

EASTERN RIDGE AND JIMBLEBAR STYGOFAUNA MONITORING 2021/2022
PREPARED FOR
BHP WESTERN AUSTRALIA IRON ORE | October 2022

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Quality statement

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Executive summary

Introduction

BHP Western Australia Iron Ore (BHP WAO) commissioned Stantec Australia Pty Ltd (Stantec), to complete the 2021/2022 Ethel Gorge Aquifer Stygobiont Threatened Ecological Community (TEC) compliance monitoring program (the Program). The Program aligns with conditions outlined in Ministerial Statements (MS) 1126, 478, 1037 and 1021, established for mining below the water table for the Eastern Ridge Orebody (OB) 23, 24, and 25, OB 31 and Jimblebar deposits, located within approximately 40 km of the town of Newman. The objective of the Program was to monitor the Ethel Gorge Aquifer Stygobiont TEC, in relation to potential impacts from BHP WAO mining operations, which include mine dewatering, groundwater extraction, mine pit salinisation and surplus water discharge.

Survey Effort

The survey effort for the Program targeted several monitoring zones (MZs) in the area, with monitoring zone 1 representing the Ethel Gorge Aquifer Stygobiont TEC and core habitat. A total of 50 samples were collected from 25 bores to assess groundwater quality and stygofauna abundance. This comprised two surveys, with 25 bores sampled in 2021 dry season survey (6th – 9th December 2021) and the same 25 bores sampled in the 2021 wet season survey (10th – 14th May 2022). Below average rainfall was received prior to and during the Program, with only two of the preceding 12 months having above average rainfall.

Groundwater quality measurements were recorded *in situ* from the bores, along with standing water levels (SWLs). Samples were also collected from the bores for chemical analysis, which was completed by a NATA-accredited laboratory. The analytical suite comprised pH, salinity, ionic composition, nutrients and metals. Stygofauna sampling aligned with regulatory technical guidance, using net hauling. Stygofauna samples were subsequently sorted and identified in the laboratory. A number of stygofauna specimens were also genetically sequenced to verify taxonomy, including amphipods, isopods and oligochaetes.

The resulting groundwater and stygofauna data were analysed to determine seasonal trends and changes over time. Comparison to previous monitoring rounds, associated with environmental conditions and/or mining operations was undertaken. Statistical analysis was performed on stygofauna species richness and survey effort

Groundwater Properties

The results of the Program indicated that groundwater quality was mostly below the groundwater trigger values (GTVs), or historic maxima, and trends were related to environmental and/or hydrogeological factors. The SWLs in both the 2021 dry season and 2022 wet season surveys were within the GTVs.

Groundwater pH was mostly alkaline. While some exceedances of the GTVs were reported at individual bores, all but one value was within the historic range for the respective MZs. Mean salinity in each of the MZs were within historical range and within GTVs.

Nutrient levels were variable with some individual bores exceeding the GTVs for nitrogen and phosphorus, with the mean values for the monitoring zones falling just outside the GTVs. The increased mean values were heavily influenced by a few bores and those bores typically exhibit raised nutrient concentrations.

Metal concentrations were generally below detection, suggesting groundwaters in the area may be characterised by naturally low metals content. Program-specific GTVs are unavailable for most metals at this time, however Barium and Boron have enough local historical measurements to construct preliminary Program-specific GTVs. Other metals are compared to established freshwater GTVs. The preliminary Project-specific GTV for barium is set at 0.04mg/L in MZ1 and 0.5mg/L across all Project zones, and for boron are set at 0.76 for the dry season and 0.63 for the wet. Note that these Project specific GTVs are preliminary. Results suggest that groundwater in the area has naturally low metals content, but is naturally slightly enriched with barium, boron, iron, zinc and manganese. There is no perceived metal toxicity risk to the Ethel Gorge Aquifer Stygobiont TEC.

Stygofauna

A total of 25 stygofauna species were recorded during the Program from six higher level taxonomic groups; Amphipoda, Bathynellacea, Copepoda, Isopoda, Ostracoda and Oligochaeta. There was one new taxon identified from bore HEOP0574M, the amphipod species *Maarrka* sp. nov. Several new haplotypes were recorded from DNA analyses in the Amphipoda, Isopoda and Oligochaeta.

Diversity and abundance of organisms in bores are lower than in historical surveys, however they are comparable with those in surveys undertaken in the previous five years. Diversity rarefaction curves indicate that not all the species in the Ethel Gorge Stygobiont TEC have been detected to date and that they are likely to be encountered with further samples. The most abundant taxon overall was *Diacyclops humphreysi*, but this was due to very high abundances in just two samples.



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1 Introduction

1.1 Background

BHP Western Australia Iron Ore (BHP WAIO) commissioned Stantec Australia Pty Ltd (Stantec), to complete the 2021/2022 Ethel Gorge Aquifer Stygobiont Threatened Ecological Community (TEC) compliance monitoring program (the Program). The Program aligns with regulatory compliance conditions and the associated management plan (Douglas and Pickard, 2014) for mining below the water table at the Eastern Ridge Orebody (OB) 23, 24, 25 and 31 and Jumblebar deposits. These deposits are located within 40 km of the town of Newman, in the Pilbara bioregion (**Figure 1-1, Figure 1-2**).

Stygofauna monitoring and management is required to investigate potential impacts (dewatering changes on groundwater quality and habitat) on the Ethel Gorge TEC, from dewatering at Jumblebar and OB 31, and the subsequent discharge of excess groundwater into Ophthalmia Dam. The Program extends to Eastern Ridge, to ensure local stygofauna communities have not been impacted by dewatering at OB 23 and OB 24/25. It also adheres to Environmental Protection Authority's (EPA) Ministerial Statements (MS) 857 (Jumblebar), 478 (OB 23), 1037 (OB 24/25), and 1021 (OB 31), and BHP WAIO's Eastern Pilbara Water Resource Management Plan (EPWRMP) (Douglas and Pickard, 2014). The latter comprises adaptive management, with monitoring against outcomes-based objectives and early warning triggers and thresholds, with the TEC identified as an important environmental receptor (Douglas and Pickard, 2014).

The Ethel Gorge Aquifer Stygobiont TEC is located 15 km northeast of Newman, adjacent to Eastern Ridge. It is associated with the Fortescue River and Ophthalmia Dam floodplain, downstream of the confluence of Homestead Creek (RPS, 2013). The TEC, which was first detected in 1997, comprises a diverse stygofauna assemblage (Eberhard and Humphreys, 1999). The hydrogeological units that host the highest species richness are the shallow alluvial and calcrete aquifers within the gorge, and approximately 5 km downstream (Bennelongia, 2014; MWH, 2016a; RPS, 2013). Stygofauna monitoring at Ethel Gorge has been ongoing since 2003, with surveys conducted by several consultants.

1.2 Objective and Scope

The objective of the Program was to monitor the Ethel Gorge Stygofauna TEC, in relation to potential impacts from BHP WAIO mining operations which include mine dewatering, groundwater extraction, mine pit salinisation and surplus water discharge. To address the objective, field surveys (surveys) were undertaken in the dry (2021) and wet season (2022), with the scope of the Program comprising the following:

Groundwater

- Monitor groundwater levels and field physico-chemistry (temperature, pH, EC).
- NATA-accredited laboratory analyses of major ions, metals and nutrients.
- Analyse groundwater quality data, reporting on elevated parameters or exceedances.
- Develop a statistically adequate baseline dataset (including historic data), to calculate and refine water quality trigger levels (20th, 50th and 80th percentiles) for metals, following (ANZECC, 2000). procedures.
- Refinement and continued development of site-specific water quality triggers including metals if sufficient data exists.

Stygofauna

- Monitor stygofauna abundance and species richness; document and map relevant species records over time.
- Ensure that stygofauna taxonomy is current and aligns with historic survey data and conduct DNA analysis to address specific taxonomic and/or environmental monitoring requirements.
- Analyse stygofauna data in relation to species' distributions and groundwater quality data.
- Investigate the use of stygofauna indicator species to determine the condition of the stygofauna community.

Supply descriptive material to WAMinals database as appropriate.



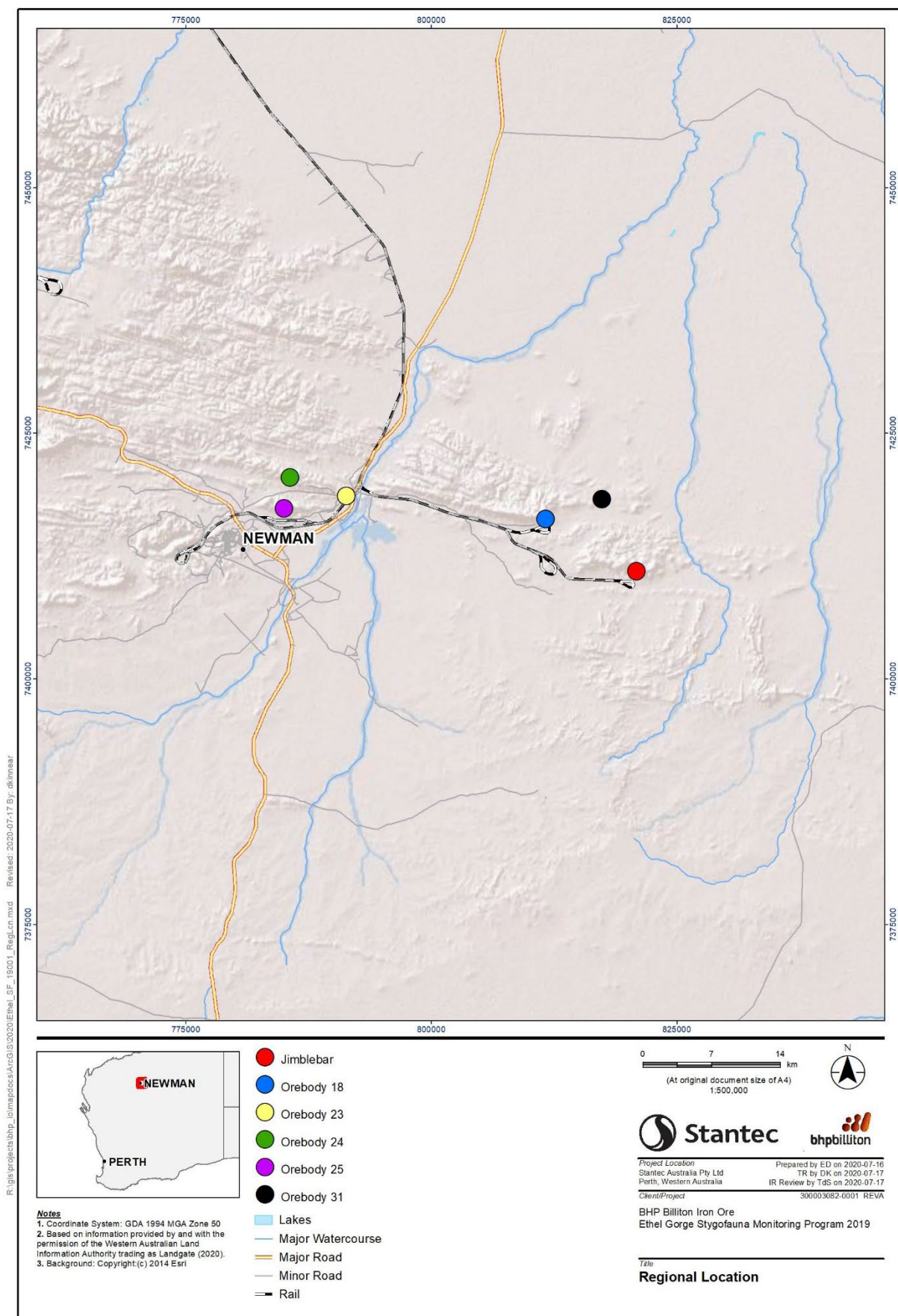


Figure 1-1: Regional location of the BHPIO WAIO deposits relevant to the Program.

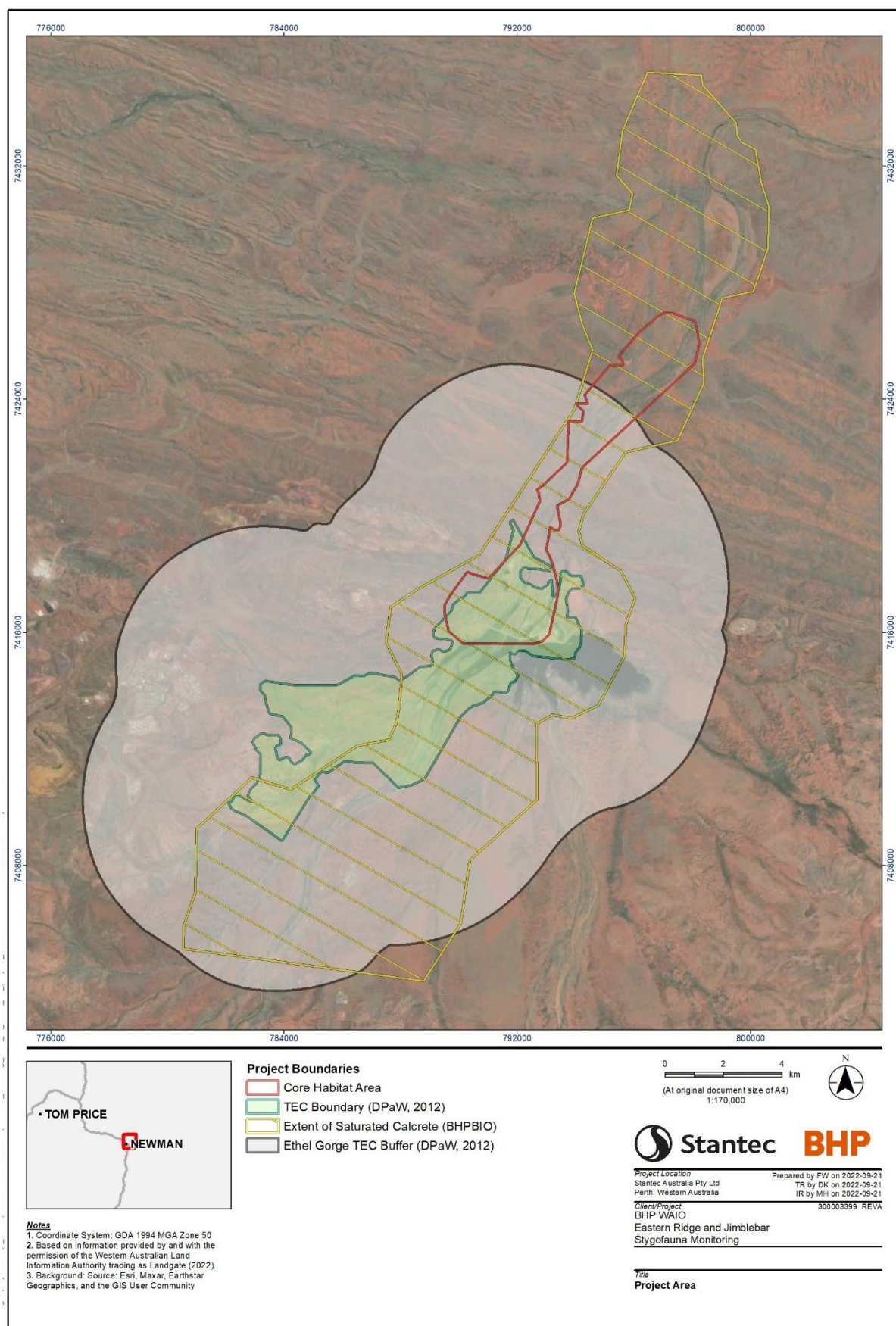


Figure 1-2: Boundaries for the TEC, TEC buffer and extent of saturated calcrete in the Ethel Gorge area.

1.3 Hydrogeology

The key features of the groundwater system at Ethel Gorge are as follows (RPS, 2013):

- A highly permeable alluvial aquifer comprising an upper unit of sandy-alluvium and calcrete and a lower unit of gravelly-alluvium. The two units are separated by an extensive low permeability clay sequence.
- Hydraulic behaviour of the Ethel Gorge groundwater system is dominated by Ophthalmia Dam – a managed aquifer recharge structure that has been constructed on the Fortescue River flood plain. The dam serves to substantially increase groundwater recharge and hydraulic loading to the alluvial aquifer.
- The upper alluvial aquifer is unconfined and receives recharge from direct infiltration from creek flow events. In addition to seasonal recharge along the creek channels, the upper aquifer also receives most of the water seeping from Ophthalmia Dam and this supports long-term trends in the volume of water stored in the aquifer and water levels.
- The lower aquifer is confined by the overlying clay and is predominantly subject to hydraulic loading from Ophthalmia Dam.

Groundwater levels range between 0 and 10 mbgl across the area, with recharge predominantly as seepage from Ophthalmia Dam, and as direct infiltrations from streamflow events (along the Fortescue channel) and several creeks. Recharge occurs mainly to the shallow alluvial aquifer, with some leakage into the underlying deep alluvial aquifer.

The Ethel Gorge stygofauna TEC occurs in the shallow alluvial aquifer from an area on the Fortescue River floodplain approximately 2 km upstream of the gorge to approximately 4 km downstream of the gorge entrance. This coincides with a thick accumulation of calcrete (in excess of 20 to 40 m in thickness) occurring at less than 20 mbgl and often as outcrop.

Groundwater levels typically fluctuate in response to climate, with dewatering also causing water level reductions across the area. However, these changes are mostly associated with the deep alluvial aquifer and represent a depressurisation response. In the shallow alluvial aquifer, water levels have generally declined by less than 10 m, and the calcrete of the Ethel Gorge TEC has remained substantially saturated (RPS, 2013).

1.4 Ethel Gorge Stygofauna Community

The Ethel Gorge TEC is currently categorised as Endangered; an ecological community that has been adequately surveyed and/or has a limited distribution, with few isolated occurrences that are very vulnerable to known threatening processes (DBCA, 2018). Monitoring of the TEC and surrounds has been undertaken for over 15 years (**Table 1-1**), with approximately 80 stygal species recorded from the Ethel Gorge aquifer and surrounds.

During this time, core habitat has also been defined (**Figure 2-1**), with approximately 50 “core species” of stygofauna documented. These core species were established in 2013, as part of mapping and characterisation of the Ethel Gorge TEC (Bennelongia, 2013). The assemblage typically contains copepods and ostracods, with oligochaetes, amphipods and bathynellids also prominent (Bennelongia, 2013). While copepods and ostracods have been numerically abundant, amphipods and bathynellids have been the most diverse component of the assemblage (Stantec, 2017).

As part of monitoring requirements for the Ethel Gorge TEC, monitoring zones were established, based on hydrological and hydrogeological conditions, to facilitate management of sensitive receptors. Monitoring zone 1 predominantly corresponds to the TEC and the assessment of groundwater levels and groundwater quality (Douglas and Pickard, 2014). Thresholds (trigger values) have been established for groundwater parameters to assist in monitoring and management of these criteria, along with sampling of stygofauna, to align with the various regulatory conditions (Douglas and Pickard, 2014).

Table 1-1: Historic Stygofauna surveys in the wider Ethel Gorge area, including the current Program.

Year	Survey Timing	Sampler/Author	Reference	Data Available?
2003	Dry Season	Not Available	Not Available	Yes
2005	Not Available	Biota Environmental Sciences	Not Available	No
2006	Not Available	Biota Environmental Sciences	Not Available	No
2007	Dry Season	Biota Environmental Sciences	Not Available	Yes
2008	Dry Season	Ecowise Environmental	Not Available	Yes
2009	Wet and Dry Season	Ecowise Environmental, Subterranean Ecology	Not Available	Yes
2010	Wet and Dry Season	Subterranean Ecology	Not Available	Yes
2011	Wet Season	Subterranean Ecology	Not Available	Yes
2012	Wet Season	Subterranean Ecology	Subterranean Ecology (2012)	Yes
2013	Dry Season	Subterranean Ecology	Subterranean Ecology (2014)	Yes
2014	Wet and Dry Season	Subterranean Ecology, Stantec (MWH)	Subterranean Ecology (2014), MWH (2015)	Yes
2015	Wet Season	Stantec (MWH)	MWH (2015)	Yes
2016	Wet Season	Stantec (MWH)	MWH (2016)	Yes
2017	Wet Season	Stantec	Stantec (2017)	Yes
2019	Dry Season	Stantec	Stantec (2020)	Yes
2020	Dry and Wet Season	Stantec	Stantec (2020)	Yes
2021	Dry and Wet Season	Stantec	Stantec (2021)	Yes
2022	Dry and Wet Season	Stantec	This report	Yes

1.5 Climate

The climate of the Pilbara bioregion is classified as semi-arid with very hot summers and mild winters. Rainfall occurs during the wet season (December to April) and is typically in response to ex-tropical cyclones or isolated storm activity. However, evaporation rates are high, and temperature often exceed 38°C in summer. Rainfall recorded at the Bureau of Meteorology (BoM) weather station Newman Aero (station number 007176) between July 2021 and June 2022 totaled 226.8 mm (**Figure 1-2**) (Bureau of Meteorology, 2022). This was substantially lower than the long-term annual average for the area (317.5 mm), reflecting below average rainfall in nine of the 12 months during that period. In contrast to that general trend, the total of 59 mm for May 2022, was nearly triple the long-term monthly average (19 mm) for May (Bureau of Meteorology, 2022). It should be noted that almost half of the May 2022 total fell on the last day of the month, after the wet season survey for the current Program was complete.

