	-	-	-	-	-	-	45.2	-	-	43.9	0.01	-	-	-	-
LB01_01 Jul 05_-	LB01	1/07/2005	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	3080	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.021	-	-	-	-
LB01_01 Oct 05_-	LB01	1/10/2005	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	2650	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	-
LB01_01 Feb 06_-	LB01	1/02/2006	Leachate	-	-	-	-	-	-	-	-	-	-	7.01	-	-	-	-	-	-	2420	-	-	-	-	155	-	-	-	-	-	-	-	-	25.7	-	-	-	0.019	-	-	-	-
LB01_01 Apr 06_-	LB01	1/04/2006	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	3430	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.012	-	-	-	-
LB01_01 Jul 06_-	LB01	1/07/2006	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	3130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-
LB01_01 Oct 06_-	LB01	1/10/2006	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	4830	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-
LB01_01 Jan 07_-	LB01	1/01/2007	Leachate	-	-	-	-	-	-	-	-	-	-	7.2	-	-	-	-	-	-	2910	-	-	-	-	164	-	-	-	-	-	-	-	-	60.4	-	-	-	0.011	-	-	-	-
LB01_01 Apr 07_-	LB01	1/04/2007	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	4380	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.017	0.013	-	-	-	-	-	-
LB02_02 Jul 19_-	LB02	2/07/2019	Leachate	-	-	-	-	-	-	-	-	-	17.8	7.14	2974	6.09	-61.1	21.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB02_25 Oct 19_-	LB02	25/10/2019	Leachate	-	-	-	-	-	-	-	-	-	17.5	6.96	3918	3.01	-9.5	24.6	-	-	-	1900	<5	-	-	-	-	170	74	150	430	310	27	0.2	160	-	-	-	-	-	-	-	-
LB02_13 Jan 20_-	LB02	13/01/2020	Leachate	-	-	-	-	-	-	-	-	-	15.74	7.38	4712	5	-159.7	26.1	7.2	2200	110	2100	<5	-	-	-	-	140	76	140	420	370	19	0.2	300	<0.005	<0.005	-	-	-	-	180	0.01
LB02_22 Apr 20_-	LB02	22/04/2020	Leachate	-	-	-	-	-	-	-	-	-	15.26	7.09	5240	0.8	-103.6	25.5	-	-	-	2200	<5	-	-	-	-	130	77	130	450	380	1	0.2	300	-	-	-	-	-	-	-	-
LD002_21 Jan 15_-	LD002	21/01/2015	Leachate	0.004	0.49	<0.0001	0.022	0.005	<0.001	<0.001	<0.00005	-	0.005	-	7.03	3.9	0.81	-112	28.5	7.4	2500	-	1900	<5	<0.2	-	<5	-	1900	130	87	180	600	570	15	0.15	230	<0.01	0.005	-	-	-	-	130	-
LD002_25 Jan 17_-	LD002	25/01/2017	Leachate	-	-	-	-	-	-	-	-	-	15.64	7.04	5320	0.21	-136	27.2	7.6	2600	1400	2400	<5	-	-	-	-	-	240	81	170	610	520	26	0.1	220	0.04	<0.005	-	-	-	0.4	210	0.02
LW01_20 Dec 16_-	LW01	20/12/2016	Leachate	0.001	-	<0.0001	0.005	-	<0.001	<0.001	<0.00005	0.005	<0.001	-	6.85	4061	0.6	-138.1	29.9	-	2100	46	2000	<5	-	-	<5	2000	-	210	75	140	300	360	40	0.2	190	<0.005	<0.005	-	-	0.12	-	130	-
LW01_11 Jan 17_-	LW01	11/01/2017	Leachate	0.002	-	<0.0001	0.004	-	<0.001	<0.001	<0.00005	0.009	0.003	-	6.76	4270	0.83	-128	31.6	-	2000	67	1500	<5	-	-	<5	1500	-	230	70	110	350	330	190	0.2	130	<0.005	<0.005	-	-	0.13	-	130	-
LW02_20 Dec 16_-	LW02	20/12/2016	Leachate	0.003	-	<0.0001	0.006	-	<0.001	<0.001	<0.00005	0.015	0.004	-	6.88	5834	0.14	-124.9	26.5	-	3100	61	2400	<5	-	-	<5	2400	-	150	79	180	590	1000	33	0.2	350	<0.01	<0.01	-	-	0.11	-	200	-
LW02_11 Jan 17_-	LW02	11/01/2017	Leachate	0.003	-	<0.0001	0.007	-	<0.001	<0.001	<0.00005	0.021	0.005	-	6.8	6340	1.63	-126	28.8	-	2900	72	2200	<5	-	-	<5	2200	-	170	78	190	610	750	36	0.2	310	<0.05	<0.05	-	-	0.12	-	200	-
LW03_20 Dec 16_-	LW03	20/12/2016	Leachate	0.001	-	<0.0001	0.008	-	<0.001	<0.001	<0.00005	0.003	<0.001	-	6.74	4518	1.22	-272.4	24.5	-	2400	27	2200	<5	-	-	<5	2200	-	230	92	140	320	420	30	0.2	260	<0.05	<0.05	-	-	0.12	-	160	-
LW03_11 Jan 17_-	LW03	11/01/2017	Leachate	0.001	-	<0.0001	0.007	-	<0.001	<0.001	<0.00005	0.002	0.002	-	6.76	4590	0.28	-291	28.1	-	2500	49	2100	<5	-	-	<5	2100	-	210	80	130	380	430	47	0.1	200	<0.005	<0.005	-	-	0.19	-	150	-
LW04_20 Dec 16_-	LW04	20/12/2016	Leachate	0.004	-	<0.0001	0.009	-	<0.001	<0.001	<0.00005	0.003	<0.001	-	6.85	4703	0.33	-154	22.2	-	2800	39	2400	<5	-	-	<5	2400	-	270	88	140	520	510	9	0.2	220	<0.05	<0.05	-	-	0.085	-	190	-
LW04_11 Jan 17_-	LW04	11/01/2017	Leachate	0.005	-	<0.0001	0.009	-	<0.001	<0.001	<0.00005	0.004	0.002	-	6.84	4890	0.13	-216	26	-	2600	130	2200	<5	-	-	<5	2200	-	290	93	130	570	590	59	0.2	150	<0.005	<0.005	-	-	0.12	-	210	-
LW05_20 Dec 16_-	LW05	20/12/2016	Leachate	0.008	-	<0.0001	0.019	-	<0.001	<0.001	<0.00005	0.003	<0.001	-	6.92	5541	1.12	-228.6	26.3	-	1800	<5	2400	<5	-	-	<5	2400	-	130	50	94	290	380	18	0.2	410	<0.05	<0.05	-	-	0.093	-	170	-
LW05_11 Jan 17_-	LW05	11/01/2017	Leachate	0.01	-	<0.0001	0.019	-	<0.001	<0.001	<0.00005	0.003	0.002	-	6.94	5320	0.08	-332	30.4	-	2200	18	2300	<5	-	-	<5	2300	-	110	43	91	330	410	23	0.2	460	<0.05	<0.05	-	-	0.14	-	160	-
LW06_20 Dec 16_-	LW06	20/12/2016	Leachate	0.027	-	<0.0001	0.085	-	<0.001	<0.001	<0.00005	0.03	0.002	-	7.06	11,200	1.26	-288.9	32.2	-	3700	580	4300	<5	-	-	<5	4300	-	110	82	230	740	940	18	0.4	780	<0.05	<0.05	-	-	1	-	470	-
LW06_11 Jan 17_-	LW06	11/01/2017	Leachate	0.032	-	<0.0001	0.098	-	<0.001	<0.001	<0.00005	0.024	0.005	-	7.13	9710	0.05	-324	37.8	-	4100	1000	4000	<5	-	-	<5	4000	-	110	86	190	730	910	47	0.3	830	<0.05	<0.05	-	-	0.77	-	600	-

Statistical Summary

Number of Results	13	1	13	13	1	13	13	13	12	13	5	30	35	18	18	18	3	27	14	17	17	1	12	13	12	1	17	17	17	17	17	17	17	30	16	16	10	19	12	1	15	2
Number of Detects	13	1	0	13	1	0	0	0	12	9	5	30	35	18	18	18	3	27	13	17	0	0	12	0	12	1	17	17	17	17	17	17	17	30	2	2	10	15	12	1	15	2
Minimum Concentration	0.001	0.49	<0.0001	0.004	0.005	<0.001	<0.001	<0.00005	0.002	<0.001	15.26	6.74	3.9	0.05	-332	21.4	7.2	1800	<5	1500	<5	<0.2	70	<5	1500	1900	110	43	91	290	310	1	0.1	10.7	<0.005	<0.005	25.4	<0.01	0.085	0.4	130	0.01
Minimum Detect	0.001	0.49	ND	0.004	0.005	ND	ND	ND	0.002	0.002	15.26	6.74	3.9	0.05	ND	21.4	7.2	1800	18	1500	ND	ND	70	ND	1500	1900	110	43	91	290	310	1	0.1	10.7	0.017	0.005	25.4	0.01	0.085	0.4	130	0.01
Maximum Concentration	0.032	0.49	<0.0001	0.098	0.005	<0.001	<0.001	<0.00005	0.03	0.005	17.8	7.83	11200	6.09	0	37.8	7.6	4100	1400	4300	<5	<0.2	164	<5	4300	1900	290	93	230	740	1000	190	0.4	830	<0.05	<0.05	43.9	0.16	1	0.4	600	0.02
Maximum Detect	0.032	0.49	ND	0.098	0.005	ND	ND	ND	0.03	0.005	17.8	7.83	11200	6.09	ND	37.8	7.6	4100	1400	4300	ND	ND	164	ND	4300	1900	290	93	230	740	1000	190	0.4	830	0.04	0.013	43.9	0.16	1	0.4	600	0.02
Average Concentration	0.0078		0.00005	0.023		0.0005	0.0005	0.000025	0.01	0.0025	16	7.1	4310	1.3	-178	28	7.4	2505	257	2382	2.5		108	2.5	2500		178	77	149	485	540	38	0.2	196	0.016	0.013	32	0.022	0.25		219	
Median Concentration	0.004	0.49	0.00005	0.009	0.005	0.0005	0.0005	0.000025	0.0045	0.002	15.74	7.05	3918	0.805	-146.05	26.85	7.4	2400	64	2200	2.5	0.1	100	2.5	2250	1900	170	79	140	450	430	27	0.2	155	0.021	0.009	30.9	0.01	0.12	0.4	180	0.015
Standard Deviation	0.01		0	0.031		0	0	0	0.0098	0.0018	1.2	0.29	1939	1.7	93	3.9	0.2	502	431	706	0		28	0	811		59	13	37	148	225	42	0.067	211	0.012	0.011	5.3	0.036	0.3		133	
Number of Guideline Exceedances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	17	17	0	0	30	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	17	17	0	0	30	0	0	0	0	0	0	0	0