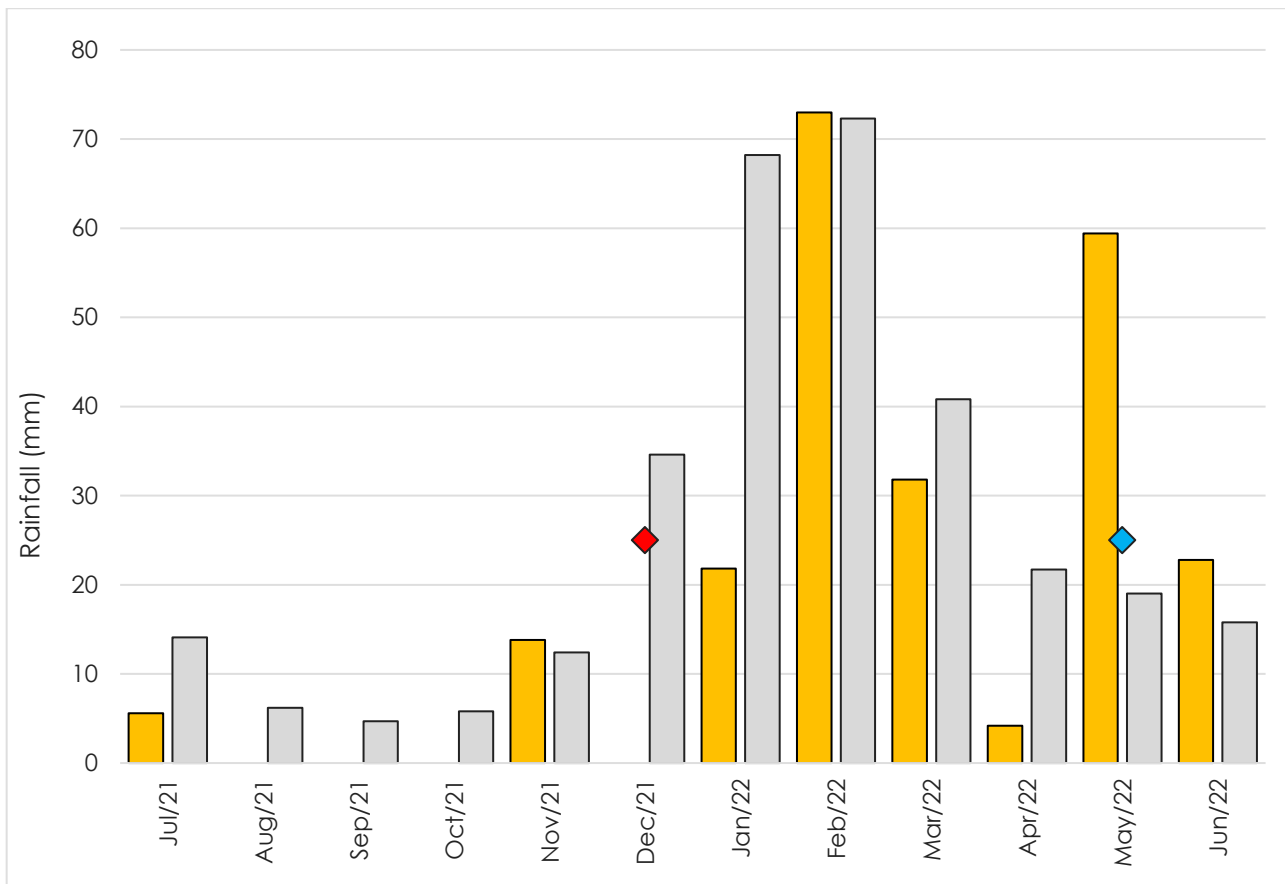


Figure 1-3: Monthly rainfall at Newman Aero (■), compared to the long-term average monthly (■) rainfall. Dry (◆) and wet (◆) season surveys of the Program indicated. Source: (Bureau of Meteorology, 2022) .

2 Methods

2.1 Survey Design

The survey design for the Program was in accordance with the MS conditions and the EPWRMP, to manage the Ethel Gorge Aquifer Stygobiont TEC, and was also generally consistent with previous monitoring. Five of the six monitoring zones (**Table 2-1**) were incorporated into the Program, across the dry and wet season surveys. Monitoring was conducted to assess standing water levels (SWLs) and groundwater quality as well stygofauna sampling to assess diversity and abundance.

A total of 50 samples across 25 bores were collected during the Program; 25 bores were sampled in December 2021, representing the dry season survey, and the same 25 bores were sampled again in May 2022, during the wet season survey (**Table 2-1, Appendix A**). Detailed methods for the groundwater and stygofauna assessment are provided in the subsequent sections. The cumulative survey locations in the area are shown in **Figure 2-2** and represents the consolidated effort from the surveys detailed in **Table 1-1**.

A Fauna taking (biological assessment) licence (Regulation 27, Biodiversity Conservation Regulations 2018), was obtained from the Department of Biodiversity, Conservation and Attractions (DBCA) prior to the commencement of the surveys (Licence number BA27000112). The 2021 dry and 2022 wet season surveys were led by Thomas de Silva (**Table 2-2**).

Table 2-1: Monitoring zone descriptions for the Program.

Monitoring Zone	Description
1. Ethel Gorge habitat stygofauna TEC	Core habitat area of TEC comprised of main calcrete body within confluence zone of Fortescue River with both Homestead Creek and Shovelanna Creek.
1 B. Early Warning	Downstream of Ophthalmia Dam between MZ4 and MZ1.
2. Shovelanna Creek*	Aquifer system associated with creek prior to entering confluence zone with Fortescue River.
3. Homestead Creek	Aquifer system associated with creek prior to entering confluence zone with Fortescue River.
4. Ophthalmia Dam	Aquifer system associated with Ophthalmia Dam and Fortescue River and Warrawanda Creek catchments south of dam.
5. Fortescue River	Aquifer system associated with Fortescue River North of Ethel Gorge stygofauna TEC within MZ1.
6. Whaleback Creek	Aquifer system associated with Whaleback Creek prior to entering confluence zone with Fortescue River (MZ1B) and MZ4.

Note: Monitoring Zones 1, 2, 3 and 4 established by Douglas and Pickard (2014); Monitoring Zones 1B, 5 and 6 were established by MWH (2015). * No bores were accessible from Monitoring Zones 2 during the current Program.

Table 2-2: Stantec personnel involved in the surveys for the Program.

Name	Qualifications and Experience	Survey
Thomas de Silva (Senior Scientist)	BSc Marine Biology and Environ. Biology (10 yrs exp.)	2021 Dry season / 2022 Wet season
Joey Laugharne (Intermediate Scientist)	BSc Marine Science and Zoology (3 yrs exp.)	2021 Dry season / 2022 Wet season

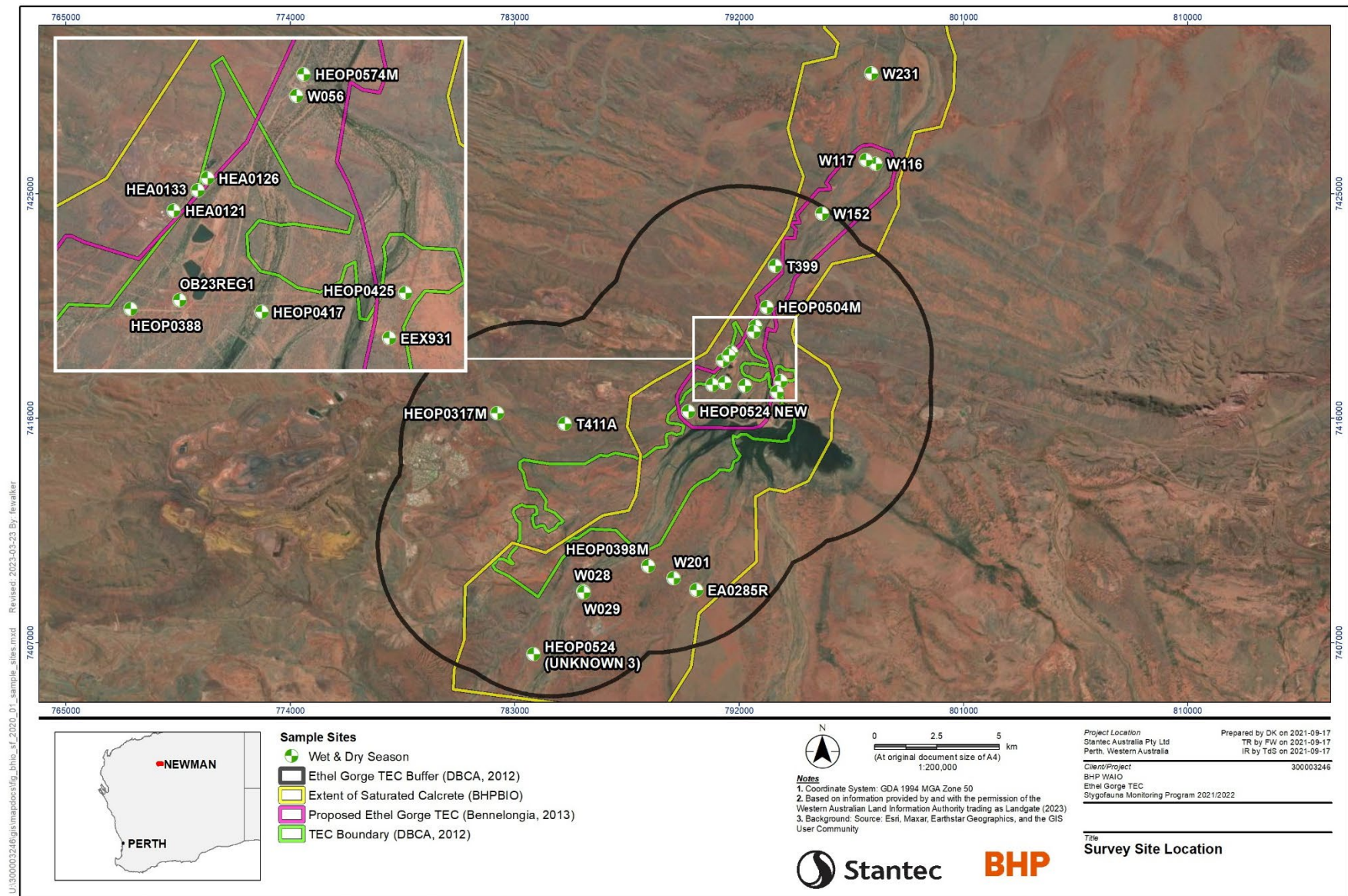


Figure 2-1: Bore locations at which stygofauna were sampled for the Program in the 2021 wet season survey and 2022 dry season survey.



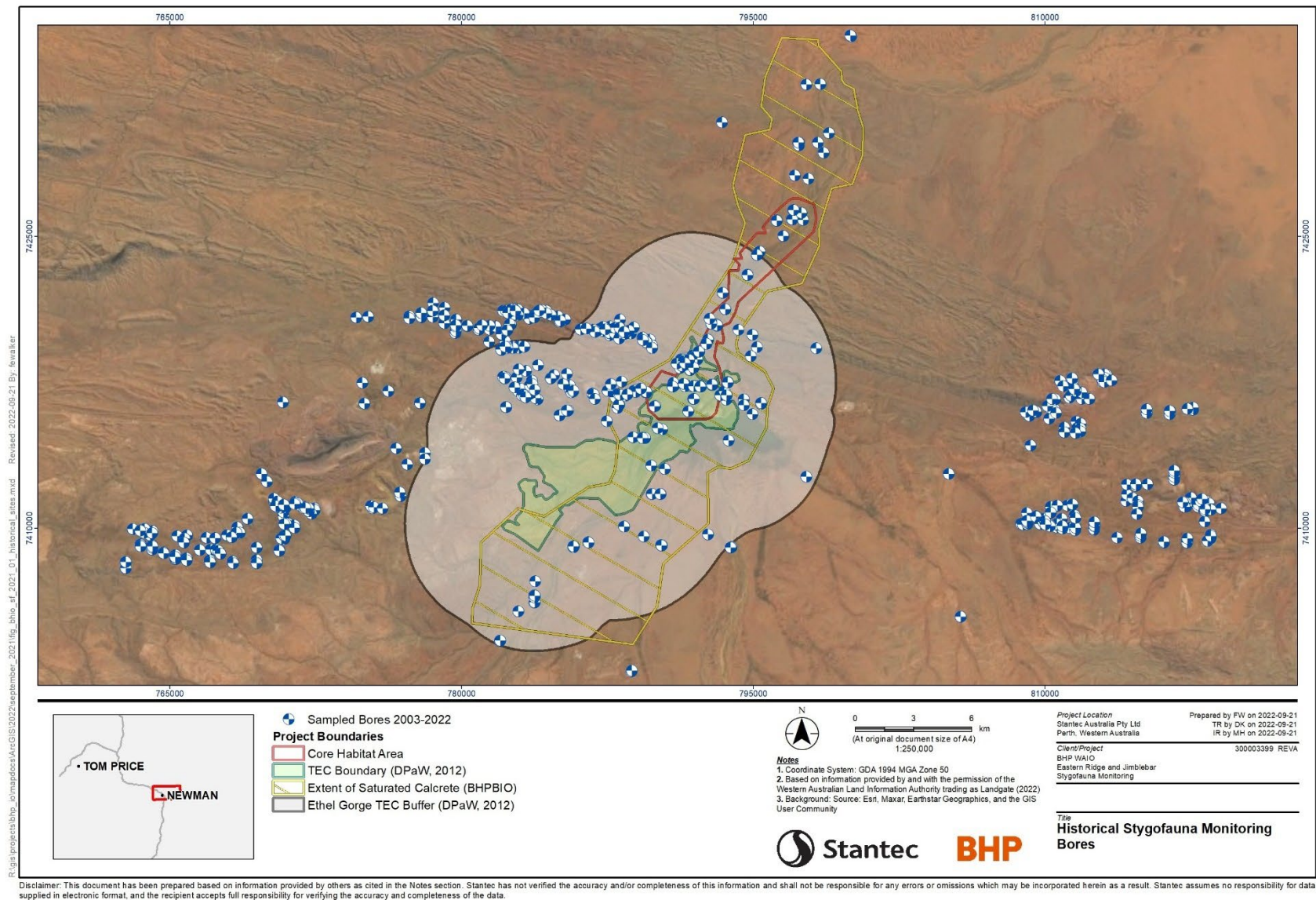


Figure 2-2: Bore locations at which stygofauna were sampled for in the broader area from 2003 to 2021 during previous and current surveys.

2.2 Groundwater Assessment

2.2.1 Groundwater Properties

During the 2021 dry season and 2022 wet season surveys, the SWLs were measured at each bore using a Solinst 101 water level meter. The end of hole (EoH) was estimated using the number of rotations of the sampling winch reel, while conducting stygofauna sampling.

Basic groundwater physicochemical parameters (pH, water temperature, dissolved oxygen; DO, electrical conductivity; EC, total dissolved solids; TDS and reduction-oxidation potential; Redox) were measured and recorded *in situ*. Groundwater was collected using a bailer from the upper surface of the bore column, with water quality measurements recorded from a YSI water quality meter.

Additional groundwater samples collected using the bailer were placed into appropriate sterilised bottles provided by the NATA-accredited Australian Laboratory Services (ALS), containing preservative where required. Bottles were filled to the top with the sample and sealed, excluding any air from the water. Following collection, the samples were couriered to ALS (located in the Perth metropolitan suburb of Malaga).

The analytical suite for groundwater comprised pH, TDS, EC, alkalinity, major ions (calcium, chloride, potassium, magnesium, sodium, and sulphate), nutrients (nitrate+nitrite, nitrogen, and phosphorus) and metals (aluminium, arsenic, barium, boron, cadmium, chromium, copper, iron, lead, manganese, mercury, molybdenum, nickel, selenium, and zinc). Holding times were met for all parameters except for analytical pH in both seasons, and TDS at some sites across the program and results for those parameters should be considered indicative.

2.2.2 Groundwater Trigger Values

Low-risk early warning trigger values have previously been derived for groundwater quality for the Ethel Gorge stygofauna TEC, aligning with the EPWRMP, and referred to as groundwater trigger values (GTVs). The GTVs for each monitoring zone, based on the EPWRMP are presented in **Table 2-3** with a focus on changes in groundwater levels and/or salinity (EC/TDS) variances (Douglas and Pickard, 2014).

Project specific GTVs have also been developed for groundwater quality by Stantec, following methodology outlined in ANZECC (2000), where an appropriate number of records exist ($n > 30$). Low Risk trigger values comprise the 80th percentile (and 20th percentile for pH only) of the amalgamated time series data for each parameter. Separate GTVs are calculated for Monitoring Zone 1 only (Ethel Gorge TEC) and for all Monitoring Zones together with the latter to provide regional context (**Table 2-4**). The GTVs comprise Pre-treatment of the data involved the removal of outliers for each parameter; values ± 4 standard deviations from the mean. Separate GTVs were established for the dry and wet seasons. It should be noted that currently, there is not a full suite of GTVs for metals, due to the limited number of records above the current limit of reporting of the testing protocols.

Exceedances of the low-risk early warning GTVs for a given parameter are an early warning system only and may indicate that further investigation is required. Only once the environmental and operational context has been considered should potential implementation of management options be investigated. Exceedances of GTVs should also be considered in the context of historic spatial and temporal trends. The GTVs are not inherently considered to be values that are detrimental or causes adverse effects to the Ethel Gorge Aquifer Stygobiont TEC but are derived from historical values for each parameter.

Table 2-3: Groundwater trigger values (GTVs) for standing water level (SWL) and total dissolved solids (TDS) in each of the monitoring zones for the Program, developed as part of the EPWRMP (Douglas and Pickard, 2014).

Monitoring Zone	Assessment Component	Groundwater Trigger Value (GTV)
1. Ethel Gorge habitat stygofauna TEC	SWL	Lower SWL +/- >5 m or at rate >4 m/year
		Upper SWL >2 mbgl
	Historic variance in groundwater salinity (TDS/EC)	TDS >2,500 mg/L
		EC >4,545 µS/cm
1B. Early Warning	Upper SWL	>2 mbgl
	Groundwater quality (TDS)	>20 % variance from interpreted seasonal baseline
2. Shovelanna Creek	Groundwater quality (TDS)	>20% variance from interpreted seasonal average
3. Homestead Creek	SWL	+/->6 m or at rate of change >4 m/year
	Groundwater quality (TDS)	>20 % variance from interpreted seasonal baseline
4. Ophthalmia Dam	SWL	Not defined
	Groundwater quality (TDS)	>20 % variance from interpreted seasonal baseline
5. Fortescue River	SWL	Not defined
	Groundwater quality (TDS)	Not defined
6. Whaleback Creek	SWL	Not defined
	Groundwater quality (TDS)	Not defined

Table 2-4: Groundwater Trigger Values (GTVs) derived for water quality for the Program. Note, only those GTVs marked with * were developed as part of the EPWRMP (Douglas and Pickard, 2014). All others have been developed subsequent to that report.

Parameter		Groundwater Trigger Values (GTVs)		
		20 th percentile	80 th percentile	20% Variance*
Basic	pH	✓	✓	-
	TDS	-	✓	✓*
	EC	-	✓	✓*
Major Ions	Sodium	-	✓	-
	Magnesium	-	✓	-
	Potassium	-	✓	-
	Calcium	-	✓	-
	Chloride	-	✓	-
	Sulphate	-	✓	-
	Total Alkalinity	-	✓	-
	Total Cations	-	✓	-
	Total Anions	-	✓	-
	Ionic Balance	-	✓	-
Nutrients	Total Nitrogen	-	✓	-
	Nitrate + Nitrite	-	✓	-
	Total Phosphorus	-	✓	-

2.3 Stygofauna Assessment

2.3.1 Haul Net Sampling

Stygofauna were sampled using haul nets during both the 2021 dry season and 2022 wet season surveys for the Program. This method is widely considered the most efficient method to retrieve stygofauna from bores (Allford et al., 2008). Sampling was consistent with the procedures outlined in the Environmental Protection Authority (EPA) Technical Guidance Sampling Methods for Subterranean Fauna Survey (EPA, 2016). The sampling method was as follows:

- Samples were collected using two weighted haul nets with mesh sizes of 150 µm and 50 µm, with each net fitted with a 70 ml plastic collection vial;
- The 150 µm net was lowered first, to the base of the bore;
- Once at the base of the bore, the net was gently raised up and down to agitate the sediments;
- The net was then raised slowly, to minimise the 'bow wave' effect that may result in the loss of specimens, filtering the stygofauna from the water column on retrieval;
- Once retrieved, the collection vial and net were rinsed into a collection pail;
- This process was repeated three times alternating with three hauls using the 50 µm mesh net;
- Following the final haul, the contents were filtered through a wide aperture 50 µm mesh net, rinsed with 100% undenatured ethanol and transferred to a 250 mL polypropylene vial for storage in 100% ethanol;
- To prevent cross-contamination, all sampling equipment was washed thoroughly with Decon 90 (2 to 5% concentration) and rinsed with potable water after sampling was completed at each bore;
- Samples were placed into eskies with ice bricks in the field, prior to being transferred into a refrigerated environment on-site at the end of each survey day; and
- Samples were couriered back to the Stantec laboratory in Perth, where they were stored in 100% ethanol, at approximately -20°C.

2.3.2 Sorting and Identification of Specimens

Preserved stygofauna samples were sorted manually under Leica MZ6, MZ7.5 and M80 stereomicroscopes. Sorting was conducted by suitably qualified scientists at Stantec. Sorted specimens were preserved in 100% ethanol and were refrigerated at approximately -20°C to ensure viability for DNA analysis, should it be required.

Identification was carried out to species or morphospecies level for most stygofauna taxa, using published literature, unpublished keys and taxon descriptions. Identification was undertaken by Dr Erin Thomas and Dr Mathew Hourston of Stantec. Copepods and ostracods were identified by specialist taxonomists Jane McRae and Dr Stuart Halse, respectively. DNA analysis was also undertaken on a number of specimens for which confirmation of identification was required. Genetic characterisation was undertaken by Dr Remko Leijds of the South Australian Museum (SAM). Haplotype characterisation of the sequenced specimens was also undertaken to determine the intraspecific diversity of the species.

2.3.3 WAMinals Descriptions

Subterranean Ecology 2013 indicated that a number of taxon descriptions were submitted for WAMinals. In addition, nine morphospecies were identified as high priority for WAMinals descriptions. Stantec is in contact with the Western Australian Museum to clarify the current status of the WAMinals descriptions.

2.3.4 Species Richness and Abundance Analysis

Interrogation of stygofauna species richness and abundance was undertaken for the Program and available historic data. Due to differences in survey effort, including sample locations and seasonality, mean species richness and abundance was calculated per bore to standardise data for comparison.

The EstimateS software package version 9.1.0 (Colwell, 2013) was also used to investigate species richness and survey effort for the core stygofauna species, based on monitoring data from November 2009 to May 2022. The analysis used species accumulation rarefaction and extrapolation curves, and species richness estimators using incidence and abundance data. The species richness analyses provide a statistical estimation of the proportion of the stygofauna assemblage that had been detected to date as a function of the total numbers of species estimated to occur in the area. A range in the number of species predicted to form the core assemblage was provided using seven estimators (ACE, Bootstrap, Chao1, Chao2, ICE, Jack 1 and Jack 2), which is statistically more robust than using a single estimator (Hortal et al., 2006). Two data sets were used for the analyses; the first included taxa that occur in the wider Newman area, (including the Ethel Gorge TEC) for all monitoring zones and the second data set encompassed core species for MZ 1 only. The taxa included in the analysis are listed in **Appendix E**.

2.3.5 Limitations of Assessment

2.3.5.1 Survey

There were no limitations for the surveys during the 2021/2022 Program.

2.3.5.2 Groundwater Quality

While the collation of a statistically robust baseline dataset and subsequent development of GTVs for metals forms an objective of the Program, there is currently sufficient data for only barium and boron. Development of GTVs for other metals may require increased sensitivity of detection for analysis, to provide enhanced data collection (a lower Limit of Reporting analysis).

2.3.5.3 Specimen Identification, Assessment and Taxonomic Resolution.

Stygofauna are inherently difficult to assess, owing to their inhabitation of cryptic, concealed habitats. Although such fauna are becoming increasingly well understood, there remains a large degree of uncertainty surrounding the taxonomy and ecological preferences of many taxa, with taxonomic frameworks poorly developed or even absent for many groups. For this Program, specimens were identified to the lowest possible taxonomic level. However, specimens may not always be identified to the level of species or morphospecies due to:

- loss or damage of important taxonomic features during collection of specimens;
- lack of adult specimens;
- lack of specimens of the correct sex for identification;
- taxonomy, where the current taxonomic resolution for a particular group is insufficiently advanced, and/or relevant taxonomic keys and descriptions are lacking; or
- contamination or failure of DNA sequencing during genetic analysis.

Every effort has been made to assess the taxonomy and distribution of the stygofauna collected using historical client data, in-house data collections, publications, publicly available reports, and information provided by specialist taxonomists.

3 Results and Discussion

3.1 Groundwater Properties

3.1.1 Standing Water Levels

The standing water levels (SWL) recorded within each monitoring zone during the 2021 dry season and 2022 wet season surveys were assessed according to the established GTVs. The results have been summarised below.

- On average, the 2021 dry season SWL in bores throughout the area were 0.5 m greater than the 2020 previous dry season survey. In contrast, SWLs in the 2022 wet season survey decreased on average by 0.65m from the 2021 wet season survey.

The decrease in the 2022 wet season SWLs contrasts with the greater than average rainfall in the same month as the survey (**Figure 1-2**), however the majority of that rainfall was recorded just after the wet season survey, and the lower SWLs are likely to be a reflection of the lower than average rainfall in several of the preceding months.

- There were no exceedances of the SWL GTVs (i.e. +/- >5 m variation) during the Program.
- **Monitoring zone 1 (MZ 1):**
 - The mean SWL recorded in the 2021 dry season survey (497.96 AHD) was 1.4 m higher than the dry season long term mean (496.52 AHD) (**Figure 3-1**). Most SWLs increased by between 0.42m and 2.6m, while only one bore (OB23REG1) decreased, by 2.21 m. This equates to a 0.71 m SWL increase in MZ1 for dry season values (**Appendix B**).
 - In contrast to the 2021 dry season survey, the mean SWL recorded in the 2022 wet season survey (497.91 AHD) 0.23m lower than the wet season long term mean (498.13 AHD). Most wet season SWLs in MZ 1 decreased, by between 0.26 m and 1.78 m from the 2021 wet season survey. Only three MZ1 bores increased, and by less than 0.28m. This equates to a 0.76 m SWL decrease in MZ1 for wet season values (**Appendix B**).
 - The average SWL in MZ 1 was almost the same between dry and wet seasons. There was only a 0.05 m decrease from dry to wet seasons. (**Figure 3-1, Appendix B**).
- **Monitoring Zone 1B (MZ1B)** comprised only a single site during the current Program (EEX931). Small increases in SWL were measured from the preceding year in both dry season (0.31m) and wet season (0.19m) surveys. Both seasons' surveys SWL means were higher than their respective long term means by >2 m (**Figure 3-1, Appendix B**).
- **Monitoring Zone 3 (MZ3):**
 - The mean SWL recorded in the 2021 dry season survey (500.27 AHD) was 2.53 m higher than the dry season long term mean (497.74 AHD) (**Figure 3-1**). Most dry season survey SWLs in MZ3 increased on the 2020 dry season values, by between 0.38m and 0.51m, while only one bore (T411A) decreased, by 0.37m (**Appendix B**).
 - In contrast to the 2021 dry season, the mean SWL recorded in the 2022 wet season survey (499.92 AHD) was 1.5m lower than the wet season long term mean (504.97 AHD). All 2022 wet season SWLs in MZ3 decreased from the previous year, by between 0.55m and 1.68m (**Appendix B**).
- **Monitoring Zone 4 (MZ4):**
 - The mean SWL recorded in the 2021 dry season survey (515.92 AHD) was 0.8m lower than the dry season long term mean (516.79 AHD) (**Figure 3-1**). Three of the five bores' SWLs in MZ4 increased on the previous year, by between 0.29m and 0.42m, while the remaining two bores decreased, by < 0.1m. (**Appendix B**).
 - In contrast to the dry season, the mean SWL recorded in the 2022 wet season survey (516.13 AHD) was 1.5m lower than the wet season long term mean (517.63 AHD). All 2022 wet season survey SWLs in MZ4 decreased from the previous year, by between 0.13m and 1.05m (**Appendix B**).
- **Monitoring Zone 5 (MZ5)** comprised only a single bore during the Program (W231). Small increases in SWL were measured from the preceding year in both dry (0.78m) and wet (0.27m) season surveys.

Both seasons' annual SWL means were higher than their respective long term means; the dry season by 1.5m and the wet season by 1.34m (**Figure 3-1, Appendix B**)

- **Monitoring Zone 6 (MZ6)** comprised only a single bore during the Program (HEOP0317M). The 2021 dry season SWL for this site increased slightly (0.46m) on the previous year's dry season value, while the 2022 wet season survey showed a slight decrease on the previous year (0.22m). Both dry and wet seasons SWL values were lower than their respective long term averages, the dry season by 0.57m and the wet season by 0.81m.

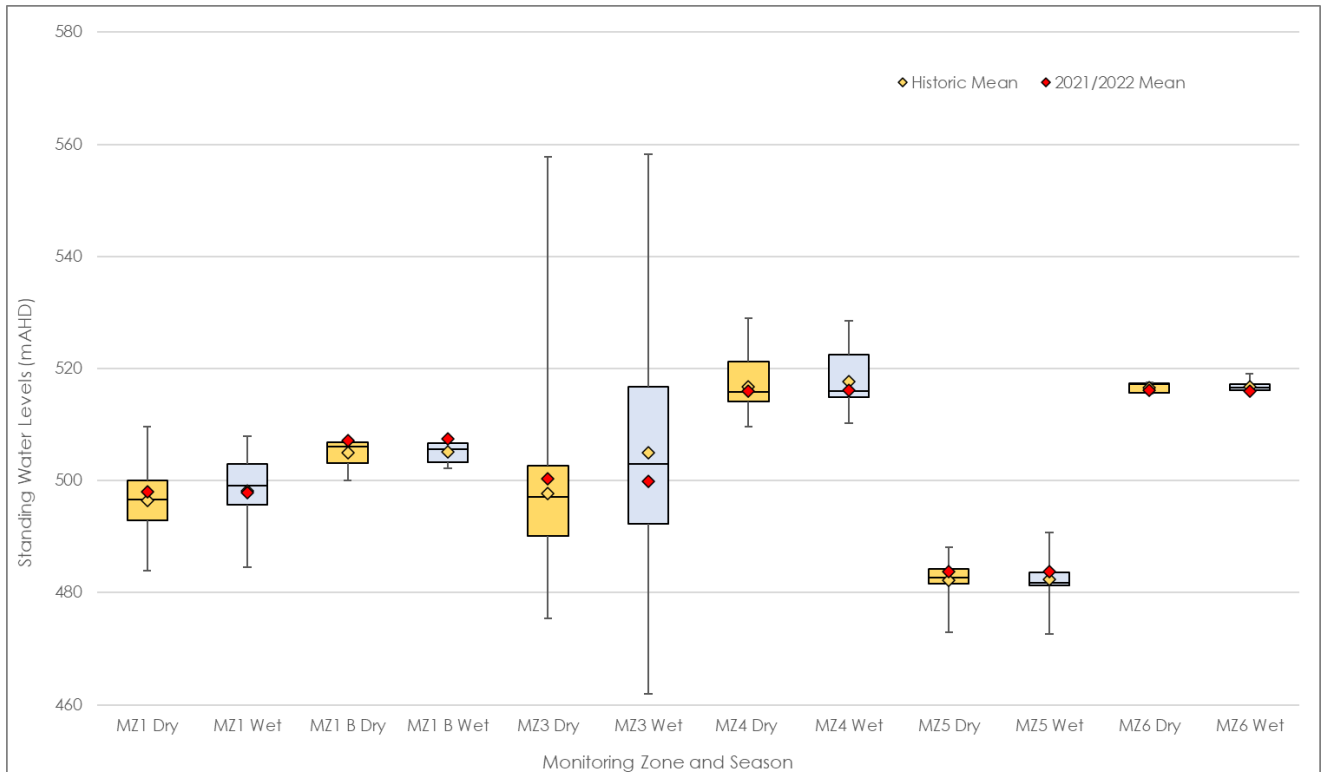


Figure 3-1: Mean SWL for each monitoring zone for the 2021 dry season survey and 2022 wet season survey, compared to summary statistics for the full historical SWL data set (2009-2022).

3.1.2 Groundwater Quality

Ground water pH ranged from 5.36 to 9.05 during the 2021 dry season survey, and from 4.86 to 8.98 during the 2022 wet season survey, corresponding to acidic to alkaline (Foged, 1978). Variation noted was predominantly spatial rather than temporal. W201 in MZ 4, consistently showed the lowest pH in both seasons' surveys, reflecting also the 2020/21 results. The highest pH values for both seasons were documented at EA0285R, also within MZ4 with this site showing similar values in the previous year's results (**Table 3-1, Table 3-2**).

pH values were predominantly within the historic ranges for the MZs from which they were recorded (**Table 3-1, Table 3-2, Figure 3-2**). The only exception was bore HEOP0317M, which had a pH of 8.23 during the 2022 wet season survey; a value equivalent to the previous maximum for MZ6 which was recorded in 2019 dry season. Some exceedances of the 80% and 20% GTVs were reported at individual bores, however, similar values have been noted for these bores previously (**Table 3-1, Table 3-2**). Despite the minor GTV exceedances recorded during the Program, pH was within the known tolerance limits of stygofauna, with groundwaters ranging from pH 3.5 to 10.3 shown to support stygofauna (Glanville et al., 2016).

Groundwater salinity, measured as Electrical Conductivity (EC), ranged from 878 $\mu\text{S}/\text{cm}$ to 5,510 $\mu\text{S}/\text{cm}$ during the 2021 dry season, and from 356 $\mu\text{S}/\text{cm}$ to 4,080 $\mu\text{S}/\text{cm}$ during the 2022 wet season survey. Minima in both seasons were recorded from HEOP0524 in MZ3, while the seasonal maxima were associated with EA0285R in MZ4 (**Table 3-1, Table 3-2**). The mean salinities for the MZs were within the historical range and below the relevant 80% GTVs (**Table 3-1; Table 3-2**). Values at some individual sites exceeded the 80% GTVs, consistent with previous monitoring periods (Stantec, 2022). Note that only one bore, HEOP0425, exceeded the established EPWRMP GTV of 4,545 $\mu\text{S}/\text{cm}$ (**Table 2-3**), with a value of 5,510 $\mu\text{S}/\text{cm}$ in the 2021 dry season survey. The Ethel Gorge stygofauna TEC is typically associated with salinities below 6,600 $\mu\text{S}/\text{cm}$ (MWH, 2016a) however, historical data indicates that some of the copepod and oligochaete species present within the Ethel Gorge TEC can be found in ECs of up to 15,000 $\mu\text{S}/\text{cm}$ at other locations (MWH, 2016b).

The established GTV developed during the EPWRMP for Total Dissolved Solids (TDS) is 2,500 mg/L (**Table 2-3**). The majority of bores were below this threshold during the 2021 dry and 2022 wet season surveys (**Table 3-1, Table 3-2**). Several bores were above the relevant seasonal 80% GTVs, however these exceedances were minor and at bores which have typically had higher TDS concentrations in historic surveys

Major ion concentrations in groundwater systems, such as the Ethel Gorge Stygobiont TEC, are influenced by the inherent hydrogeological features of the area including groundwater residence and flow rates (Bakalowicz, 1994). This is long term condition can be overlaid with seasonally variability from climatic sources such as rainfall and subsequent aquifer recharge.

Major ion concentrations (Na, Mg, K, Ca, Cl and S) showed some small deviations outside the 20th and 80th percentiles at individual sites (**Table 3-1, Table 3-2**), but mean values were all within the relevant GTVs ranges (**Table 3-3**). Mean values for Ionic Balance in the wet season were slightly above previous years' values. This was driven by small increases across most bores. The deviations in the values of ion concentrations responsible for the change in ionic balance values are likewise very small. While ion concentrations are typically low in wet season samples, rainfall prior to the wet season sampling may have resulted in further dilution. The measured changes in ion concentrations and Ionic Balance are not expected to have implications for the stygofauna organisms or assemblages.

During the Program, nutrient levels varied, with some bores exceeding the 80th percentile GTVs (**Table 3-1, Table 3-2**). Mean values of Total Nitrogen in both dry and wet season surveys were above the 80% GTV, mostly attributable to the elevated values at bores W28 and W29. Both are located outside the TEC area and have been associated with elevated nitrogen concentrations previously. A slight exceedance of the 80% GTV was noted for the mean Total Phosphorus concentration during the 2022 wet season (**Table 3-2**). This primarily reflected the naturally elevated concentration at HEAO126, consistent with previous records from the bore, and does not represent a change in conditions. The reason for elevated nutrient levels at those specific bores noted above is not clear and may be the result of natural or anthropogenic processes. As elevations are limited to a few individual bores, and nutrient enrichment is not typically a result of mining operations it is unlikely to be attributable to the BHPWAIO operations in the area. It is recognised that there is a relative paucity of information concerning the ecological effects of nutrient enrichment on stygal ecosystems (Castaño-Sánchez et al., 2020; Manenti et al., 2021). The few studies of relevance are mixed in their conclusions on the specifics of the fauna responses. In general, stygal ecosystems appear to respond in similar ways to their epigean counterparts with individual species, diversity and ecosystem functions showing both positive and negative responses in different circumstances.

The majority of metal concentrations in individual bores in both seasons' surveys were below detection limits (**Table 3-1, Table 3-2**). This is consistent with the previous monitoring round, suggesting that the groundwaters are generally characterised by naturally low metal concentrations. The only parameters in detectable concentrations at multiple sites were barium, boron, iron, manganese, molybdenum, and zinc.

The metals concentrations were measured to an appropriate resolution to benchmark against Australian freshwater GTVs (ANZECC & ARMCANZ, 2000) , which are the closest published benchmarks available. However, many of the metals' measurements are below the Limit of Reporting for the tests currently used. This has slowed the development of the project specific metals GTVs. The only metals for which there are sufficient measurements to construct preliminary project specific GTVs are barium and boron. This limitation has been identified in the appropriate section (**Section 2.3.5**).

Barium

- The current ANZECC & ARMCANZ (2000) 99% protection trigger value for barium in surface freshwater is 0.09mg/L.
- The preliminary project specific GTV for barium is set at 0.04 mg/L in MZ1 and 0.5 mg/L across all other monitoring zones.
- All measurements for barium were below 0.09mg/L except for site W201 (MZ4), which had concentrations of 0.553 mg/L and 0.489 mg/L in 2021 dry and 2022 wet season surveys, respectively. Review of data from previous surveys (2019 dry season to 2021 wet season) indicates that values in this range are typical at this bore.
- Six of the measurements were above the preliminary project specific barium GTVs, all of which were recorded in the dry season survey but none of which were in MZ1.
- Note that consistently higher concentrations of barium at site W201 have influenced the development of the barium GTV across the Project. The validity of its inclusion will need to be examined in greater detail in future surveys.

Boron

- The current published ANZECC & ARMCANZ (2000) trigger value for boron in surface freshwater is 0.1mg/L.
- Boron concentrations in six samples across the Project exceed the ANZECC & ARMCANZ (2000) trigger value.
- The preliminary Project specific GTV for boron, based on all MZs, is set at 0.76 for the dry season and 0.63 for the wet season.
- Four bores had concentrations in exceedance of the dry season project specific boron GTV, and three in the wet. As for barium, these bores show consistent values for boron throughout the available timeseries of data.

Other metals

- No Project specific GTVs have been developed for the other metals. The majority of metals concentrations were below the limit of reporting in most samples. Other than the barium and boron, only iron, manganese and zinc were present in detectable concentrations in more than one sample.
- When detectable, iron concentrations were higher than the ANZECC (2000) trigger values, however this is expected in the context of the local geology, which is rich in iron bearing minerals.
- Manganese was detectable, and below the ANZECC & ARMCANZ (2000) trigger values in all but four samples.
- Zinc was detectable, and below the ANZECC & ARMCANZ (2000) trigger values in all but one sample.
- Arsenic was detected at a single site (EEX931) in both the 2021 dry season (0.024 mg/L) and the 2022 wet season (0.022 mg/L) surveys, this corresponds to approximately 5x the ANZECC & ARMCANZ (2000) trigger value for freshwater (0.005mg/L.). While arsenic is known to be toxic to a wide range of organisms including stygal taxa (Castaño-Sánchez et al., 2020; Hose et al., 2016) this metal has been detected in samples at this location in previous surveys, it can be naturally occurring (Smith et al., 2003), and has only be recorded at one bore (EEX931 in MZ 1B). There is no perceived metal toxicity risk to the Ethel Gorge Aquifer Stygobiont TEC.

Table 3-1: Groundwater quality during the December 2021 (dry season) survey of the Program.