Env Stds Comments

	Soluble Major Ions										Field Parameters						Inorganics					Unassigned		Acidity & Alkalinity			Major Ions							Nutrients							Organic Indicators	
	Arsenic (soluble) (Filtered)	Barium (soluble) (Filtered)	Cadmium (soluble) (Filtered)	Chromium (III+VI) (soluble) (Filtered)	Cobalt (soluble) (Filtered)	Copper (soluble) (Filtered)	Lead (soluble) (Filtered)	Mercury (soluble) (Filtered)	Nickel (soluble) (Filtered)	Zinc (soluble) (Filtered)	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field) (Filtered)	Redox (Field)	Temperature (Field)	pH (Lab)	Total Dissolved Solids (Filtered)	Total Suspended Solids	Bicarbonate ion (HCO3-)	Carbonate ion	chlordane-alpha	Dissolved Organic Carbon (Filtered)	Alkalinity (Hydroxide as CaCO3)	Alkalinity (total as CaCO3)	Alkalinity (total)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Fluoride	Ammonia as N	Nitrate (as N)	Nitrite (as N)	Kjeldahl Nitrogen Total	Nitrate (as NO3-)	Phosphate	Phosphorus (Total)	Total Organic Carbon	Aluminium
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mbTOC	pH Units	µS/cm	mg/L	mV	°C	pH Units	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)												6.5-8.5					6.5-8.5	600												180	250	250		0.411								0.2
ADWG 2011 Health (v3.5 updated 2018)																															500[#2]	1.5		11.29[#3]	0.91[#4]		50				
NHMRC Recreational Guidelines 2008 - Health																															5000[#2]	15		112.9[#3]	9.1[#5]		500				
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																								
2-4m																																								
4-8m																																								
>8m																																								
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																								
2-4m																																								
4-8m																																								
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NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																								
2-4m																																								
4-8m																																								
>8m																																								

SampleCode **Location_Code** **Sampled_Date_Time** **Matrix_Type**

#1:Natural concentrations generally <0.01 mg/L
#2:Not specifically guideline value: >500mg/L can have purgative effects
#3:Guideline value calculated by dividing Nitrate (as Nitrate) value (50 mg/L) by 4.427
#4:Guideline value calculated by dividing Nitrite (as Nitrite) value (0.3 mg/L) by molecular weight (3.2967033).
#5:Guideline value calculated by dividing Nitrite (as Nitrite) value (30 mg/L) by molecular weight (3.2967033).
#6:Not limiting: Derived water HSL exceeds water solubility limit
#7:To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fraction.

Appendix G Table G3b - Historical leachate results - human health assessment criteria

Breen Resources Pty Ltd
Kurnell Landfill Facility
Breen Resource Facility - EIS

	Metals												BTEXN						TRH - NEPM 2013					TRH - NEPM 1999				PAHs - standard 16														PAHs - extended			SVOCs			
	Aluminium (Filtered)	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene (m)	F1 (C6-C10 minus BTEX)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Total 8 PAHs (as BaP TEQ)(zero LOR) - Lab Calc	Benzo(b+j+k)fluoranthene	Benzo(b)&(k)fluoranthene	Dibenzo(a,h)pyrene	Hexachlorocyclohexane	4,4'-DDE	a-BHC	Aldrin
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)	0.2							1		0.1		3[#1]		25	3																																			
ADWG 2011 Health (v3.5 updated 2018)		0.01	2	0.002		0.05		2	0.01	0.5	0.001		1	800	300																	0.01																
NHMRC Recreational Guidelines 2008 - Health		0.1	20	0.02		0.5		20	0.1	5	0.01		10	8000	3000																	0.1																
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																																
2-4m													NL[#6]	NL[#6]	NL[#6]				NL[#6]																				NL[#6]										
4-8m													NL[#6]	NL[#6]	NL[#6]				NL[#6]																				NL[#6]										
>8m													NL[#6]	NL[#6]	NL[#6]				NL[#6]																				NL[#6]										
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																																
2-4m													*NL[#6]*	*NL[#6]*	*NL[#6]*				*NL[#6]*																				*NL[#6]*										
4-8m													*NL[#6]*	*NL[#6]*	*NL[#6]*				*NL[#6]*																				*NL[#6]*										
>8m													*NL[#6]*	*NL[#6]*	*NL[#6]*				*NL[#6]*																				*NL[#6]*										
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																																
2-4m													5000	NL[#6]	NL[#6]				6000[#7]																				NL[#6]										
4-8m													5000	NL[#6]	NL[#6]				6000[#7]																				NL[#6]										
>8m													5000	NL[#6]	NL[#6]				7000[#7]																				NL[#6]										

| SampleCode | Location_Code | Sampled_Date_Time | Matrix_Type | | | | | | | | | | | | | | | | | | |

	Metals												BTEXN						TRH - NEPM 2013					TRH - NEPM 1999				PAHs - standard 16																PAHs - extended			SVOCs			
	Aluminium (Filtered)	Arsenic	Barium	Cadmium	Chromium (III+VI)	Chromium (hexavalent)	Cobalt	Copper	Lead	Manganese	Mercury	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene (m)	F1 (C6-C10 minus BTEX)	C6-C10 Fraction	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Total 8 PAHs (as BaP TEQ)(zero LOR) - Lab Calc	Benzo(b+j+k)fluoranthene	Benzo(b)&(k)fluoranthene	Dibenzo(a,h)pyrene	Hexachlorocyclohexane	4,4'-DDE	a-BHC	Aldrin
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)	0.2							1		0.1		3[#1]		25	3																																				
ADWG 2011 Health (v3.5 updated 2018)		0.01	2	0.002		0.05		2	0.01	0.5	0.001		1	800	300																		0.01																
NHMRC Recreational Guidelines 2008 - Health		0.1	20	0.02		0.5		20	0.1	5	0.01		10	8000	3000																		0.1																
CRC CARE 2011 GW HSL for vap.int Intrusive Maint. - Sand																																																	
2-4m													**NL[#6]**	**NL[#6]**	**NL[#6]**				**NL[#6]**																					**NL[#6]**										
4-8m													**NL[#6]**	**NL[#6]**	**NL[#6]**				**NL[#6]**																					**NL[#6]**										
>8m													**NL[#6]**	**NL[#6]**	**NL[#6]**				**NL[#6]**																					**NL[#6]**										
NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																																	
2-4m													*NL[#6]*	*NL[#6]*	*NL[#6]*				*NL[#6]*																					*NL[#6]*										
4-8m													*NL[#6]*	*NL[#6]*	*NL[#6]*				*NL[#6]*																					*NL[#6]*										
>8m													*NL[#6]*	*NL[#6]*	*NL[#6]*				*NL[#6]*																					*NL[#6]*										
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																																	
2-4m													5000	NL[#6]	NL[#6]				6000[#7]																					NL[#6]										
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SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type