Water Quality Parameter		Monitoring Zone and Bores																								min	max	Groundwater Trigger Values (GTVs)								
		MZ 1												MZ 1 B	MZ 3						MZ 4				MZ 5			MZ 6	Dry Season MZ 1 Only				Dry Season All Zones			
		HEOP 0388	HEOP 0417	HEOP 0425	HEOP 0504	HEOP 0574M	Ob23 REG1	T399	W152	WP056	W116	W117	EEX 931	HEA 0121	HEA 0126	HEA 0133	HEOP0 524 (NEW)	T411A	HEOP 0398M	EA0285 R	HEOP0 524 (UNKN3)	W028	W029	W201	W231			HEOP 0317M	n	20t h	80th	20% Var.	n	20th	80th	20 % Var.
Basic	pH	7.87	8.13	7.91	8.43	7.93	7.98	7.78	7.89	7.92	7.87	8.05	8.68	7.87	7.9	7.77	7.95	7.94	8.18	9.05	7.96	8.21	8.18	5.36	7.9	7.89	5.36	9.1	81	7.2	8.0	-	154	7.26	8.13	-
	TDS	1,030	986	3,540	853	732	784	1,360	1,300	862	911	1,660	717	919	938	1,560	414	504	684	2,250	1,270	1,020	1,110	1,100	1,270	812	414	3,540	63	-	1,326	1,591	92	-	1,242	1,490
	EC (µS/cm)	1,640	1,580	5,510	1,360	1,190	1,230	2,180	2,030	1,310	1,460	2,640	1,090	1,500	1,520	2,530	710	878	1,060	4,060	1,930	1,660	1,800	1,340	1,840	1,300	710	5,510	81	-	3,672	4,406	177	-	2,661	3,193
	SS	51	164	<5	<5	<5	<5	266	7	<5	15	13	12	<5	<5	10	52	2,400	<5	<5	8	<5	12	36	14	22	7	2,400	-	-	-	-	-	-	-	-
Major Ions	Sodium	174	204	964	177	91	94	271	220	98	167	319	244	140	137	274	59	19	97	805	210	148	162	58	234	91	19	964	80	-	319	-	225	-	250	-
	Magnesium	80	56	120	53	70	72	89	98	76	52	113	4	76	75	106	31	74	48	28	97	90	98	28	54	82	4	120	80	-	104	-	226	-	86.8	-
	Potassium	6	8	25	6	6	6	10	9	7	6	8	6	8	8	10	5	4	6	22	5	4	4	2	10	6	2	25	80	-	10	-	226	-	12	-
	Calcium	77	60	92	12	69	69	74	89	75	77	87	4	81	79	105	38	65	58	4	80	78	89	117	23	81	4	117	80	-	89	-	226	-	81.8	-
	Chloride	256	276	1,020	428	188	182	421	380	236	252	560	102	233	242	548	143	32	130	1,020	442	314	313	463	580	154	32	1,020	80	-	563	-	226	-	430	-
	Sulphate	177	133	774	<1	82	113	177	181	87	152	280	59	126	124	266	25	8	76	134	222	168	180	<1	<1	108	8	774	80	-	290	-	226	-	230	-
	Bicarbonate	380	338	574	103	326	310	429	424	310	292	348	361	366	356	278	149	460	248	232	229	277	316	<1	41	415	41	574	-	-	-	-	-	-	-	
	Hydroxide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	0	-	-	-	-	-	-	-	
	Carbonate	<1	<1	<1	3	<1	<1	<1	<1	<1	<1	<1	34	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	3	81	-	-	-	-	-	-	-	
	Total Hardness	522	380	724	248	460	469	551	626	500	406	682	26	515	506	699	222	467	342	125	599	565	626	407	280	540	26	724	-	-	-	-	-	-	-	
	Total Alkalinity	380	338	574	106	326	310	429	424	310	292	348	395	366	356	278	149	460	248	312	229	277	316	<1	41	415	41	574	62	-	482	-	192	-	428	-
	Total Anions	18.5	17.3	56.4	14.2	13.5	13.7	24.1	23	14.7	16.1	28.6	12	16.5	16.5	26.6	7.53	10.3	10.2	37.8	21.7	17.9	18.9	13.1	17.2	14.9	7.5	56.4	42	-	30.2	-	104	-	24.2	-
	Total Cations	18.1	16.7	57	12.8	13.3	13.6	23.1	22.3	14.4	15.5	27.7	11.3	16.6	16.3	26.1	7.14	10.3	11.2	38.1	21.2	17.8	19.6	10.7	16	14.9	7.1	57.0	42	-	30.5	-	104	-	23.7	-
	Ionic Balance	0.96	1.84	0.6	5.1	0.77	0.25	2.27	1.44	0.77	1.79	1.52	3.01	0.25	0.74	0.78	2.65	0.01	4.73	0.38	1	0.14	1.98	9.86	3.48	0.06	0.01	9.9	49	-	2.5	-	104	-	2.66	-
Nutrients	Total Nitrogen	0.8	0.3	8.3	0.4	0.8	0.6	1.4	1.3	0.6	0.6	2.7	0.2	2.6	2.2	1.2	0.3	3.3	19.3	0.2	7.1	12.9	21.7	0.3	3.6	0.9	0.2	21.7	80	-	1.9	-	334	-	2.62	-
	TKN	0.4	0.3	0.8	0.4	0.2	0.2	1.1	0.4	0.2	0.4	0.7	0.2	0.9	0.6	1.2	0.3	0.8	1.6	0.2	1	1.2	5.3	0.3	3.6	0.3	0.2	5.3	-	-	-	-	-	-	-	-
	Ammonia	<0.01	0.01	0.01	0.29	<0.01	0.02	0.19	<0.01	<0.01	0.14	0.01	0.02	0.04	0.02	0.22	0.04	0.03	0.01	0.08	0.33	0.01	0.01	0.11	3.56	<0.01	0.01	3.6	-	-	-	-	-	-	-	
	Nitrite + Nitrate	0.36	0.02	7.48	<0.01	0.63	0.4	0.29	0.9	0.43	0.22	1.99	0.02	1.65	1.58	0.03	0.01	2.54	17.7	<0.01	6.06	11.7	16.4	<0.01	<0.01	0.63	0.01	17.7	49	-	4.1	-	140	-	7.52	-
	Total Phosphorus	0.03	0.06	0.03	0.02	<0.01	0.01	0.27	0.02	0.01	0.03	0.04	0.1	0.12	0.26	0.18	0.03	0.11	0.03	0.02	0.02	0.01	0.02	0.04	0.03	0.01	0.3	42	-	0.1	-	104	-	0.1	-	
Metals	Aluminium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.0	-	-	-	-	-	-	-	
	Arsenic	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.024	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00	0.0	-	-	-	-	-	-	-	
	Barium	0.023	0.044	0.026	0.014	0.027	0.023	0.033	0.039	0.028	0.075	0.034	0.022	0.054	0.047	0.045	0.059	0.025	0.058	0.006	0.029	0.047	0.054	0.553	0.043	0.016	0.01	0.6	36	-	0.04	-	68	-	0.5	-
	Boron	0.76	0.74	2.79	0.4	0.33	0.37	0.68	0.55	0.31	0.31	0.78	1.1	0.49	0.47	0.46	0.19	0.28	0.39	1.04	0.52	0.53	0.62	0.23	0.26	0.31	0.19	2.8	36	-	0.76	-	68	-	0.74	-
	Cadmium	<0.001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0	0.0	-	-	-	-	-	-	-	
	Chromium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001																											

Table 3-2: Groundwater quality during the May 2022 (wet season) survey of the Program.

Water Quality Parameter		Monitoring Zone and Bores																									min	max	Groundwater Trigger Values (GTVs)							
		MZ 1											MZ 1 B	MZ 3						MZ 4					MZ 5	MZ 6			Dry Season MZ 1 Only				Dry Season All Zones			
		HEOP 0388	HEOP 0417	HEOP 0425	HEOP 0504	HEOP 0574M	Ob23 REG1	T399	W152	WP056	W116	W117	EEX 931	HEA 0121	HEA 0126	HEA 0133	HEOP0 524 (NEW)	T411A	HEOP 0398M	EA028 5R	HEOP0 524 (UNKN 3)	W028	W029	W201	W231	HEOP 0317M			n=	20 th	80 th	20% Var.	n=	20 th	80 th	20 % Var.
Basic	pH	7.87	8.42	8.3	8.24	7.96	7.98	7.92	8.04	7.82	7.96	8.02	8.54	8.06	8.18	7.92	8.16	8.08	8.03	8.98	8.09	8.29	8.19	4.89	7.79	8.23	4.89	8.98	12 7	7. 1	8.0	-	27 9	7.11	8.1	-
	TDS	958	719	2,310	862	761	724	1,230	1,290	798	898	1,650	778	880	803	1,660	191	453	650	2,250	939	1,110	1,240	1,230	1,250	806	191	2,310	38	-	1,326	1,591	92	-	1,242	1,4 90
	EC (µS/cm)	1,610	1,290	3,880	1,460	1,290	1,200	2,180	2,090	1,340	1,470	2,680	1,190	1,510	1,470	2,710	356	825	926	4,080	1,370	1,700	1,820	1,420	1,870	1,320	356	4,080	12 6	-	3,254	3,905	28 8	-	2,561	3,0 73
	SS	6	10	6	<5	<5	<5	10	18	<5	146	24	<5	<5	<5	<5	18	96	<5	<5	<5	<5	<5	13	8	6	6	146	-	-	-	-	-	-	-	-
Major Ions	Sodium	166	211	704	176	95	99	278	229	100	169	319	266	137	133	294	50	22	78	761	146	141	161	61	234	92	22	761	12 6	-	350	-	26 5	-	278	-
	Magnesium	78	31	59	56	72	67	86	96	75	49	112	3	71	66	108	6	67	38	29	49	84	92	26	51	79	3	112	83	-	104	-	26 5	-	89	-
	Potassium	6	6	21	5	6	6	9	8	6	5	7	6	6	8	9	3	4	9	21	3	3	3	1	8	5	1	21	83	-	15	-	26 5	-	12	-
	Calcium	67	11	32	13	64	56	61	74	66	66	76	3	67	64	95	7	53	45	3	25	73	72	106	19	72	3	106	83	-	86	-	26 5	-	84.2	-
	Chloride	236	246	716	452	188	176	404	378	221	245	557	120	244	231	598	95	29	84	1,040	423	297	306	472	614	151	29	1,040	83	-	620	-	26 5	-	489	-
	Sulphate	187	138	494	<1	103	123	145	208	108	150	291	58	156	131	315	<1	10	64	165	<1	182	216	<1	<1	133	10	494	83	-	304	-	26 3	-	232	-
	Bicarbonat e	393	194	430	90	357	297	497	437	328	288	358	363	367	363	291	34	418	194	240	70	295	318	<1	44	415	34	497	-	-	-	-	-	-	-	
	Hydroxide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	0	-	-	-	-	-	-	-	
	Carbonate	<1	7	2	<1	<1	<1	<1	<1	<1	<1	<1	25	<1	<1	<1	<1	<1	<1	77	<1	<1	<1	<1	<1	<1	2	77	-	-	-	-	-	-	-	
	Total Hardness	488	155	323	263	456	416	506	580	474	366	651	20	460	432	682	42	408	269	127	264	528	559	372	257	505	20	682	-	-	-	-	-	-	-	
	Total Alkalinity	393	201	432	90	357	297	497	437	328	288	358	388	367	363	291	34	418	194	317	70	295	318	<1	44	415	34	497	73	-	437	-	23 4	-	418	-
	Total Anions	18.4	13.8	39.1	14.5	14.6	13.4	24.3	23.7	15	15.8	28.9	12.3	17.5	16.5	29.2	3.36	9.38	7.58	39.1	13.3	18.1	19.5	13.3	18.2	15.3	3.4	39.1	89	-	29.0	-	14 9	-	22.6	-
	Total Cations	17.1	12.4	37.6	13	13.4	12.8	22.4	21.8	14	14.8	27.1	12.1	15.3	14.6	26.6	3.09	9.22	9	36.2	11.7	16.8	18.2	11.9	15.5	14.2	3.1	37.6	89	-	28.1	-	14 9	-	21.6	-
	Ionic Balance	3.56	5.32	1.96	5.46	4.2	2.64	4.06	4.32	3.68	3.21	3.32	0.92	6.6	6.04	4.64	4.1	0.86	8.55	3.89	6.48	3.72	3.28	5.51	7.92	3.71	0.86	8.6	47	-	2.7	-	21 7	-	3.4	-
Nutrients	Total Nitrogen	0.4	0.3	2.7	0.5	0.9	0.8	0.5	0.3	0.9	0.6	2.2	0.6	2.3	1.2	1.3	0.6	2	32.1	0.1	1.6	11.4	14.5	0.4	4	1.2	0.1	32.1	85	-	1.9	-	23 4	-	2.99	-
	TKN	0.4	0.3	1.3	0.5	0.3	0.7	0.5	0.2	0.4	0.4	0.8	0.6	1.2	0.8	1.2	0.6	0.5	5.1	0.1	1.6	1.2	1.5	0.3	4	0.6	0.1	5.1	-	-	-	-	-	-	-	
	Ammonia	0.03	0.07	0.48	0.32	0.06	0.04	0.08	<0.01	0.03	0.04	0.04	0.02	0.03	0.03	0.32	0.1	0.02	2.7	0.03	0.78	0.01	0.01	0.1	3.68	0.04	0.01	3.7	-	-	-	-	-	-	-	
	Nitrite + Nitrate	0.03	0.01	1.37	<0.01	0.64	0.1	<0.01	0.12	0.49	0.23	1.43	<0.01	1.13	0.36	0.11	<0.01	1.48	27	0.03	0.01	10.2	13	0.1	<0.01	0.64	0.01	27.0	55	-	5.0	-	21 8	-	7.2	-
	Total Phosphorus	<0.01	0.01	0.1	<0.01	0.0100	0.02	0.02	0.02	<0.01	0.09	0.09	0.08	0.03	0.96	0.17	<0.01	<0.01	0.04	<0.01	<0.01	<0.02	<0.02	<0.01	0.02	<0.01	0.01	1.0	47	-	0.07	-	14 9	-	0.12	-
Metals	Aluminium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.0	-	-	-	-	-	-	-	
	Arsenic	<0.00 1	<0.00 1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00 1	<0.001	<0.001	<0.001	0.02	0.0	-	-	-	-	-	-	-	
	Barium	0.021	0.009	0.016	0.017	0.03	0.021	0.023	0.033	0.028	0.066	0.034	0.018	0.05	0.043	0.05	0.017	0.031	0.053	0.005	0.034	0.042	0.053	0.489	0.039	0.016	0.01	0.5	33	-	0.04	-	72	-	0.5	-
	Boron	0.56	0.48	1.8	0.3	0.3	0.38	0.58	0.46	0.26	0.26	0.64	1.08	0.39	0.35	0.36	<0.05	0.22	0.23	0.87	0.23	0.38	0.48	0.16	0.18	0.22	0.16	1.8	33	-	0.64	-	71	-	0.63	-
	Cadmium	<0.00 01	<0.00 01	<0.0001	<0.000 1	<0.000 1	<0.000 1	<0.000 1	<0.000 1	<0.000 1	<0.000 1	<0.000 1	<0.000 1	<0.000 1	<0.000 1	<0.000 1	<0.000 1	<																		

Table 3-3: Means and ranges across seasons for the Program, in comparison to GTVs.

Water Quality Parameter			LoR	Dry							Wet						
				2021 Survey			GTVs				2022 Survey			GTVs			
				Min	Max	Mean	n=	20th	80th	20%Var	Min	Max	Mean	n=	20th	80th	20%Var
Basic	pH	All Zones	0.01	5.36	9.05	7.94	180	7.264	8.13	-	4.89	8.98	7.92	279	7.11	8.1	-
		MZ 1		7.78	8.43	7.98	81	7.2	8.0	-	7.82	8.42	8.05	127	7.12	7.98	-
	TDS	All Zones	10	414	3,540	1,143.44	92	-	1,242	1490.4	191	2,310	1,071.89	92	-	1,242	1,490
		MZ 1		732	3,540	1,274.36	63	-	1,326	1,591	719	2,310	1,109.09	38	-	1,326	1,591
	EC	All Zones	1	710	5,510	1,813.92	184	-	2,629	3,155.04	356	4,080	1,759	288	-	2,561	3,073
		MZ 1		1,190	5,510	2,011.82	81	-	3,672	4,406	1,200	3,880	1,862.73	126	-	3,254	3,905
Ions	Sodium	All Zones	1	19	964	218.28	307	-	250	-	22	761	218.70	265	-	278	-
		MZ 1		91	964	252.64	80	-	319	-	95	704	231.45	126	-	350	-
	Magnesium	All Zones	1	4	120	70.8	307	-	86.8	-	3	112	61.67	265	-	89	-
		MZ 1		52	120	79.91	80	-	104	-	31	112	71	83	-	103.6	-
	Potassium	All Zones	1	2	25	7.88	307	-	12	-	1	21	7.26	265	-	12	-
		MZ 1		6	25	8.82	80	-	10	-	5	21	7.73	83	-	15	-
	Calcium	All Zones	1	4	117	67.32	307	-	81.8	-	3	106	51.81	265	-	84.2	-
		MZ 1		12	92	71	80	-	89	-	11	76	53.27	83	-	86	-
	Chloride	All Zones	1	32	1,020	356.6	306	-	430	-	29	1,040	355.26	265	-	489.2	-
		MZ 1		182	1,020	381.73	80	-	563	-	176	716	347.18	83	-	620	-
	Sulphate	All Zones	1	8	774	166	306	-	230	-	10	494	176.41	263	-	232.4	-
		MZ 1		82	774	215.6	80	-	290	-	103	494	194.70	83	-	304	-
	Total Alkalinity	All Zones	1	41	574	319.96	217	-	428.2	-	34	497	297.04	234	-	418	-
		MZ 1		106	574	348.82	62	-	482	-	90	497	334.36	73	-	437	-
	Total Anions	All Zones	0.01	7.53	56.4	19.25	104	-	24.2	-	3.36	39.1	18.39	149	-	22.6	-
		MZ 1		13.5	56.4	21.83	42	-	30.2	-	13.4	39.1	20.14	89	-	29.0	-
	Total Cations	All Zones	0.01	7.14	57	18.87	104	-	23.7	-	3.09	37.6	17.09	149	-	21.62	-
		MZ 1		12.8	57	21.32	42	-	30.5	-	12.4	37.6	18.76	89	-	28.1	-
Ionic Balance	All Zones	0.01	0.01	9.86	1.86	140	-	2.7	-	0.86	8.55	4.35	217	-	3.40	-	
	MZ 1		0.25	5.1	1.57	49	-	2.5	-	1.96	5.46	3.79	47	-	2.7	-	
Nutrients	Total Nitrogen	All Zones	0.1	0.2	21.7	3.74	334	-	2.6	-	0.1	32.1	4.28	234	-	2.986	-
		MZ 1		0.3	8.3	1.62	80	-	1.9	-	0.3	2.7	0.92	85	-	1.9	-
	Nitrite + Nitrate	All Zones	0.01	0.01	17.7	3.38	140	-	7.5	-	0.01	27	3.89	218	-	7.2	-
		MZ 1		0.02	7.48	1.27	49	-	4.1	-	0.01	1.43	0.49	55	-	5	-
Total Phosphorus	All Zones	0.01	0.01	0.27	0.06	104	-	0.1	-	0.01	0.96	0.16	149	-	0.12	-	
	MZ 1		0.01	0.27	0.05	42	-	0.1	-	0.01	0.1	0.05	47	-	0.068	-	
Metals	Barium	All Zones	0.01	0.006	0.553	0.06	68	-	0.05	-	0.005	0.489	0.06	72	-	0.5	-
		MZ 1		0.014	0.075	0.03	35	-	0.04	-	0.009	0.066	0.03	33	-	0.0352	-
	Boron	All Zones	0.01	0.19	2.79	0.60	68	-	0.74	-	0.16	1.8	0.51	71	-	0.63	-
		MZ 1		0.31	2.79	0.73	36	-	0.76	-	0.26	1.8	0.55	33	-	0.64	-

Note: All units in mg/L unless otherwise stated; n=number of data records; orange shading indicates value exceeds 80th percentile of GTV; bold font indicates exceedance of EPWMP (2014) 20% variance GTV.

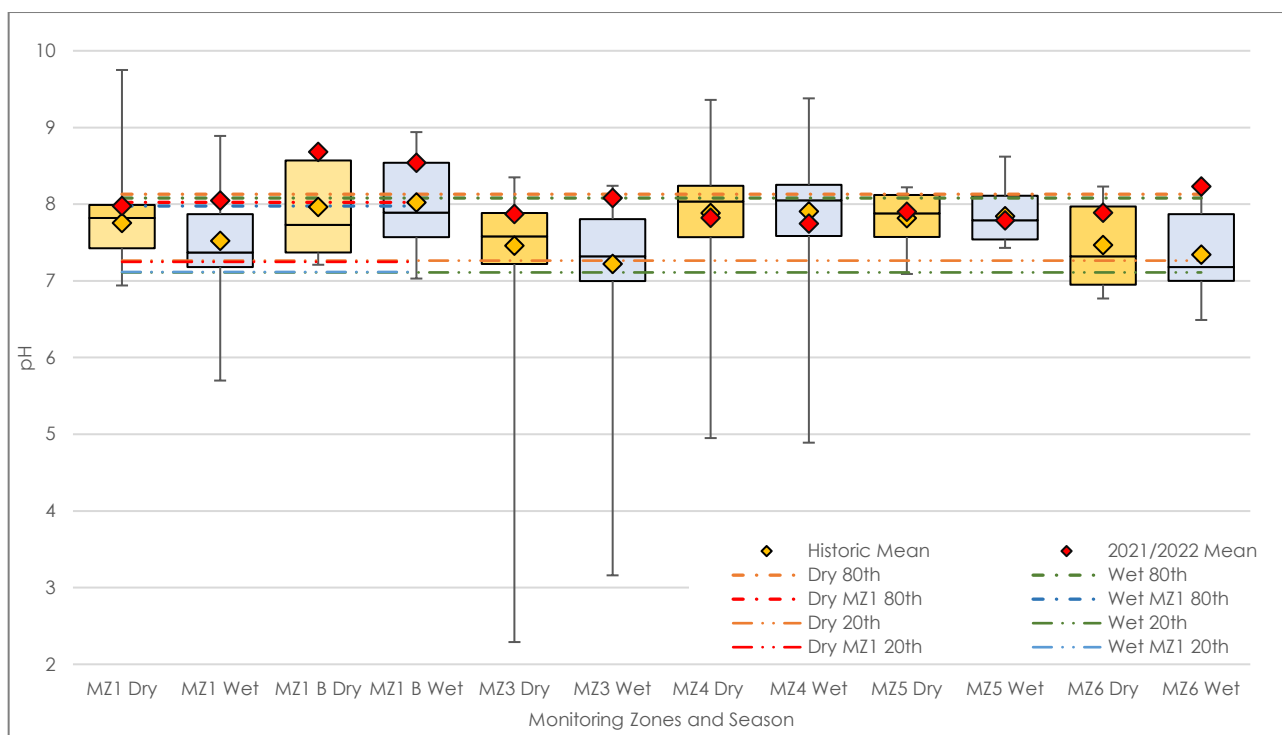


Figure 3-2: Comparison of pH for each monitoring zone and across dry and wet seasons (2009 to 2021), compared to the GTVs and current seasonal means.