#1:Natural concentrations generally <0.01 mg/L
#2:Not specifically guideline value: >500mg/L can have purgative effects
#3:Guideline value calculated by dividing Nitrate (as Nitrate) value (50 mg/L) by 4.4
#4:Guideline value calculated by dividing Nitrite (as Nitrite) value (0.3 mg/L) by mol
#5:Guideline value calculated by dividing Nitrite (as Nitrite) value (30 mg/L) by mol
#6:Not limiting: Derived water HSL exceeds water solubility limit
#7:To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fractio

	OC Pesticides																				OP Pesticides											TPH		OLD PAH Calcs	Phenols - total
	b-BHC	Chlordane (cis)	Chlordane (gamma)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	DDE	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Azinphos methyl	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Malathion	Parathion	Ronnel	C6-C36 Fraction (Sum of Total) - Lab calc	Manganese (soluble) (Filtered)	PAH (Sum of Total)	Phenolics Total
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)																																		
ADWG 2011 Health (v3.5 updated 2018)							9			20						10	0.3			300	30	10	10		4	7	4	7	70	20					
NHMRC Recreational Guidelines 2008 - Health							90			200						100	3			3000	300	100	100		40	70	40	70	700	200					
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2-4m																																		
4-8m																																		
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SampleCode	Location_Code	Sampled_Date_Time	Matrix_Type																																		
LB01_01 Jan 02_-	LB01	1/01/2002	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 02_-	LB01	1/04/2002	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jul 02_-	LB01	1/07/2002	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Oct 02_-	LB01	1/10/2002	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jan 03_-	LB01	1/01/2003	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 03_-	LB01	1/04/2003	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jul 03_-	LB01	1/07/2003	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Oct 03_-	LB01	1/10/2003	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jan 04_-	LB01	1/01/2004	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 04_-	LB01	1/04/2004	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 05_-	LB01	1/04/2005	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 May 05_-	LB01	1/05/2005	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jul 05_-	LB01	1/07/2005	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Oct 05_-	LB01	1/10/2005	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Feb 06_-	LB01	1/02/2006	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 06_-	LB01	1/04/2006	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jul 06_-	LB01	1/07/2006	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Oct 06_-	LB01	1/10/2006	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Jan 07_-	LB01	1/01/2007	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB01_01 Apr 07_-	LB01	1/04/2007	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB02_02 Jul 19_-	LB02	2/07/2019	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB02_25 Oct 19_-	LB02	25/10/2019	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LB02_13 Jan 20_-	LB02	13/01/2020	Leachate	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-	-	<50
LB02_22 Apr 20_-	LB02	22/04/2020	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LD002_21 Jan 15_-	LD002	21/01/2015	Leachate	<0.2	-	<0.2	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<200	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	91	-	-	<50
LD002_25 Jan 17_-	LD002	25/01/2017	Leachate	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	-	-	<50
LW01_20 Dec 16_-	LW01	20/12/2016	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3260	-	-	-	-
LW01_11 Jan 17_-	LW01	11/01/2017	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2320	-	-	-	-
LW02_20 Dec 16_-	LW02	20/12/2016	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2900	-	-	-	-
LW02_11 Jan 17_-	LW02	11/01/2017	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2990	-	-	-	-
LW03_20 Dec 16_-	LW03	20/12/2016	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4250	-	-	-	-
LW03_11 Jan 17_-	LW03	11/01/2017	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2490	-	-	-	-
LW04_20 Dec 16_-	LW04	20/12/2016	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2750	-	-	-	-
LW04_11 Jan 17_-	LW04	11/01/2017	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3040	-	-	-	-
LW05_20 Dec 16_-	LW05	20/12/2016	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5030	-	2.4	-	-
LW05_11 Jan 17_-	LW05	11/01/2017	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3560	-	-	-	-
LW06_20 Dec 16_-	LW06	20/12/2016	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21,520	-	7.9	-	-
LW06_11 Jan 17_-	LW06	11/01/2017	Leachate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,750	-	-	-	-

Statistical Summary

Number of Results	3	2	1	2	3	2	2	1	3	2	3	1	3	3	3	3	3	3	3	3	1	3	3	2	3	3	3	3	1	1	3	12	1	2	3
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	1	2	0
Minimum Concentration	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	2320	91	2.4	<50
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2320	91	2.4	ND
Maximum Concentration	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<200	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	21520	91	7.9	<50
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21520	91	7.9	ND
Average Concentration	0.1				0.1				0.1		0.1		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1		33	0.1	0.1	0.1			0.1	5655			25
Median Concentration	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3150	91	5.15	25
Standard Deviation	0				0				0		0		0	0	0	0	0	0	0	0		0	0		58	0	0	0			0	5884			0
Number of Guideline Exceedances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Env Stds Comments

	OC Pesticides																				OP Pesticides											TPH		OLD PAH Calcs	Phenols - total
	b-BHC	Chlordane (cis)	Chlordane (gamma)	Chlordane (trans)	d-BHC	4,4 DDD	4,4 DDT	DDE	Dieldrin	Endosulfan	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan Sulfate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Azinphos methyl	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dimethoate	Ethion	Fenitrothion	Malathion	Parathion	Ronnel	C6-C36 Fraction (Sum of Total) - Lab calc	Manganese (soluble) (Filtered)	PAH (Sum of Total)	Phenolics Total
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ADWG 2011 Aesthetic (v3.5 updated 2018)																																		
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NEPM 2013 Table 1A(4) HSL C Rec GW for Vapour Intrusion, Sand																																		
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#4:Guideline value calculated by dividing Nitrite (as Nitrite) value (0.3 mg/L) by mol
#5:Guideline value calculated by dividing Nitrite (as Nitrite) value (30 mg/L) by mol
#6:Not limiting: Derived water HSL exceeds water solubility limit
#7:To obtain F1 subtract the sum of BTEX concentrations from the C6 - C10 fractio

	Field Parameters	NA	Inorganics	Organic Indicators	Metals							TRH - NEPM 1999		PAHs - standard 16
	Electrical conductivity (field)	Tot +ve report Chlordane	pH (Field)	Total Organic Carbon	Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel	Zinc	C6-C9 Fraction	C10-C36 (Sum of Total)	Benzo(a)pyrene
	µS/cm	mg/kg	pH Units	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL															
NEPM 2013 EIL-Commercial/Industrial					**160**		**310**	**1,200**	**1,800**		**55**	**360**			
NEPM 2013 EIL-Urban Residential- Public Open Space					*100*		*190*	*800*	*1,100*		*30*	*230*			
NEPM 2013 Table 1A(1) HIL C Rec					300	90	300	17,000	600	80	1,200	30,000			
NEPM 2013 Table 1A(1) HIL D Comm/Ind					3,000	900	3,600	240,000	1,500	730	6,000	400,000			
NEPM 2013 Table 1B(6) ESLs for Comm/Ind, Coarse Soil															1.4
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil															0.7
NEPM 2013 Table 1A(3) HSL C Rec Soil for Vapour Intrusion, Sand| 0 m to <1 m												NL**	NL**	
NEPM 2013 Table 1A(3) HSL D Comm/Ind Soil for Vapour Intrusion, Sand	0 m to <1 m												260**	NL**	
CRC CARE 2011 Soil Vapour HSL Intrusive Maintenance Workers - Sand													NL***	NL***	
CRC CARE 2011 Soil Direct Contact HSL-C Recreational / Open Space													5,100***	3,800***	
CRC CARE 2011 Soil Direct Contact Commercial/industrial													26,000***	20,000***	
CRC CARE 2011 Soil Direct Contact Intrusive Works													82,000***	62,000***	