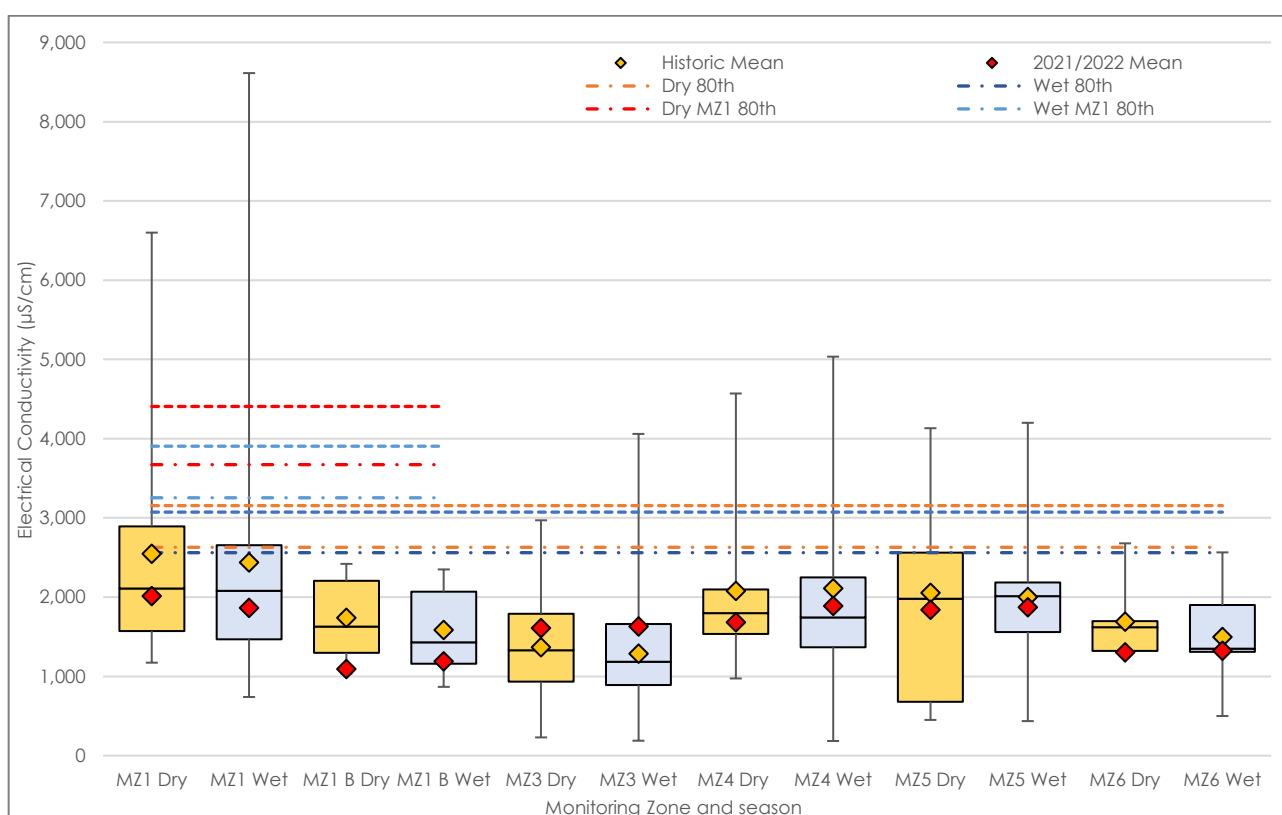


Figure 3-3: Comparison of salinity (EC) for each monitoring zone and across dry and wet seasons (2009 to 2021), compared to the GTVs and current seasonal means.

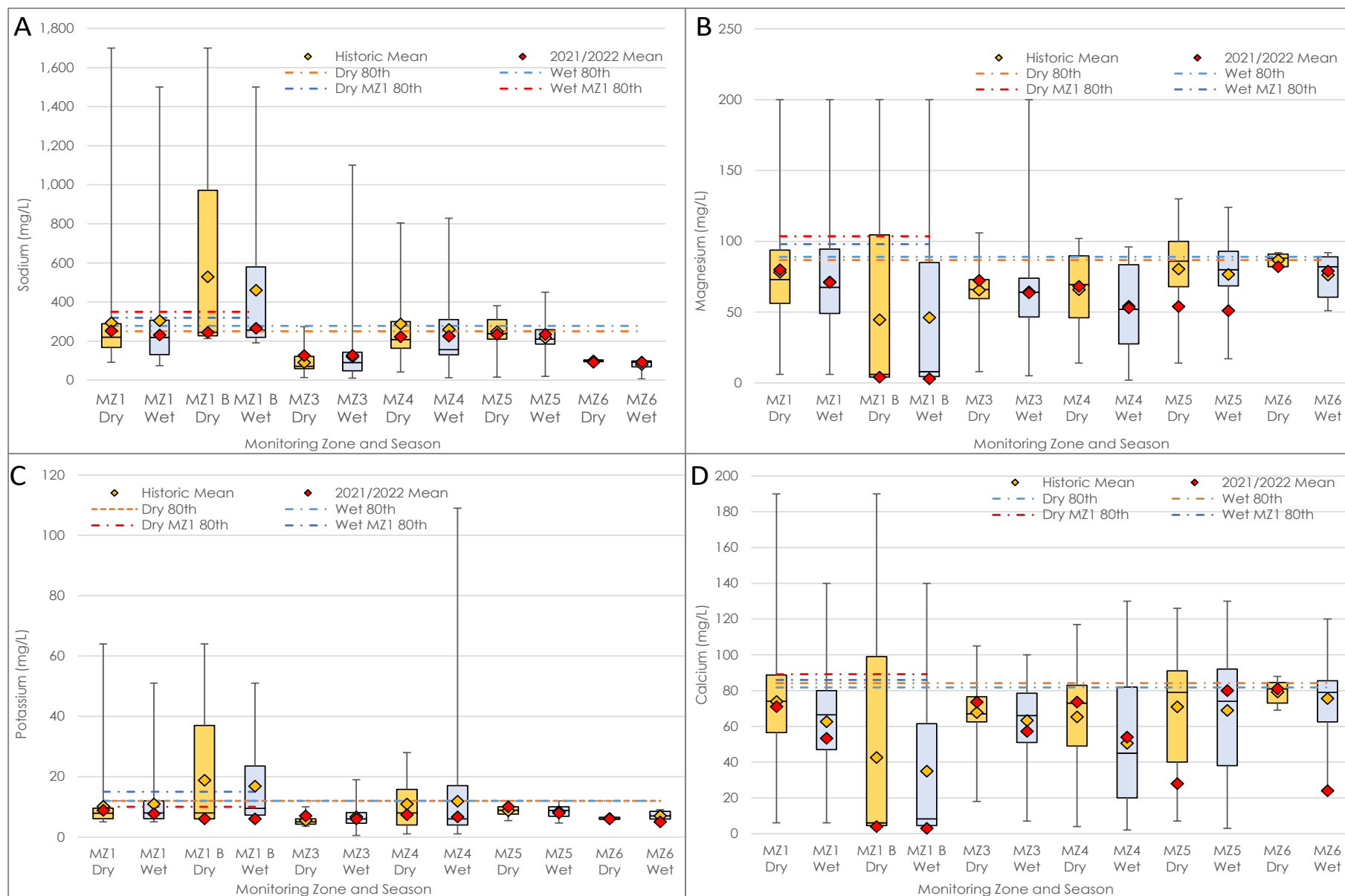


Figure 3-4: Comparison of major ions for each monitoring zone and across dry and wet seasons, compared to the GTVs and seasonal means (2012 to 2021) (A)sodium, (B)magnesium, (C)potassium, and (D) calcium.

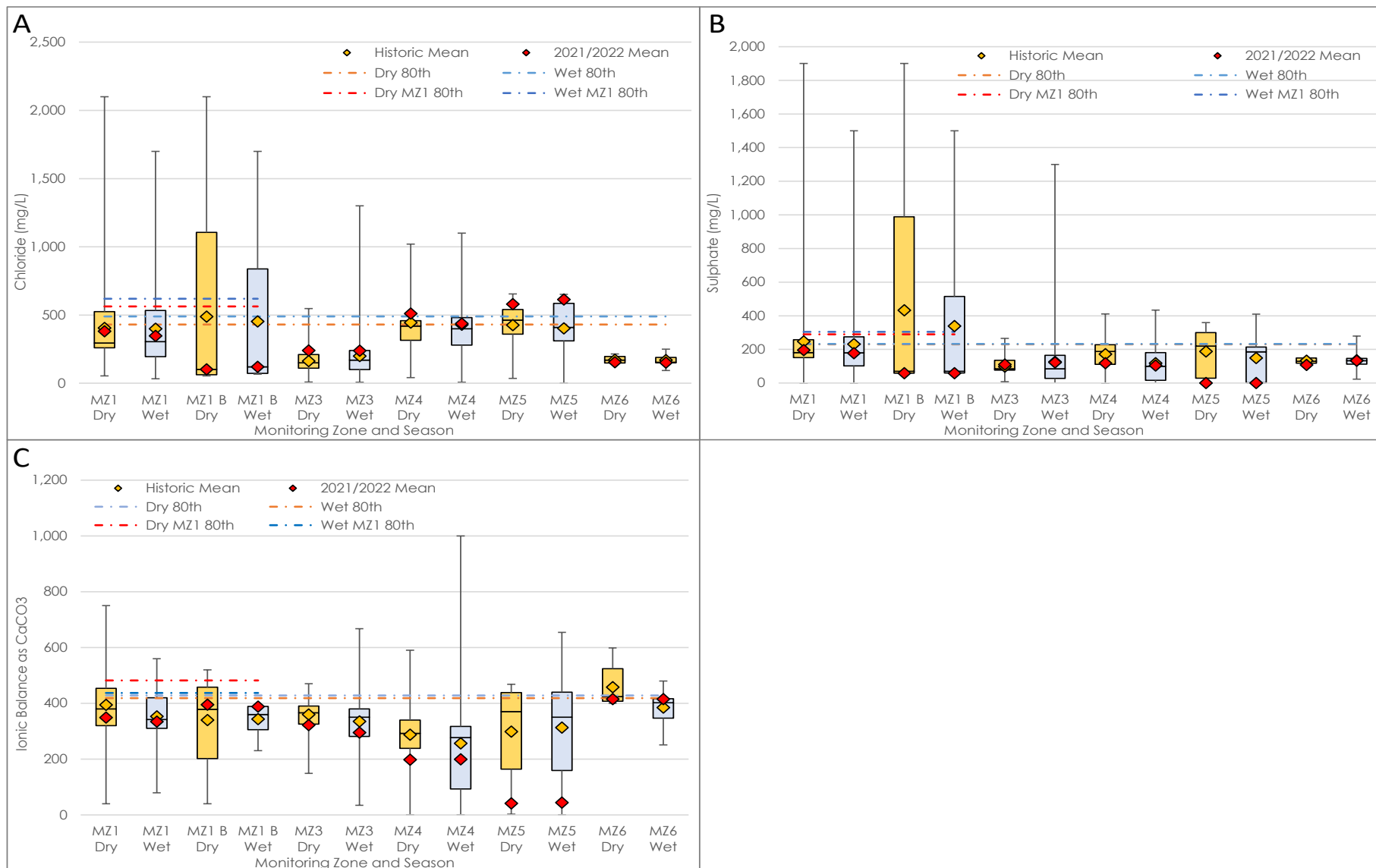


Figure 3-5: Comparison of major ions for each monitoring zone and across dry and wet seasons, compared to the GTVs and seasonal means (2012 to 2021), (A) chloride, (B) sulphate, and (C) alkalinity.

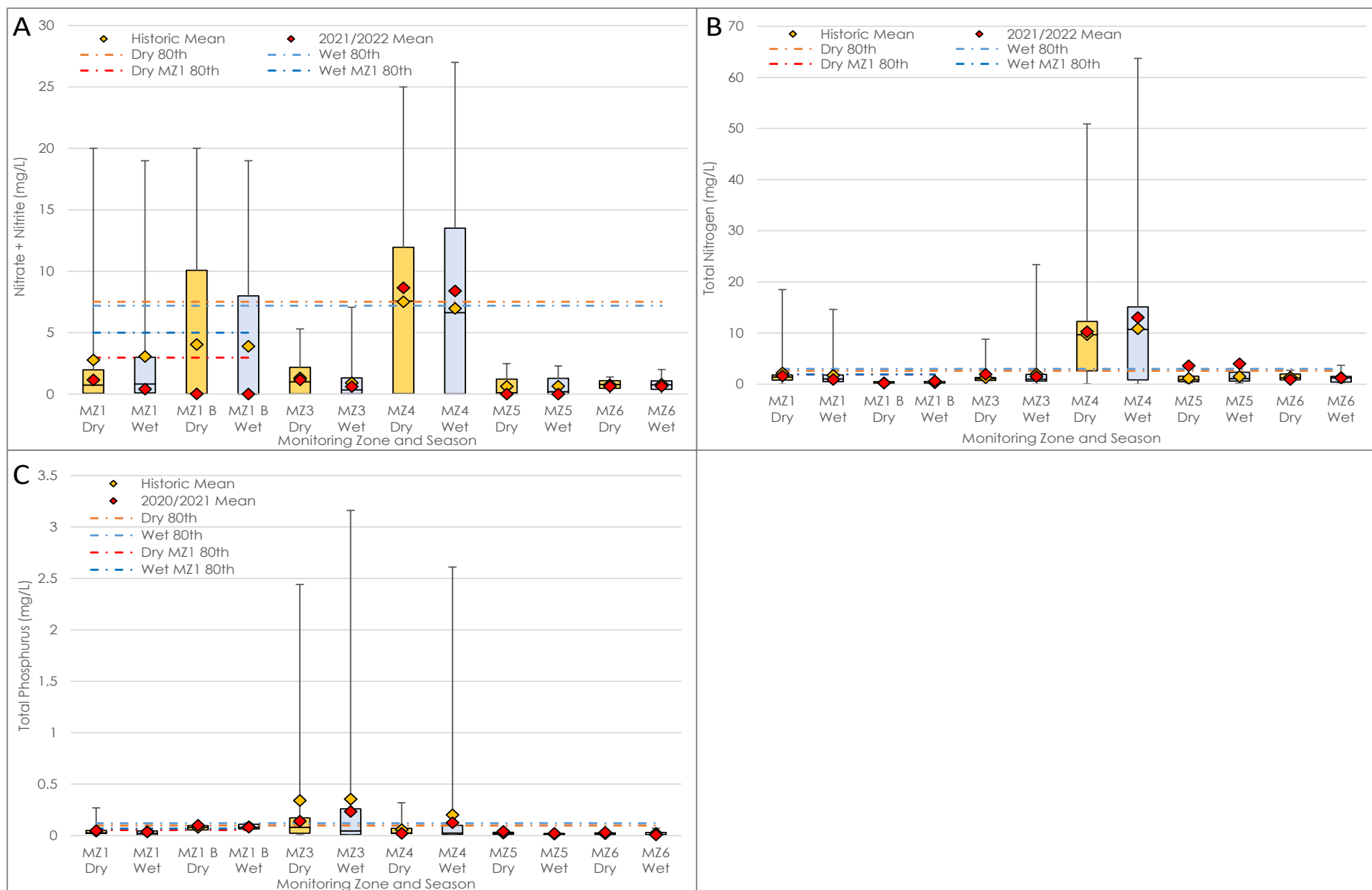


Figure 3-6: Comparison of nutrients for each monitoring zone and across dry and wet seasons, compared to the GTVs and seasonal means (2012 to 2021), (A) nitrate + nitrite, (B) total nitrogen, and (C) total phosphorus.

3.2 Stygofauna Results

3.2.1 Overview

In total, 819 stygofauna specimens were collected during the Program, representing 25 taxa from six high-level taxonomic groups; Amphipoda, Copepoda, Isopoda, Ostracoda, Bathynellacea and Oligochaeta (**Table 3-4, Table 3-5, Appendix Table D1**). Twelve of those 25 taxa were considered 'core taxa' for the Ethel Gorge Stygobiont TEC. A total of 389 stygofauna specimens were collected during the 2021 dry season survey, with cyclopoid copepods accounting for more than half of the specimens (**Table 3-4**). Slightly more specimens were recorded during wet season field survey (430 stygofauna organisms) (**Table 3-5**), close to half of which were also cyclopoid copepods (**Figure 3-7**).

3.2.2 Taxa

3.2.2.1 Amphipoda

Chydaekata acuminata was the most common amphipod species, with 124 individuals occurring across 12 samples from eight bores (**Table 3-4, Table 3-5**). Records of this species during the Program were limited to MZ1-MZ3 (**Figure 3-8**). Those samples of *C. acuminata* that produced a successful COI sequence were found to belong to Haplotype 1 which has been the most common haplotype for this species in previous surveys (**Appendix Table D-1**).

Chydaekata sp. "AMP005" was less abundant and widespread than its congener, with 10 individuals collected from two samples, all in MZ 4. The morphospecies "Paramelitidae OB2" was collected as a singleton from W152 (MZ 1) in the 2021 dry season survey and identified through DNA analysis. This morphospecies was recorded from the same bore during the 2020 dry season. One amphipod specimen was unable to be identified further than family (Paramelitidae sp.) due to poor condition (**Table 3-4, Table 3-5**).

Two individuals of a new species of *Maarrka* were collected from a single bore (HEOP0574M, MZ1) (**Table 3-5**). One of the specimens yielded a high-quality DNA sequence while the second specimen did not successfully sequence and was assigned based on initial morphological investigations. *Maarrka* sp. nov. was confirmed as a novel species after comparison to the COI barcodes of known paramelitid species from the region, including specimens of *Maarrka etheli* previously collected from that specific bore. The sequence grouped with two Paramelitid species identified as *Maarrka*. There was a genetic divergence of 12.65-13.65 % between this specimen and the closest sister species, known from Weeli Wolli and Marillana Creeks (**Figure 3-7**), indicating that the specimen represented a previously undetected species (**Appendix C**) (Leijs (2022)). As both specimens of *Maarrka* sp. nov. were consumed for DNA analysis, representatives of this species collected in subsequent monitoring rounds will be retained for morphological comparison, where possible.

The *Maarrka* sp. nov. specimens were collected from bore HEOP0574M, located next to the Marble Bar Rd / Jimblebar Rd intersection, in the southern-central part of the TEC (**Appendix Table D-1, Figure 2-1**). This bore has been sampled during previous monitoring rounds and often yields a relatively high diversity of paramelitid amphipods including *M. etheli*.

3.2.2.2 Bathynellacea

A single specimen of *Brevisomabathynella pilbaraensis* was collected from bore W117 in MZ 1 (**Figure 3-13**). Bathynellaceans have been present in low numbers in several stygofauna sampling surveys in the Ethel Gorge area, with the previous survey (2021 wet season) having an unusually large number (22 individuals) (Stantec, 2022). *Brevisomabathynella pilbaraensis* has been collected from several historical samples in addition to the current Program. Records of the species over time have typically been limited to the northernmost part of the core habitat area, with low abundances collected from bores W116 and W117 (**Figure H-6, Appendix Table D-1**). An exception was 2010 when several specimens were found in bore WP131.