Field ID	Location Code	Date	Matrix Type														
010419-JP-AG	Soil AG	1/04/2019	soil	290				<4	<0.4	6	23	59	<0.1	4	38			
010419-JP-RF	Soil RF	1/04/2019	soil	1,000		8.4				10	24	84			100			
020320-JS-AG	Soil AG	2/03/2020	soil	240				<4	<0.4	8	10	34	<0.1	9	55			
020320-JS-RF	Soil RF	2/03/2020	soil	9	2.2	8.2	0.89	10	<0.4	10	28	96	<0.1	5	200			0.2
020919-BR-RF	Soil RF	2/09/2019	soil	1,200		7.9				24	36	37			91			
021219-JS-AG	Soil AG	2/12/2019	soil	530						16	64	120			120			
021219-JS-RF	Soil RF	2/12/2019	soil	1,100		8.4				17	26	91			130			
030619-JP-AG	Soil AG	3/06/2019	soil	640				<4	<0.4	18	16	28	<0.1	11	38			
040219-JJ-RF1	Soil RF	4/02/2019	soil	1,400		8.2				10	32	110			99			
040319-JP-AG	Soil AG	4/03/2019	soil	790				<4	<0.4	9	22	49	<0.1	4	38			
040319-JP-RF	Soil RF	4/03/2019	soil	1,400		8.9				11	46	99			75			
040520-BR-AG	Soil AG	4/05/2020	soil	170				<4	<0.4	10	9	31	<0.1	6	62			
041119-LP-AG	Soil AG	4/11/2019	soil	820				4	<0.4	12	27	36	0.1	3	64			
050819-JP-AG	Soil AG	5/08/2019	soil	360				4	<0.4	48	28	48	<0.1	*35*	100			
060120-JS-AG	Soil AG	6/01/2020	soil	250				5	<0.4	9	32	44	0.1	22	77			
060120-JS-RF	Soil RF	6/01/2020	soil	1,200	26	8.3	0.65	<4	<0.4	13	32	88	0.2	6	110		310	2.6
060420-BR-AG	Soil AG	6/04/2020	soil	220				<4	<0.4	5	8	23	<0.1	3	41			
060420-BR-RF	Soil RF	6/04/2020	soil	1,200		8.4				11	50	64			120			
060519-JP-AG	Soil AG	6/05/2019	soil	670				4	<0.4	8	20	66	0.1	5	73			
060519-JP-RFU	Soil RF	8/05/2019	soil	1,500	4	8.3	0.52	<4	<0.4	8	24	51	0.1	7	77			0.4
080419-JP-AG	Soil AG	8/04/2019	soil	370				4	<0.4	6	18	15	<0.1	2	42			
080419-JP-RF1	Soil RF	8/04/2019	soil	1,500	2.8	7.7	0.55	<4	<0.4	7	16	39	<0.1	4	66			0.2
081019-LP-AG	Soil AG	8/10/2019	soil	1,400				5	<0.4	12	19	44	<0.1	6	57			
081019-LP-RF	Soil RF	8/10/2019	soil	1,100	7.2	7.6	1.5	6	<0.4	21	28	81	0.1	11	110			0.71
090320-JS-RF	Soil RF	9/03/2020	soil	1,400		8.1				10	32	110			230			
090919-BR-RF	Soil RF	9/09/2019	soil	1,300	14	8.6	0.88	<4	<0.4	21	24	56	0.1	8	87		350	1.4
091219-LP-AG	Soil AG	9/12/2019	soil	160				<4	<0.4	3	3	9	<0.1	2	27			
091219-LP-RF	Soil RF	9/12/2019	soil	1,300	14	8.2	1	5	<0.4	49	58	77	0.2	6	100			1.4
110219-JP-RF1	Soil RF	11/02/2019	soil	1,400	21	8.5	0.53	<4	<0.4	4	35	120	3.4	5	90	<25	<250	1.9
110319-JP-AG	Soil AG	11/03/2019	soil	310				<4	<0.4	5	8	20	<0.1	1	22			
110319-JP-RF1 & 180319	Soil RF	11/03/2019	soil	940	8.6	8.7	0.68	<4	<0.4	7	26	55	0.1	3	51			0.65
110520-LP-AG	Soil AG	11/05/2020	soil	330				5	<0.4	12	12	23	<0.1	4	51			
111119-JS-RF	Soil AG	11/11/2019	soil	160				5	<0.4	3	39	24	0.1	3	86			
111119-JS-RF	Soil RF	11/11/2019	soil	670	4.7	8	1.1	<4	<0.4	15	34	47	<0.1	8	57			0.5
120819-JP-AG	Soil AG	12/08/2019	soil	150				7	<0.4	10	19	12	<0.1	6	34			
120819-JP-RF	Soil RF	12/08/2019	soil	630	8.9	8.4	1.9	6	<0.4	20	25	41	<0.1	14	63		<330	1
130120-LP-AG	Soil AG	13/01/2020	soil	800				<4	<0.4	2	<1	4	<0.1	<1	8			
130120-LP-RF	Soil RF	13/01/2020	soil	170		8.4				10	22	65			75			
130519-JP-RF	Soil RF	13/05/2019	soil	1,200		8.2				10	27	170			120			
140420-LP-RF	Soil RF	14/04/2020	soil	2,200	2.3	8.2	1.7	9	<0.4	12	26	67	0.1	5	130		360	0.2
141019_LP_AG	Soil AG	14/10/2019	soil	410				4	<0.4	15	9	24	<0.1	4	95			
141019_LP_RF	Soil RF	14/10/2019	soil	550		8.1				5	11	40			36			
150419-JP-AG	Soil AG	15/04/2019	soil	450				<4	<0.4	2	2	7	<0.1	<1	5			
150419-JP-RF	Soil RF	15/04/2019	soil	1,800		8.3				8	14	35			44			
150719-JP-AG	Soil AG	15/07/2019	soil	500				<4	<0.4	6	8	13	<0.1	5	27			
160919-JS-RF	Soil RF	20/09/2019	soil	800		8.8				150	24	40			73			
161219-JS-AG	Soil AG	16/12/2019	soil	110				5	<0.4	25	21	58	0.2	2	40			
161219-JS-RF	Soil RF	16/12/2019	soil	830		8.4				9	28	110			130			
180218-JP-AG1	Soil AG	18/02/2019	soil	460				<4	<0.4	22	22	36	<0.1	17	40			
180218-JP-RF	Soil RF	18/02/2019	soil	2,100		7.7				9	25	87			65			
180319-JP-AG	Soil AG	18/03/2019	soil	940				<4	<0.4	5	8	25	<0.1	3	51			
180319-JP-RF1	Soil RF	18/03/2019	soil	980		8.9				7	22	65			75			
180520-LP-AG	Soil AG	18/05/2020	soil	200				5	<0.4	16	21	40	<0.1	7	220			
180520-LP-RF	Soil RF	18/05/2020	soil	1,900	2.2	8.1	1	<4	<0.4	13	28	53	<0.1	7	130			0.2
181119-LP-RF	Soil AG	18/11/2019	soil	350				<4	<0.4	15	6	3	<0.1	10	14			
181119-LP-RF	Soil RF	18/11/2019	soil	2,100		8.3				15	44	75			150			
200120-LP-AG	Soil AG	20/01/2020	soil	610				<4	<0.4	9	17	51	<0.1	4	65			
200120-LP-RF	Soil RF	20/01/2020	soil	1,900	10	7.9	1	7	<0.4	13	26	70	0.2	6	110		110	1
200420-LP-AG	Soil AG	20/04/2020	soil	170				5	<0.4	12	18	27	<0.1	5	73			
200420-LP-RF	Soil RF	20/04/2020	soil	1,400		8.2				12	18	36			100			
200519-JP-AG1	Soil AG	20/05/2019	soil	440				<4	<0.4	9	25	100	0.1	4	64			
200519-JP-RF	Soil RF	20/05/2019	soil	490	6.7	8.5	0.62	<4	<0.4	7	27	140	1.5	4	93		<250	0.59
211019-LP-AG	Soil AG	21/10/2019	soil	150				<4	<0.4	5	2	5	<0.1	<1	2			
220719-JP-AG	Soil AG	22/07/2019	soil	360				5	<0.4	11	29	66	0.1	9	150			
230320-LP-RF	Soil RF	23/03/2020	soil	1,800		8.1				11	35	92			230			
230420-LP-RF	Soil RF	23/04/2020	soil	1,400		8.3				15	23	50			130			
230919-JS-AG	Soil AG	23/09/2019	soil	900				<4	<0.4	10	2	5	<0.1	2	2			
230919-JS-RF	Soil RF	23/09/2019	soil	910	28	9.9	1	5	<0.4	13	25	59	<0.1	11	68		240	2.9
250219-JP-AG1	Soil AG	25/02/2019	soil	690				<4	<0.4	5	20	76	0.1	3	39			
250219-JP-RF & 040319-J	Soil RF	25/02/2019	soil	970	6	8.6	0.66	<4	<0.4	8	49	100	0.4	6	67	<25	<250	0.53
250520-BR-AG	Soil AG	25/05/2020	soil	88				<4	<0.4	10	39	28	<0.1	7	30			
250520-BR-RF	Soil RF	25/05/2020	soil	660		8.8				10	19	68			56			
251119-JS-AG	Soil AG	25/11/2019	soil	450				9	<0.4	26	32	77	0.2	11	210			
251119-JS-RF	Soil RF	25/11/2019	soil	900	10	8.2	1.1	9	<0.4	22	28	64	0.1	6	120		110	0.88
260319-JP-AG	Soil AG	26/03/2019	soil	350				<4	<0.4	4	37	48	<0.1	3	37			

				Field Parameters	NA	Inorganics	Organic Indicators	Metals								TRH - NEPM 1999		PAHs - standard 16
				Electrical conductivity (field)	Tot +ve report Chlordane	pH (Field)	Total Organic Carbon	Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel	Zinc	C6-C9 Fraction	C10-C36 (Sum of Total)	Benzo(a)pyrene
				µS/cm	mg/kg	pH Units	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
260319-JP-RF	Soil RF	26/03/2019	soil	340	4.6	8.6	0.34	<4	<0.4	6	20	55	<0.1	3	39			0.4
260819-BR-AG	Soil AG	26/08/2019	soil	510				<4	<0.4	7	14	21	<0.1	2	25			
270420-LP-AG	Soil AG	27/04/2020	soil	150				6	<0.4	14	21	56	<0.1	7	91			
270519-JP-AG	Soil AG	27/05/2019	soil	1,100				<4	<0.4	8	15	40	<0.1	4	59			
281019_LP_RF	Soil RF	28/10/2019	soil	2,400		8.2				17	120	72			210			
281019-LP-AG	Soil AG	28/10/2019	soil	180				<4	<0.4	3	6	29	<0.1	2	61			
300320-BR-AG	Soil AG	30/03/2020	soil	140				7	0.8	8	44	51	0.1	4	180			
300320-BR-RF	Soil RF	30/03/2020	soil	1,600	11	8	1.1	6	0.5	15	30	66	<0.1	8	130			0.8
300919-JS/LP-Ag	Soil AG	30/09/2019	soil	1,800				<4	<0.4	7	31	40	<0.1	10	*86*			
300919-JS/LP-RF	Soil RF	30/09/2019	soil	640	4.2	8.8	0.71	<4	<0.4	7	20	55	<0.1	5	62		110	0.52
04112019-LP-RF	Soil RF	4/11/2019	soil	1,800		8.2				14	43	140			*270*			
AG	Soil AG	17/02/2020	soil	1,400				<4	<0.4	4	5	14	<0.1	2	31			
AG-3/02/20	Soil AG	3/02/2020	soil	120				4	1	9	10	34	<0.1	4	150			
AG_24/02/20	Soil AG	24/02/2020	soil	2,000				5	<0.4	12	10	22	<0.1	2	46			
AG_28/01/20	Soil AG	28/01/2020	soil	220				6	<0.4	13	19	38	0.1	5	56			
AG-JS-160320	Soil AG	16/03/2020	soil	820				<4	<0.4	5	15	26	<0.1	3	48			
RF-3/02/20	Soil RF	3/02/2020	soil	1,000	30	8.2	0.86	5	<0.4	11	26	75	0.2	7	91		140	2.6
RF_10/02/2020	Soil RF	10/02/2020	soil	1,200		8.3				20	48	120			*290*			
RF_28/01/20	Soil RF	28/01/2020	soil	1,100		8.3				16	23	85			90			
RF-JS-160320	Soil RF	16/03/2020	soil	1,500	3.4	9.8	1	6	<0.4	15	39	68	0.2	7	140			0.4

Statistics

Number of Results	95	23	47	23	70	70	95	95	95	70	70	95	2	12	23
Minimum Detect	9	2.2	7.6	0.34	4	0.5	2	2	3	0.1	1	2	ND	110	0.2
Maximum Detect	2,400	30	9.9	1.9	10	1	150	120	170	3.4	35	290	ND	360	2.9
95% UCL (Student's-t) *	960.5	13.11	8.47	1.061	4.087	0.249	15.87	27.48	61.73	0.236	7.033	96.39	12.5	240.2	1.247

* A Non Detect Multiplier of 0.5 has been applied.

** TRH C6-C9 and TRH >C10-C36 fractions were compared indicatively against HSL for the TRH F1 fraction (C6-C10 minus BTEX) and the TRH F2 fraction (C10-C16 less naphthalene), respectively. This comparison must be used as an indication only.

*** TRH C6-C9 and TRH >C10-C36 fractions were compared indicatively against CRC CAR HSL for the TRH C6-C10 fraction and the TRH C10-C16 fraction, respectively. This comparison must be used as an indication only.