3.2.2.3 Copepoda

Copepods were numerically the most abundant group, occurring in most samples collected during the Program (**Figure 3-7, Table 3-4, Table 3-5**). The cyclopoid copepod *Diacyclops humphreysi* s.l. was the most frequently recorded stygofauna species during the Program, with more than half of the total number of individual specimens collected belonging to this species. It was also the most widespread species occurring in 16 samples from 13 bores across both wet and dry season surveys (**Figure 3-9**). The abundances per sample were typically low except for HEOP0388 in the 2021 dry season and W029 in the 2022 wet season survey,

each yielding 200 specimens. *Diacyclops humphreysi* s.l., which occurs widely within the Ethel Gorge area, is one of the most wide ranging copepods in groundwaters of the Pilbara region (Halse et al., 2014). The only other described *Diacyclops* species encountered was *Diacyclops cockingi*, which is likewise distributed throughout the Pilbara, as well as some other individuals that could not be identified past genus but are considered likely to belong to the known species (**Figure 3-10**).

Pilbaracyclops supersensus and an indeterminate *Pilbaracyclops* species were collected as singletons from two MZ 1 bores across the Program (HEOP0574M and HEOP0388, respectively). The distribution and abundance of this genus is consistent with previous surveys, occurring in low numbers at HEOP0388 and HEOP574M, in the centre of the core habitat area (**Figure 3-10**).

Harpacticoid copepods were relatively uncommon during this Program compared to previous surveys in the area. This was due to the absence of any bores very high abundances similar to that recorded for *D. humphreysi* above. A total of five individuals were collected from five different bores with only *Archinitocrella newmanensis* occurring more than once (**Figure 3-11**).

3.2.2.4 Isopoda

The only stygal isopod taxon collected from within the Ethel Gorge core area is *Pygolabis humphreysi*, which is considered a core taxon for the TEC (Subterranean Ecology, 2013). During the Program, twelve individuals of *P. humphreysi* were collected from seven samples, five bores, across dry and wet season surveys and in MZ1 and MZ4 (**Figure 3-12, Table 3-4, Table 3-5**). The maximum abundance was five in a single sample, with the rest of the samples containing only one or two individuals. This pattern of abundance and distribution is consistent with previous years surveys (Stantec, 2022). Two specimens of *P. humphreysi* were successfully sequenced for CO1 to determine haplotype diversity within the region. One specimen belonged to a previously sequenced haplotype (haplotype 24), while the other was different but very closely related and is designated as haplotype 24a (**Appendix C**) (Leijs, 2022).

3.2.2.5 Ostracoda

A total of 26 ostracods were collected during the Program, comprising representatives of three Candonidae species and one Limnocytheridae. Twenty-one of the specimens were recorded from the bore HEOP0574M in MZ1; five in the 2021 dry season and 16 in the 2022 wet season. The remaining five specimens were recorded across MZ1 and MZ4 (**Figure 3-14, Table 3-4, Table 3-5**). *Pilbaracandona colonia* was the most abundant species (16 specimens) while *Pilbaracandona eberhardi*, *Pilbaracandona kosmos*, *Gomphodella hirsuta* and an indeterminate *Pilbaracandona*, were represented as singletons. Six specimens collected during the 2022 wet season survey could not be identified past Class Ostracoda due to damage, however are likely to belong to one of the described species.

The pattern of ostracod distribution is consistent with historic records, with each of the species collected during the Program recorded previously. Notably, the listed species appear in bore HEOP0574M in historical samples, with *Pilbaracandona colonia* being generally the most abundant. The overall abundance of ostracods is slightly lower than recent years but is within historic range.

3.2.2.6 Oligochaeta

Phreodrilid oligochaetes were the dominant the annelids during both the 2021 dry season and 2022 wet season surveys. A total of 112 individuals of the morphospecies Phreodrilidae sp.3 (OP1) was collected from two bores, W152 and HEOP00524(Unk3), across both surveys. The abundance was highest in HEOP00524(Unk3) during the 2021 dry season survey (51 specimens), with greater numbers recorded at W152 during the 2022 wet season (50 individuals; (**Figure 3-15, Table 3-4**)). Representative specimens were successfully sequenced for CO1, revealing that the specimens belonged to haplotypes that had not been collected previously (haplotypes 8 and 9) (**Appendix C**) (Leijs, 2022).

The Naidid oligochaete morphospecies *Pristina* sp. OB was recorded as a singleton in the 2021 dry season sample at HEOP0388 (MZ 1). CO1 barcoding of the specimen identified it as a new haplotype (haplotype 9) for the morphospecies. This was noted by (Leijs, 2022) as evidence of a relatively high haplotype diversity, with nine haplotypes identified from ten sequenced *Pristina* sp. OB specimens over time (**Appendix C**) (Leijs, 2022).

A total of three enchytraeid oligochaetes were collected during the Program. All specimens were from MZ 1, comprising a singleton in HEOP0504M during the 2021 dry season survey and two specimens in OB23REG1 during the 2022 wet season survey (**Appendix Table D1**). Enchytraeid oligochaetes have been commonly represented in the Project area over time, occurring at variable abundances.

3.2.2.7 Summary

Overall, the stygofauna assemblage documented during the Program was largely consistent with that observed in previous surveys with comparable species composition and diversity. Abundances were variable, highlighting the natural fluctuations of the system, both spatially and temporally.

Taxon	Monitoring Zone and Bore codes - Dry Season																
	MZ1										MZ3				MZ4		
	HEOP 0388	HEOP 0417	HEOP 0425	HEOP 0574M	OB23 REG1	T399	W152	W056	W116	W117	HEA 0121	HEA 0126	HEA 0133	HEOP 0398M	HEOP 0524 (Unk3)	W028	W029
Amphipoda																	
<i>Chydaekata acuminata</i>				16		1	9	4	1	46		3	2				
<i>Chydaekata</i> 'AMP005'																5	5
<i>Paramelitidae</i> sp.							1										
<i>Maarrka</i> sp. nov.				2													
Copepoda																	
<i>Diacyclops cockingi</i>						3							4	2			
<i>Diacyclops humphreysi</i> s.l.			1		15		12			8	2						200
<i>Diacyclops</i> sp.																2	
<i>Pilbaracyclops supersensus</i>				1													
<i>Archinitocrella newmanensis</i>													1				
Isopoda																	
<i>Pygolabis humphreysi</i>	1	2	1					1									1
Ostracoda																	
<i>Gomphodella hirsuta</i>				1													
<i>Pilbaracandona colonia</i>				12													
<i>Pilbaracandona kosmos</i>				1													
<i>Ostracoda</i> sp. unident.				2						1						3	
Oligochaeta																	
<i>Enchytraeidae</i>					2												
<i>Phreodrilidae</i> sp.3 (OP1)							50								6		

Table 3-4: Abundance of stygofauna in individual bores and monitoring zones in the 2021 dry season survey.

Taxon	Monitoring Zone and Bore codes – Wet Season															
	MZ1										MZ3			MZ4		
	HEOP 0388	HEOP 0425	HEOP 0504M	HEOP 0574M	OB23 REG1	T399	W152	W056	W116	W117	HEA 0126	HEA 0133	HEOP 0524 (New)	HEOP 0524 (Unk3)	W028	W029
Amphipoda																
<i>Chydaekata acuminata</i>						24	4			6	8					
Paramelitidae OB2							1									
Copepoda																
<i>Diacyclops humphreysi</i> s.l.	200			2			7	2	16	7	21	5			4	5
<i>Diacyclops</i> sp.													1			
<i>Pilbaracyclops</i> sp.	1															
<i>Archinitocrella newmanensis</i>								1								
<i>Parastenocaris</i> `COP001`														1		
<i>Parastenocaris</i> sp.					1											
Harpacticoida									1							
Isopoda																
<i>Pygolabis humphreysi</i>	5	1														
Bathynellacea																
<i>Brevisomabathynella pilbaraensis</i>										1						
Ostracoda																
<i>Pilbaracandona colonia</i>				4												
<i>Pilbaracandona eberhardi</i>				1												
<i>Pilbaracandona</i> sp.									1							
Oligochaeta																
Enchytraeidae			1													
Naididae, <i>Pristina</i> sp. OB	1															
Phreodrilidae sp.3 (OP1)							5							51		

Table 3-5: Abundance of stygofauna in individual bores and monitoring zones in the 2022 wet season survey.

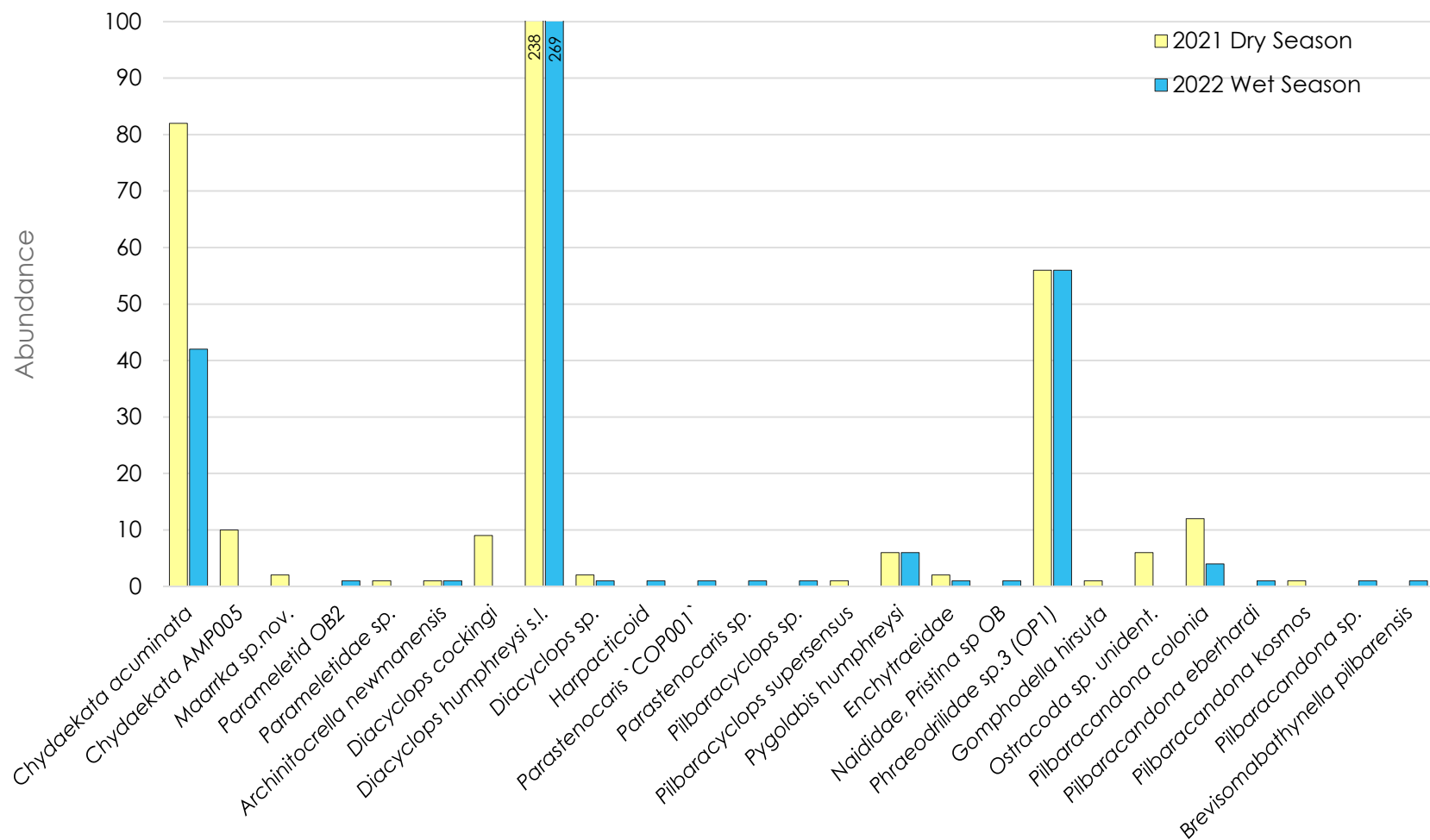


Figure 3-7: Total abundance of each stygofauna taxon during the Program.

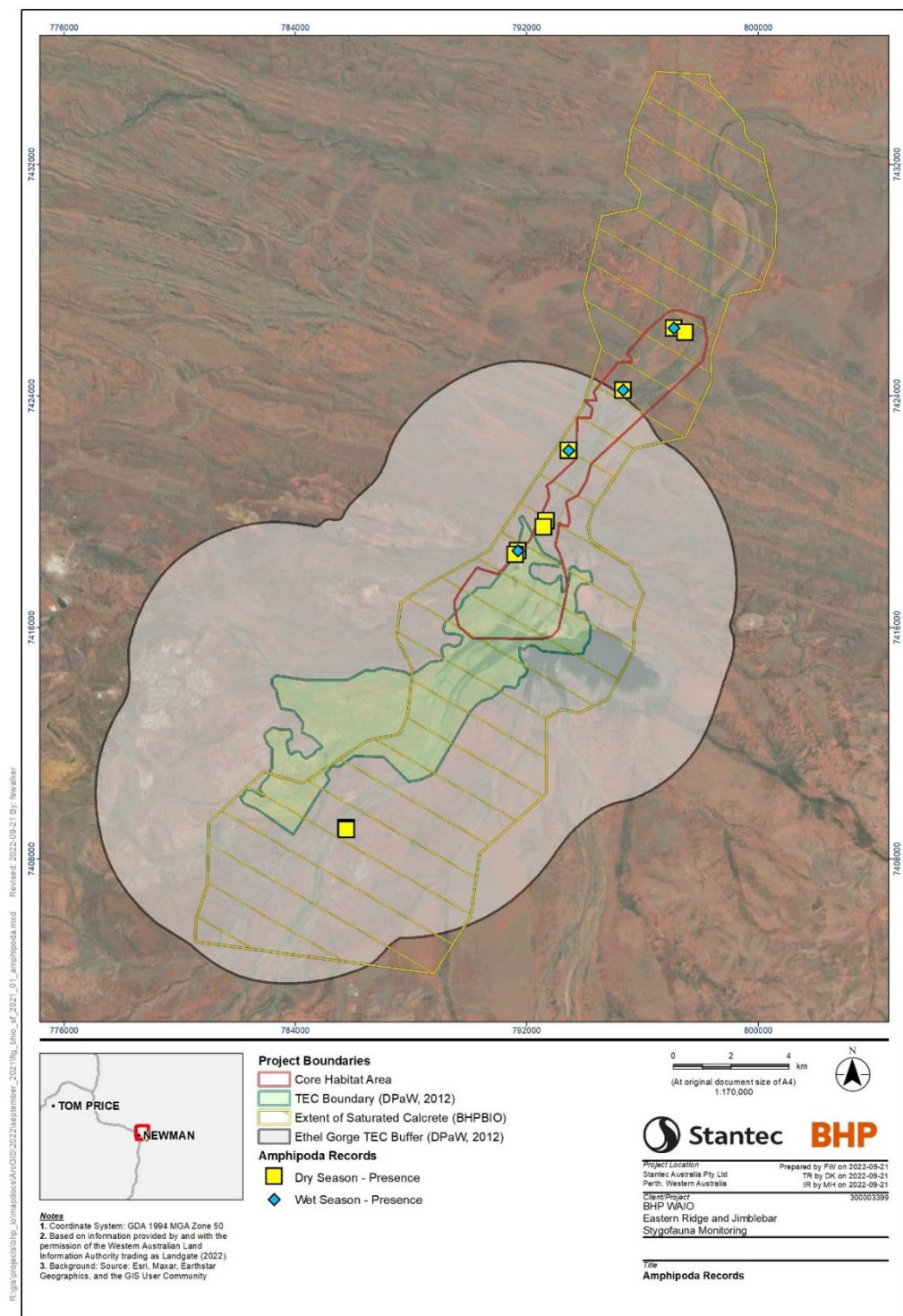


Figure 3-8: The distribution of Amphipoda during the Program.

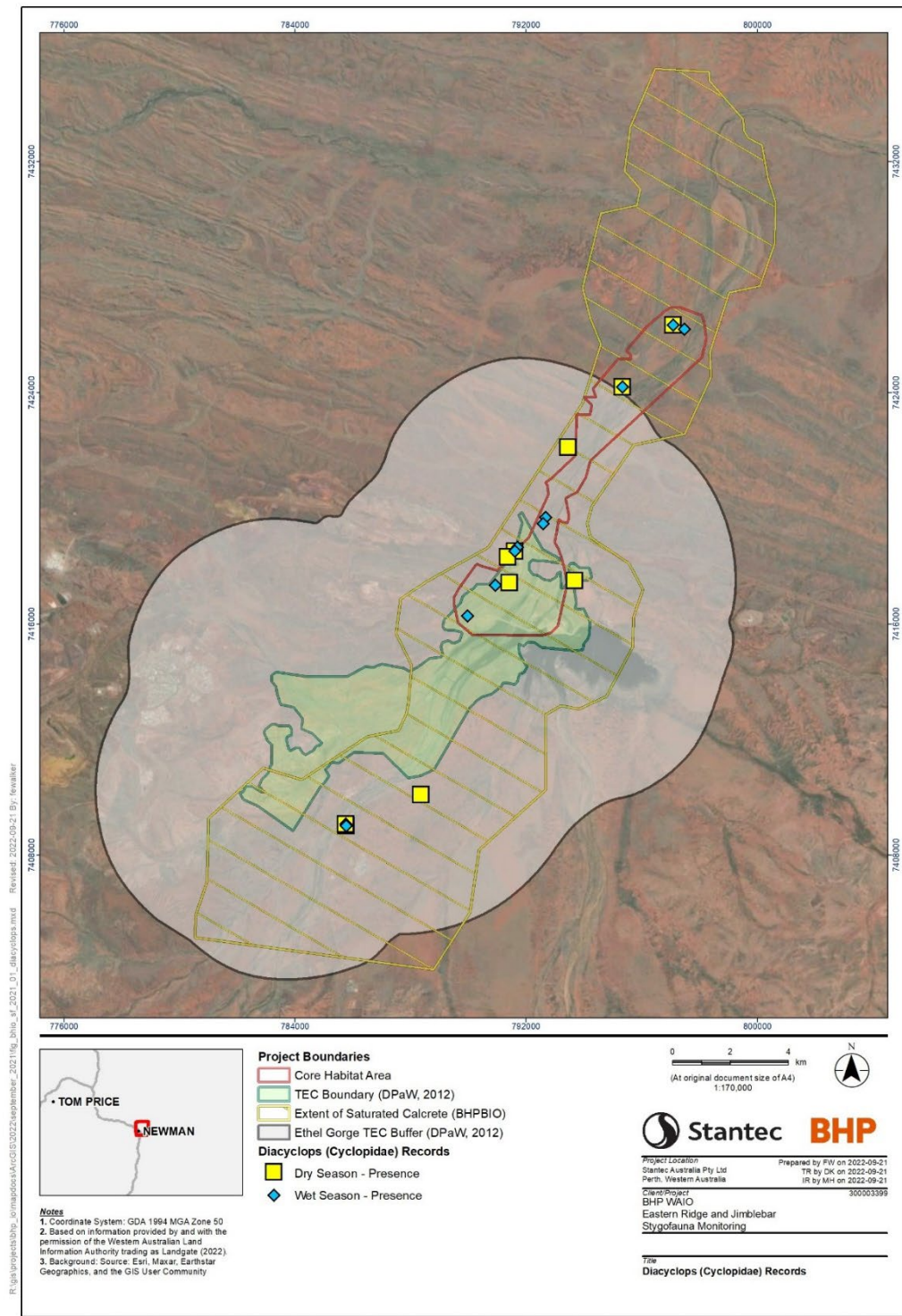


Figure 3-9: The distribution of Diacyclops during the Program.