			Initial well pressure above atmospheric	Initial vent	Flow Rate	CH_4 initial concentration	CO_2 concentration	Maximum vacuum on well	Recovery time	Total volume purged	CH4 concentration after purging	CO_2 concentration after purging
			kPa		L/hr	%	%	psi	min	L	%	%
NSW EPA (2016) Environmental Guidelines – Solid Waste Landfills						1	1.5				1	1.5
NSW EPA ID No	**Well ID**	**Matrix Type**										
					Dec-16							
-	LW01	Landfill gas	-0.01	-	<0.1	41.2	20.7	-	-	-	41.1	20.6
-	LW02	Landfill gas	-0.005	-	<0.1	34.6	19.5	-	-	-	16.4	11.6
-	LW03	Landfill gas	-0.112	-	-0.1	0.1	0.1	-	-	-	<0.1	0.2
-	LW04	Landfill gas	<0.01	-	<0.1	18.9	19.7	-	-	-	22.5	25.4
-	LW05	Landfill gas	0.57	-	2.4	47.1	22.2	-	-	-	30.3	14.7
-	LW06	Landfill gas	0.45	-	13.4	2.6	4.6	-	-	-	0.8	1.9
					Jan-17							
-	LW01	Landfill gas	<0.01	-	0.7	48.5	24.1	-	-	-	-	-
-	LW02	Landfill gas	<0.01	-	1	35.4	23.6	-	-	-	-	-
-	LW03	Landfill gas	<0.01	-	-0.1	16.2	10.5	-	-	-	-	-
-	LW04	Landfill gas	<0.01	-	1.4	19.6	20.2	-	-	-	-	-
-	LW05	Landfill gas	<0.01	-	0.9	59.7	25.8	-	-	-	-	-
-	LW06	Landfill gas	<0.01	-	1.12	63.6	34.7	-	-	-	-	-
					-							
20	BH4A	Landfill gas	<1	Nil	-0.2	<1		-18	<1	30	<1	
22	BH8B	Landfill gas	<1	Nil	-0.5	<1		-18	<1	30	<1	
23	BH12A	Landfill gas	<1	Nil	-0.5	0.1		-18	<1	30	<1	
24	BH13A	Landfill gas	<1	Nil	-0.5	<1		-18	<1	30	<1	
25	BH18	Landfill gas	<1	Nil	-0.4	<1		-18	<1	50	<1	
					Oct-17							
20	BH4A	Landfill gas	<0.1	Nil	1.3	<0.1		-18	<1	30	<0.1	
22	BH8B	Landfill gas	<0.1	Nil	0.9	<0.1		-18	<1	30	<0.1	
23	BH12A	Landfill gas	<0.1	Nil	1	<0.1		-18	<1	30	<0.1	
24	BH13A	Landfill gas	<0.1	Nil	1.2	<0.1		-18	<1	30	<0.1	
25	BH18	Landfill gas	<0.1	Nil	1.2	<0.1		-18	<1	50	<0.1	
					Jan-18							
20	BH4A	Landfill gas	<0.1	Nil	0.1	<0.1		-18	<1	30	<0.1	
22	BH8B	Landfill gas	<0.1	Nil	0.4	<0.1		-18	<1	30	<0.1	
23	BH12A	Landfill gas	<0.1	Nil	0.3	<0.1		-18	<1	30	<0.1	
24	BH13A	Landfill gas	<0.1	Nil	0.2	<0.1		-18	<1	30	<0.1	
25	BH18	Landfill gas	<0.1	Nil	0.6	<0.1		-18	<1	50	<0.1	
					Apr-18							
20	BH4A	Landfill gas	<0.1	Nil	-0.1	0.1		-18	<1	30	0.1	
22	BH8B	Landfill gas	<0.1	Nil	<0.1	0.1		-18	<1	30	0.1	
23	BH12A	Landfill gas	<0.1	Nil	-0.1	<0.1		-18	<1	30	<0.1	
24	BH13A	Landfill gas	<0.1	Nil	<0.1	0.1		-18	<1	30	0.1	
25	BH18	Landfill gas	<0.1	Nil	0.1	<0.1		-18	<1	30	0.1	
					Jul-18							
20	BH4A	Landfill gas	<0.1	Nil	0	<0.1		-18	<1	30	<0.1	
22	BH8B	Landfill gas	<0.1	Nil	0	<0.1		-18	<1	30	<0.1	
23	BH12A	Landfill gas	<0.1	Nil	0.2	<0.1		-18	<1	30	<0.1	
24	BH13A	Landfill gas	<0.1	Nil	0.1	<0.1		-18	<1	30	<0.1	
25	BH18	Landfill gas	<0.1	Nil	0.1	<0.1		-18	<1	30	<0.1	
					Oct-18							
20	BH4A	Landfill gas	<0.1	Nil	<0.1	0.1		-18	<1	30	<0.1	
22	BH8B	Landfill gas	<0.1	Nil	<0.1	<0.1		-18	<1	30	<0.1	
23	BH12A	Landfill gas	<0.1	Nil	<0.1	<0.1		-18	<1	30	<0.1	
24	BH13A	Landfill gas	<0.1	Nil	0.1	<0.1		-18	<1	30	<0.1	
25	BH18	Landfill gas	<0.1	Nil	<0.1	0.1		-18	<1	30	<0.1	
					Jan-19							
20	BH4A	Landfill gas	<0.1	Nil	<0.1	<0.1		-	-	-	No Vehicle Access	
22	BH8B	Landfill gas	<0.1	Nil	0.1	<0.1		-18	<1	30	<0.1	
23	BH12A	Landfill gas	<0.1	Nil	<0.1	<0.1		-18	<1	30	<0.1	
24	BH13A	Landfill gas	<0.1	Nil	0.2	<0.1		-18	<1	30	<0.1	
25	BH18	Landfill gas	<0.1	Nil	<0.1	<0.1		-	-	-	No Vehicle Access	
					Apr-19							
20	BH4A	Landfill gas	<0.1	Nil	<0.1	<0.1		-18	<1	30	0.1	
22	BH8B	Landfill gas	<0.1	Nil	-0.1	<0.1		-18	<1	30	<0.1	
23	BH12A	Landfill gas	<0.1	Nil	-0.1	<0.1		-18	<1	30	<0.1	
24	BH13A	Landfill gas	<0.1	Nil	<0.1	<0.1		-18	<1	30	<0.1	
25	BH18	Landfill gas	<0.1	Nil	<0.1	<0.1		-18	<1	30	<0.1	
					Jul-19							
20	BH4A	Landfill gas	<0.1	Nil	<0.1	0.1		-18	<1	30	0.1	
22	BH8B	Landfill gas	<0.1	Nil	<0.1	<0.1		-18	<1	30	<0.1	
23	BH12A	Landfill gas	<0.1	Nil	<0.1	<0.1		-18	<1	30	<0.1	
24	BH13A	Landfill gas	<0.1	Nil	0.1	<0.1		-18	<1	30	<0.1	
25	BH18	Landfill gas	<0.1	Nil	<0.1	<0.1		-18	<1	30	<0.1	
					Oct-19							
20	BH4A	Landfill gas	<0.1	Nil	0.3	<0.1		-18	<1	30	<0.1	
22	BH8B	Landfill gas	<0.1	Nil	0.1	<0.1		-18	<1	30	<0.1	
23	BH12A	Landfill gas	<0.1	Nil	0.1	<0.1		-18	<1	30	<0.1	
24	BH13A	Landfill gas	<0.1	Nil	0.1	<0.1		-18	<1	30	<0.1	
25	BH18	Landfill gas	<0.1	Nil	0.2	<0.1		-18	<1	30	<0.1	
					Jan-20							
20	BH4A	Landfill gas	<0.1	Nil	<0.1	<0.1		-18	<1	30	<0.1	
22	BH8B	Landfill gas	<0.1	Nil	<0.1	<0.1		-18	<1	30	<0.1	
23	BH12A	Landfill gas	<0.1	Nil	-0.7	<0.1		-18	<1	30	<0.1	
24	BH13A	Landfill gas	<0.1	Nil	-0.5	<0.1		-18	<1	30	<0.1	
25	BH18	Landfill gas	<0.1	Nil	<0.1	0.1		-18	<1	30	<0.1	