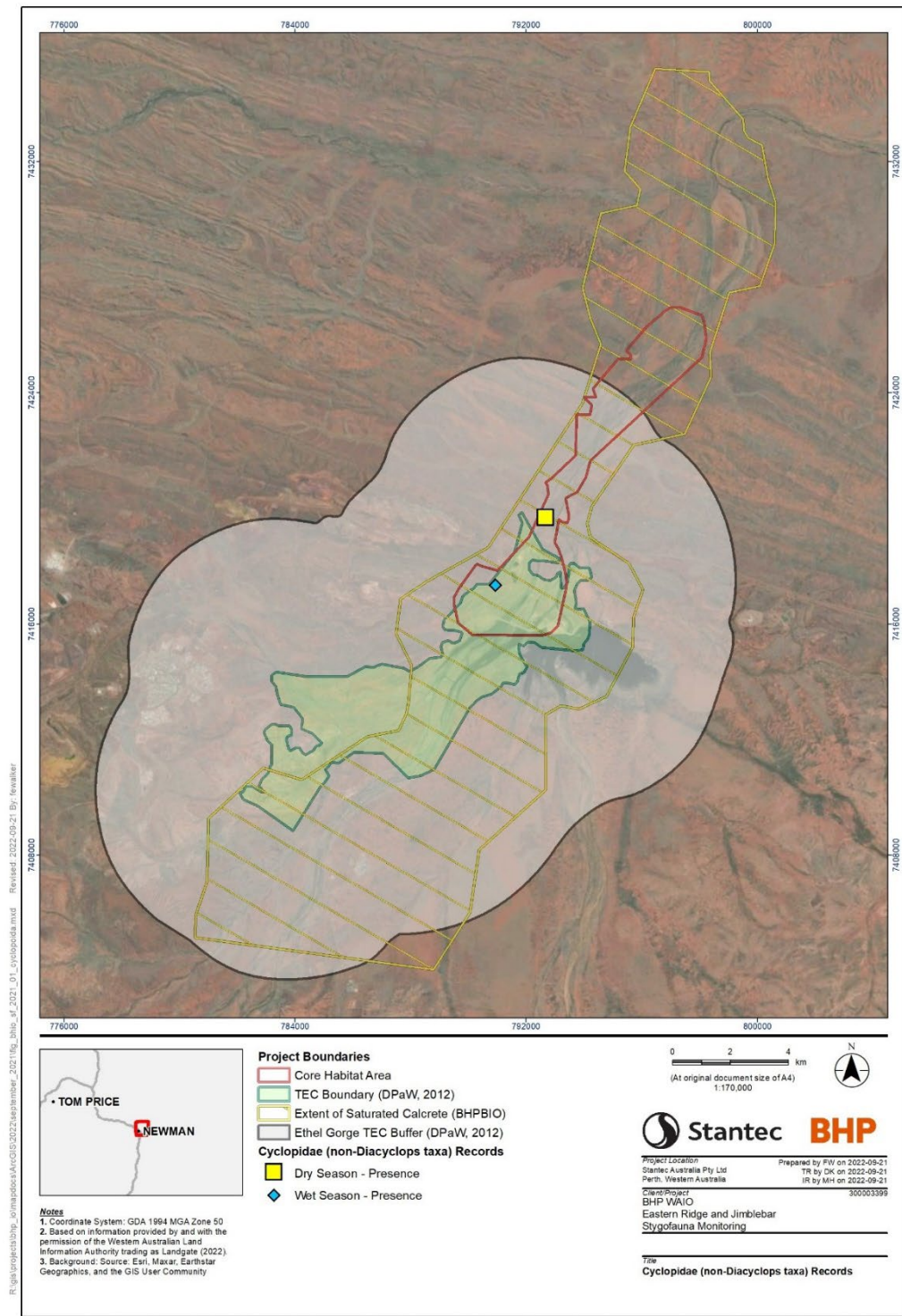


Figure 3-10: The distribution of Cyclopoid copepod species other than *Diacyclops* during the Program.

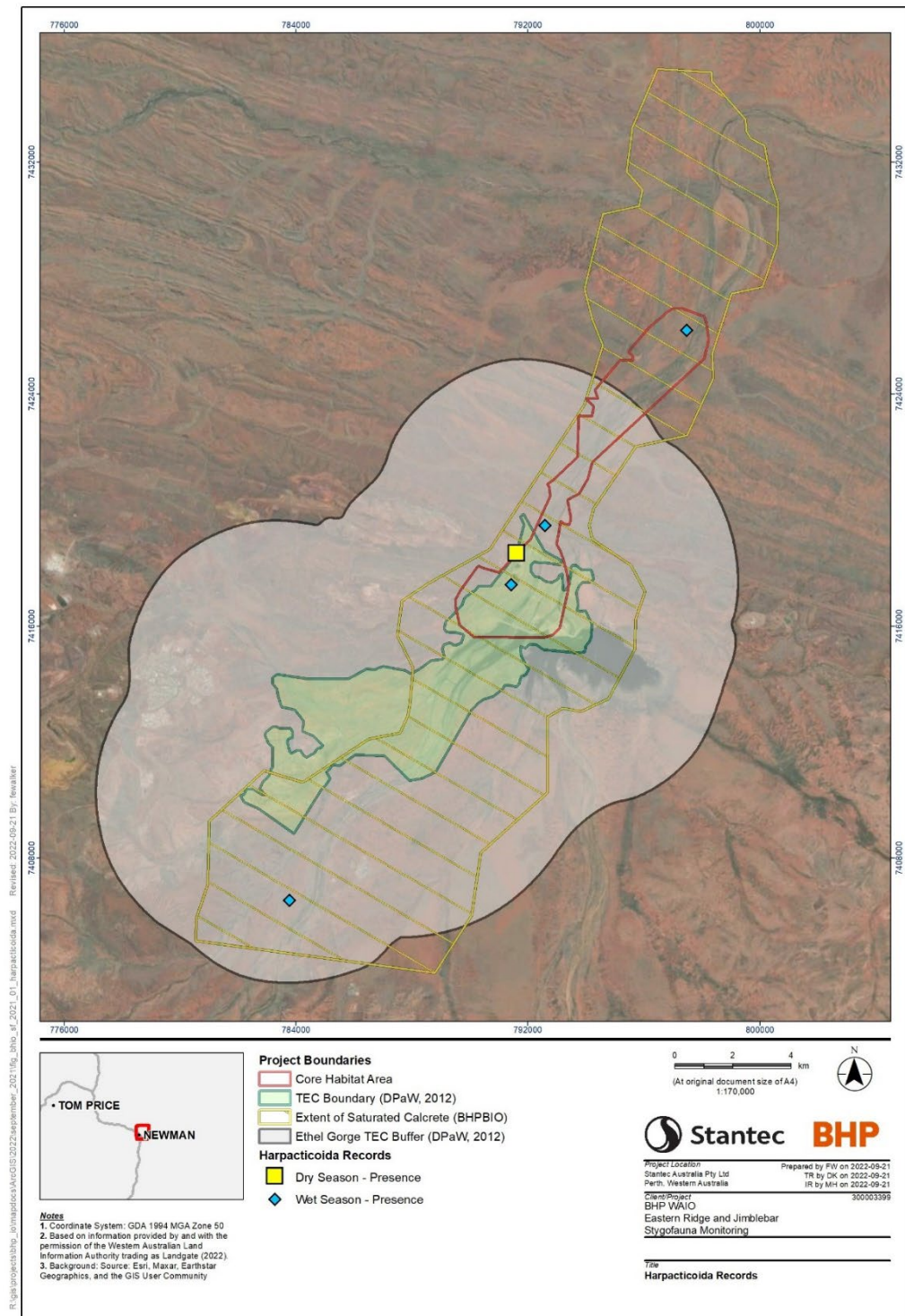


Figure 3-11: The distribution of Harpacticoid copepods during the Program

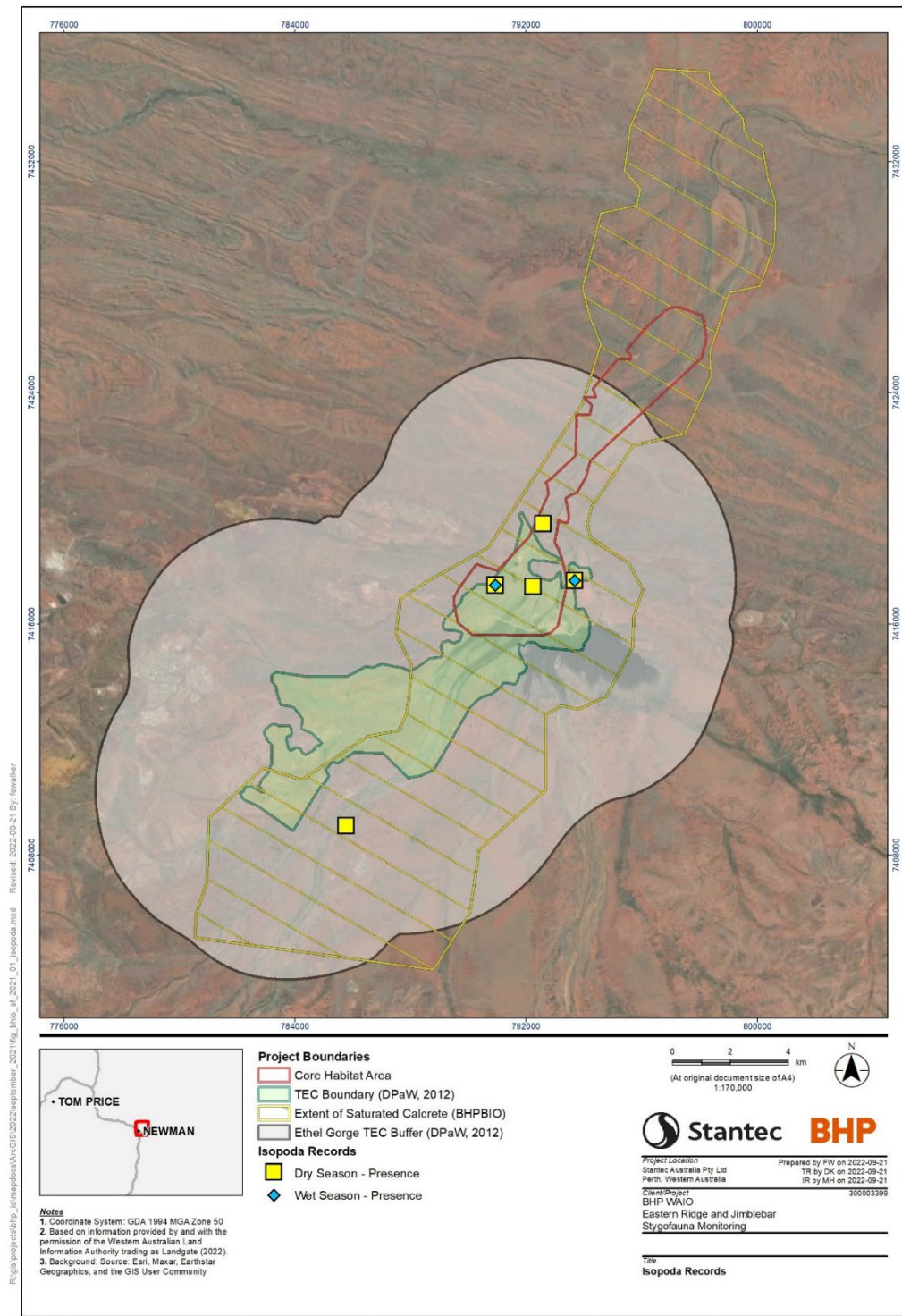


Figure 3-12: The distribution of *Pygolabis humphreysi* during the Program.

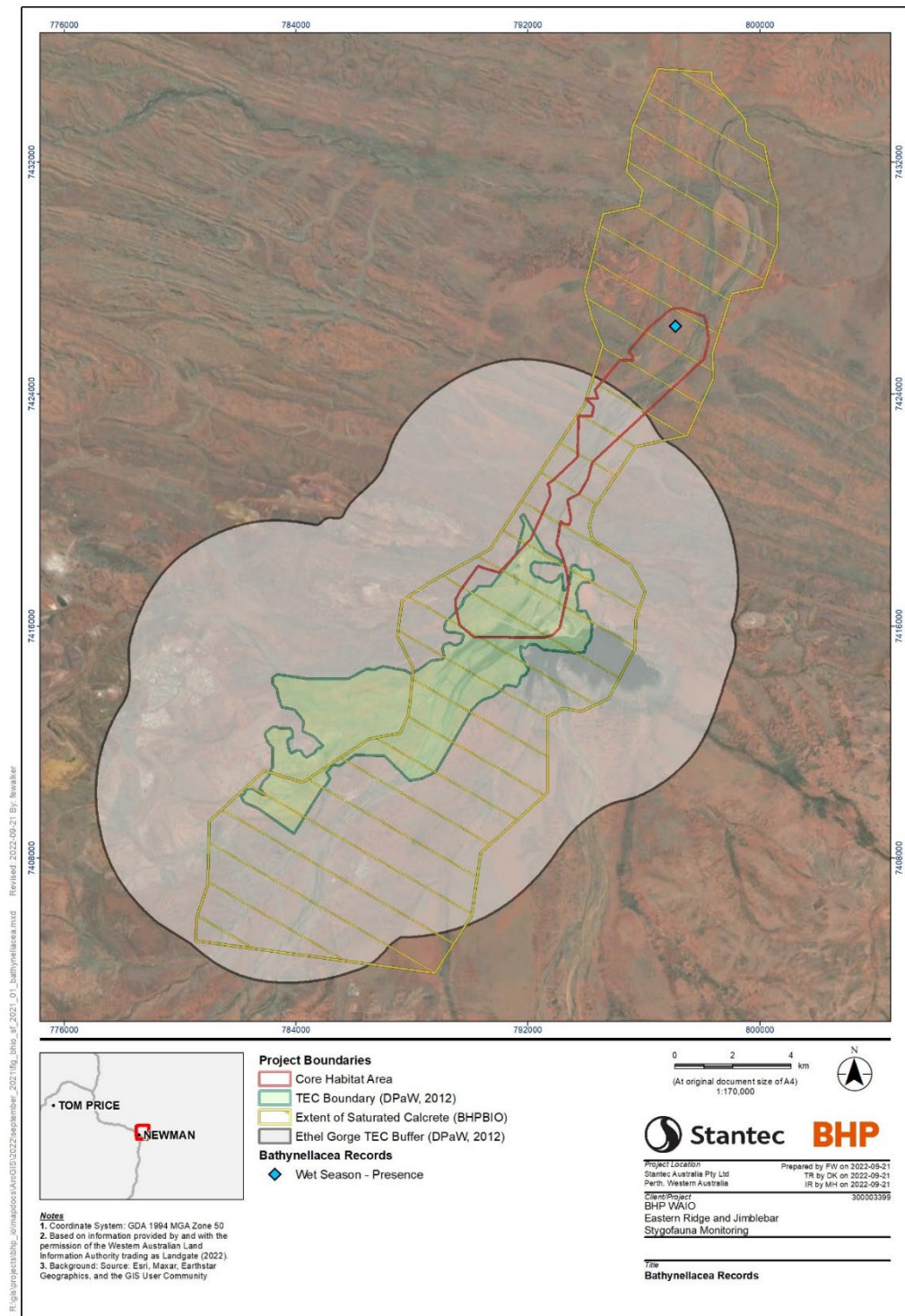


Figure 3-13: The distribution of Bathynellacea during the Program.

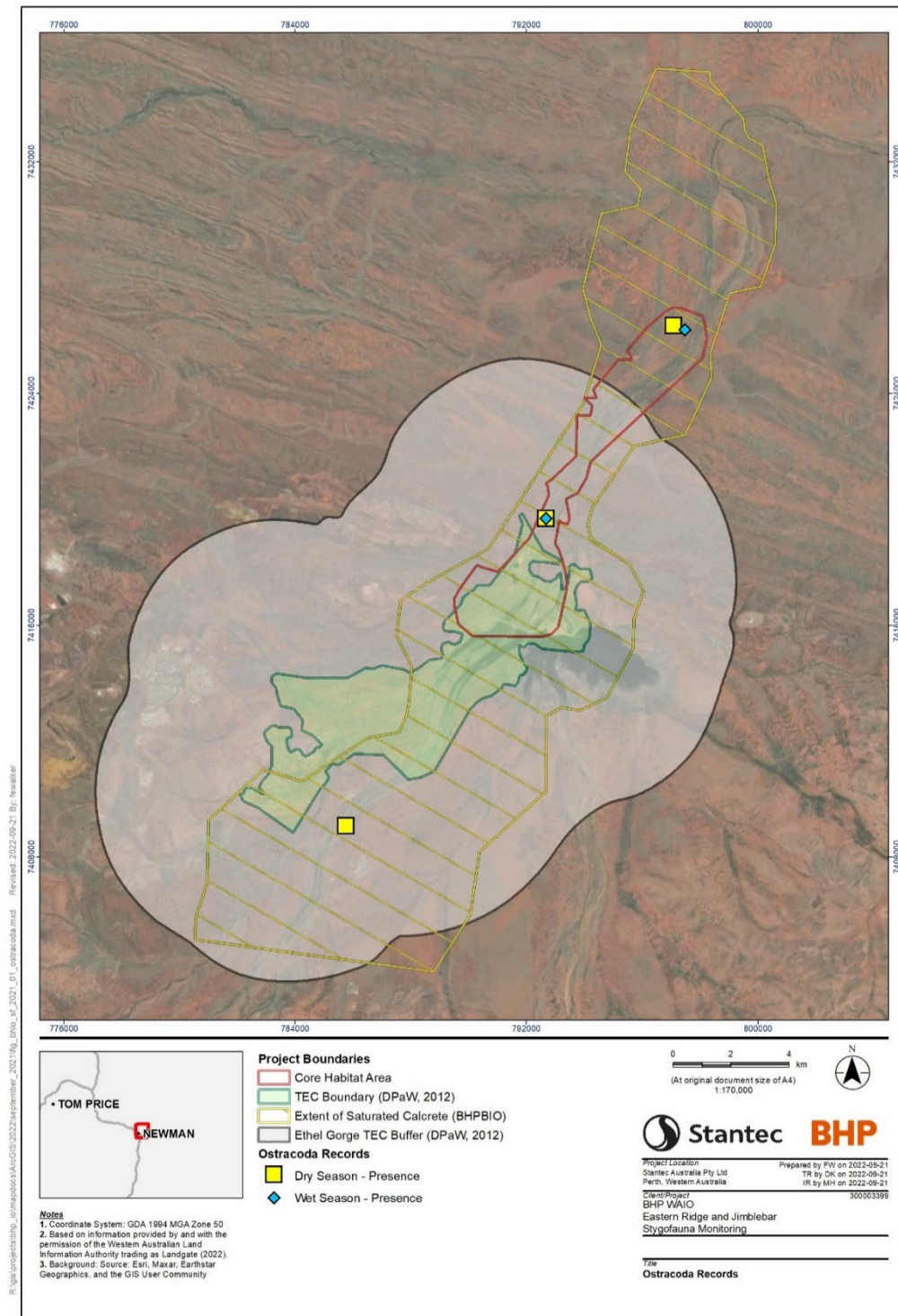


Figure 3-14: The distribution of Ostracoda during the Program

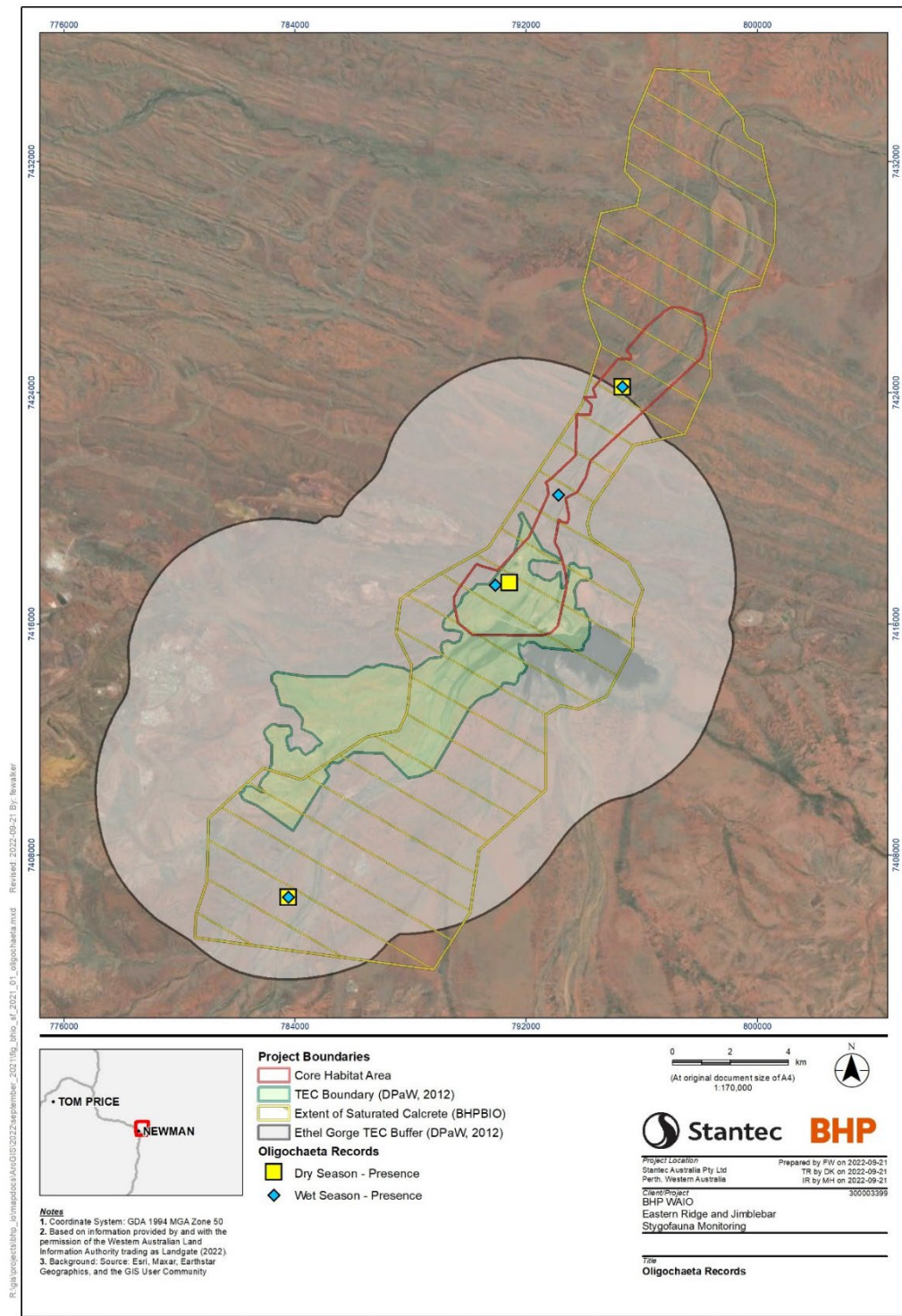


Figure 3-15: The distribution of Oligochaetes during the Program

3.2.3 Species Richness and Abundance

3.2.3.1 Trends over time

Mean numbers of taxa per bore in both the 2021 dry and 2022 wet season surveys were slightly lower than the equivalent season in previous surveys (Stantec, 2022). As in the previous program, the long-term trends in the mean number of taxa per bore still showed a slightly increasing trend in the dry season and slightly decreasing trend in the wet season (**Figure 3-19**).

In the historical timeseries, an observable declining trend in the mean number of individuals per bore was evident in both wet and dry seasons (**Figure 3-19**). The trend in dry season values is strongly driven by the very high mean in the 2013 dry season which is 4-5 times higher than other dry season surveys (**Figure 3-16C**). Similarly, the mean number of individuals per bore in wet season surveys prior to 2016 is considerably higher than 2017 onwards (**Figure 3-19D**). Stantec (2022) notes that the lower mean abundances post-2016 correspond to an extended period of low rainfall, and that rainfall and aquifer recharge are considered to be one of the primary influences on stygofauna abundance. The rainfall during the current Program follows the same trend of below average falls reported for the previous five years (**Section 1.5, Figure 1-2**). Likewise, the mean number of stygofauna specimens per bore during the Program reflects a similar range to that period.

Another factor that may be contributing to the lower mean number of individuals per bore in recent years is the inherent variability of species such as *Diacyclops humphreysi* and *Nitocrella karanovici*, which may occasionally occur in very high abundances. This, coupled with changes in the sampling plan over time may introduce biases to the data. For instance, bore EEX917 yielded high abundances of *Nitocrella karanovici* in earlier surveys, however, that bore has been inaccessible in recent surveys. It is likely that the removal of this bore from the sampling program is linked to the lack of records of *Nitocrella karanovici* in the Program.

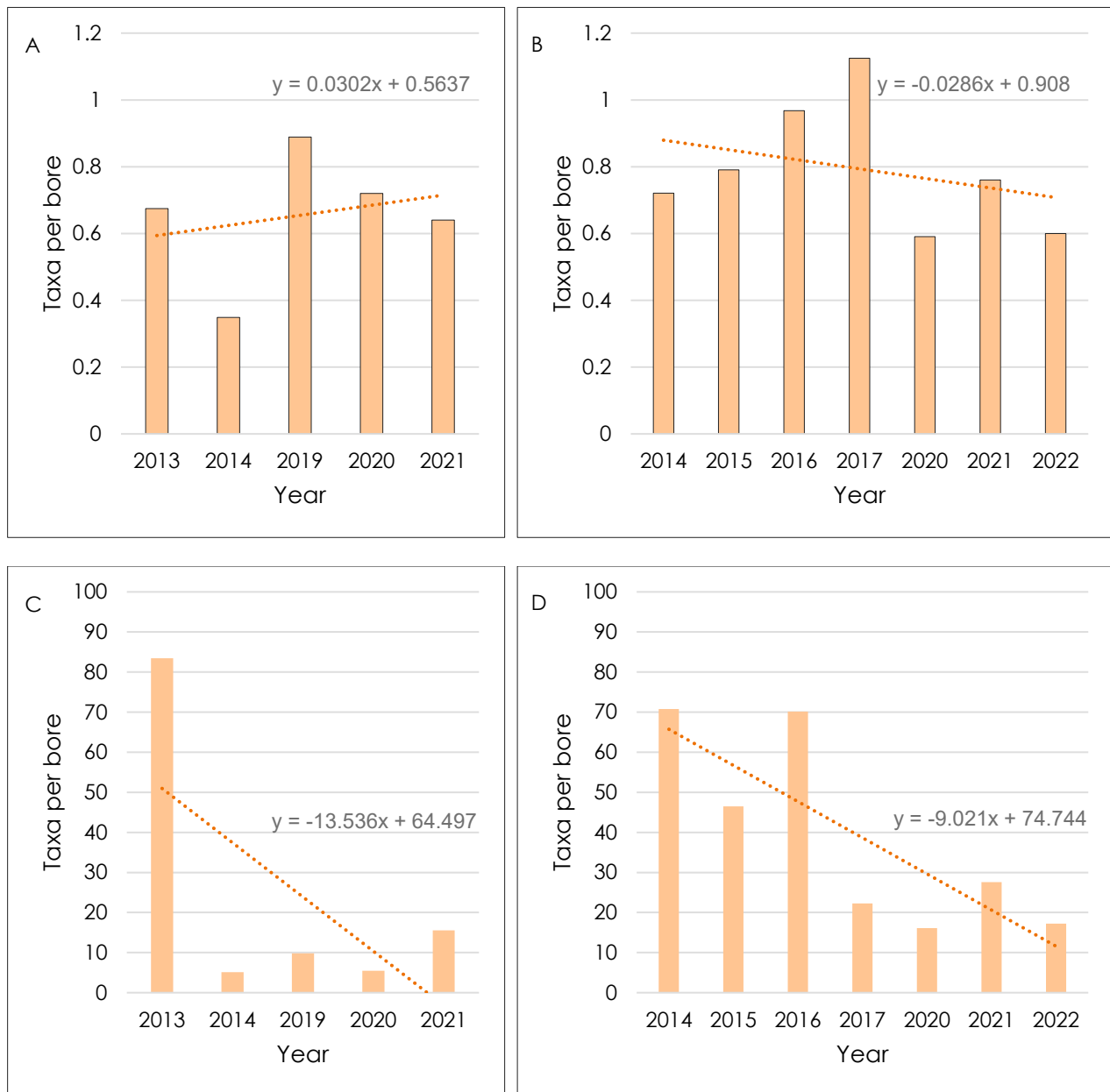


Figure 3-16: Mean taxa per bore for (A) dry season and (B) wet season. Mean number of individuals per bore for (C) dry season and (D) wet season.

3.2.3.2 Estimators

The Ethel Gorge Monitoring program (including all monitoring zones) has produced a total of 51 core species between November 2009 and May 2022 (**Table 3-6**). The current year's sampling has added a single species to the core species list; *Maarka* sp. nov. (**Appendix X**). Diversity estimators indicate that not all the species present have been collected, and that there may be as many as 23 more species that may be detected with twice the current amount of sampling effort. This is reflected in the rarefaction curves based on those indicators which are all still generally trending upwards.

For MZ 1 only, 50 cores species have been detected, which represents 81% of the predicted number, based on extrapolation (60 species). The diversity estimators in **Table 3-7** indicate that 50 species represents between 57% and 85% of the total number of core species present in the TEC. In the previous monitoring report it was noted that the Chao2 mean rarefaction curve was beginning to plateau while the others continued to increase (Stantec, 2022). The current year's curves show progression of that trend, with the Chao2 indicator now peaked and the ICE and Jack 2 means beginning to plateau.

Overall, these analyses indicate that further sampling would be required to fully represent the diversity of species in the Ethel Gorge Aquifer Stygobiont TEC and surrounding area. However, the percentage of stygal species that remain undetected is decreasing.

Table 3-6: Observed and extrapolated stygofauna species richness for all monitoring zones between 2009 and May 2022 compared to seven alternate diversity estimators.

Observed vs Estimated		Obs. & Pred. spp richness	% Predicted collected
Obs.	Sobs	51	
	Extrapolated (970 samples)	60.74	84.0%
Diversity estimators	Chao 1 Mean	55.1	92.5%
	Chao 2 Mean	68.1	74.8%
	ACE Mean	55.6	91.7%
	ICE Mean	65.3	78.1%
	Bootstrap Mean	57.7	88.3%
	Jack 1 Mean	66.0	77.2%
	Jack 2 Mean	74.0	68.9%
Range		55.13 - 74.01	68.9% - 92.5%

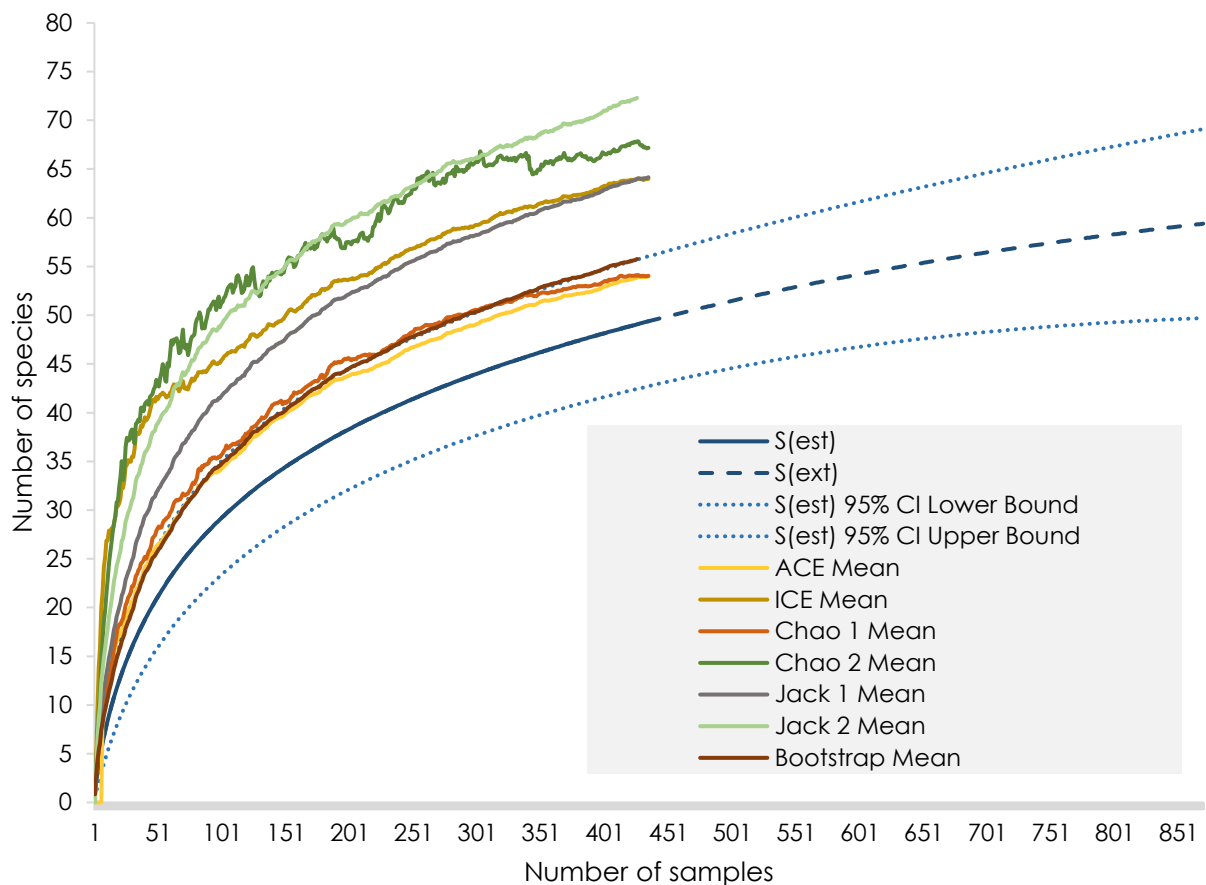


Figure 3-17: Stygofauna core species accumulation curves for observed (s_{est}), extrapolated (s_{ext}) and various species richness estimators (EstimateS (Colwell, 2013)) for the broader ethel gorge area, i.e. all monitoring zones sampled from 2009 to May 2022.

Table 3-7: Observed and extrapolated stygofauna species richness for only Monitoring Zone 1 between 2009 and May 2022 compared to seven alternate diversity estimators.

Observed vs Estimated		Obs. & Pred. spp richness	% Predicted collected
Obs.	Sobs	50	
	Extrapolated (970 samples)	61.71	81.0%
Diversity estimators	Chao 1 Mean	86.6	57.7%
	Chao 2 Mean	82.3	60.7%
	ACE Mean	65.8	75.9%
	ICE Mean	75.7	66.0%
	Bootstrap Mean	58.5	85.4%
	Jack 1 Mean	69.1	72.4%
	Jack 2 Mean	78.4	63.8%
Range		58.53 - 86.55	57.7% - 85.4%

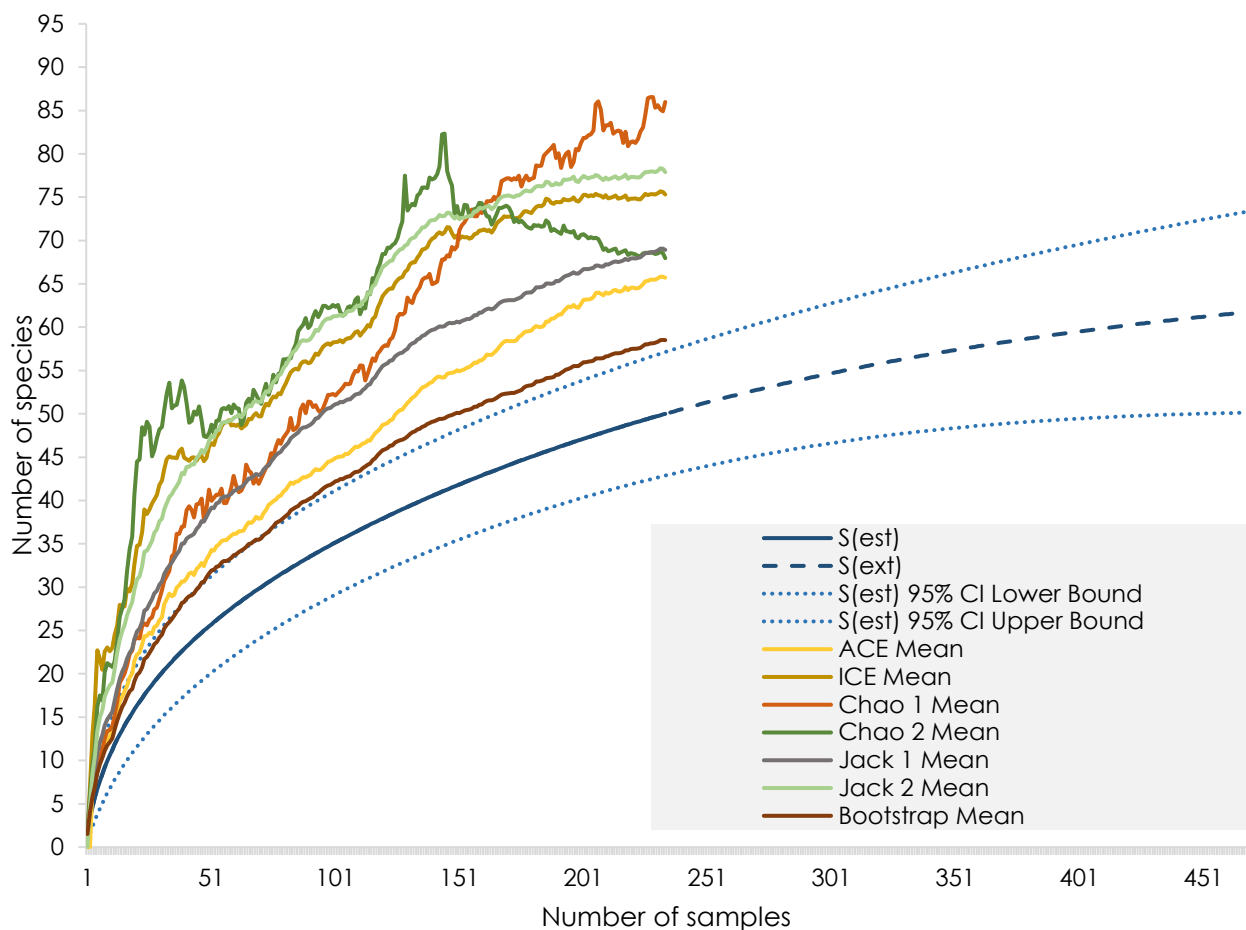


Figure 3-18: Stygofauna core species accumulation curves for observed (s_{est}), extrapolated (s_{ext}) and various species richness estimators (EstimateS (Colwell, 2013)) for Monitoring Zone 1 only in the Ethel Gorge TEC, sampled from 2009 to May 2022.

3.2.4 Indicator Species

The possibility of using an indicator species approach to the management of the Ethel Gorge Stygobiont TEC has been considered for almost a decade, with *Nitocrella karanovici* and *Chydaekata acuminata* being two of the species considered most useful for this purpose (Bennelongia, 2013) and (Stantec 2020).

To function as an effective indicator species in the assessment of ecosystem health, a taxon should ideally be representative of and unique to the community, well distributed within the specific area and have adequate population density (Hilty and Merenlender, 2000; Holt and Miller, 2010). However, stygofauna are naturally heterogeneous in distribution (Mammola et al., 2021), potentially limiting the utility of most taxa as indicator species. The usefulness of the two above mentioned species, as well as others in the TEC, will be examined in detail in an upcoming desktop report using all available monitoring data collected to date in the core TEC habitat and surrounding area.

4 Conclusion

4.1 Groundwater

The results of the Program indicated that groundwater quality was mostly below the groundwater trigger values (GTVs), or historic maxima, and trends were related to environmental and/or hydrogeological factors. The SWLs in both the 2021 dry season and 2022 wet season surveys were within the GTVs.

Groundwater pH was mostly alkaline. While some exceedances of the GTVs were reported at individual bores, all but one value was within the historic range for the respective MZs. Mean salinity in each of the MZs were within historical range and within GTVs.

Nutrient levels were variable with some individual bores exceeding the GTVs for nitrogen and phosphorus, with the mean values for the monitoring zones falling just outside the GTVs. The increased mean values were heavily influenced by a few bores and those bores typically exhibit raised nutrient concentrations.

Metal concentrations were generally below detection, suggesting groundwaters in the area may be characterised by naturally low metals content. Program-specific GTVs are unavailable for most metals at this time, however Barium and Boron have enough local historical measurements to construct preliminary Program-specific GTVs. Other metals are compared to established freshwater GTVs. The preliminary Project-specific GTV for barium is set at 0.04mg/L in MZ1 and 0.5mg/L across all Project zones, and for boron are set at 0.76 for the dry season and 0.63 for the wet. Note that these Project specific GTVs are preliminary.

Results suggest that groundwater in the area has naturally low metals content, but is naturally slightly enriched with barium, boron, iron, zinc and manganese. There is no perceived metal toxicity risk to the Ethel Gorge Aquifer Stygobiont TEC.

4.2 Stygofauna

A total of 25 stygofauna species were recorded during the Program from six higher level taxonomic groups; Amphipoda, Bathynellacea, Copepoda, Isopoda, Ostracoda and Oligochaeta. There was one new taxon identified from bore HEOP0574M, the amphipod species *Maarka* sp. nov. Several new haplotypes were recorded from DNA analyses in the Amphipoda, Isopoda and Oligochaeta.

Diversity and abundance of organisms in bores are lower than in historical surveys, however they are comparable with those in surveys undertaken in the previous five years. Diversity rarefaction curves indicate that not all the species in the Ethel Gorge Stygobiont TEC have been detected to date and that they are likely to be encountered with further samples. The most abundant taxon overall was *Diacyclops humphreysi*, but this was due to very high abundances in just two samples.

4.3 Summary and recommendations

There were no impacts on the physico-chemical parameters of groundwater in relation to mining activities during the Program, based on SWLs and groundwater quality. Metal concentration were also typically below detection or within acceptable limits for aquatic biota, posing no risk to the Ethel Gorge Aquifer Stygobiont TEC. Arsenic is the only metal with concentrations considerably higher than GTVs, however this was limited to a single bore in MZ 1B, potentially reflecting natural weathering. The concentrations have been consistent over time and are not considered to present a risk to the Ethel Gorge Aquifer Stygobiont TEC. Trends in the stygofauna community show consistent levels of diversity, abundance and composition to recent surveys.

Longer term decreasing trends in diversity (taxa per bore) are likely to reflect climate variability on those same timescales.

The findings of the Program along with previous surveys indicate that current groundwater management practices have been appropriate to prevent potential impacts to the Ethel Gorge stygofauna TEC from BHP WAIO operations. It is also considered that adequate saturation of the core habitat has been maintained, enabling the persistence of stygofauna.

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- MWH 2016b Salinity Tolerance of Ethel Gorge Stygofauna TEC, Report prepared for BHP Billiton Iron Ore.
- RPS 2013 Eastern Pilbara Hub: Ecohydrological conceptual model
- Smith, E., Smith, J., Smith, L., Biswas, T., Correll, R. and Naidu, R. 2003. Arsenic in Australian environment: an overview. *Journal of Environmental Science and Health, Part A* 38(1), 223-239.
- Stantec 2017 Ethel Gorge Stygofauna Monitoring Program: 2017, Report prepared for BHP Iron Ore, Perth, Western Australia.
- Stantec 2022 Eastern Ridge and Jimblebar stygofauna monitoring 2020/2021, BHP Western Australia Iron Ore.
- Subterranean Ecology 2013 Ethel Gorge Aquifer Threatened Ecological Community Consolidated Taxonomy.

Appendices

We design with community in mind



Appendix A Program sampling effort

Table A1: Details of bores sampled during the 2021 dry season survey and 2022 wet season survey.

Bore Code	Previous Bore Code	Latitude (DMS)	Longitude (DMS)	Elevation (AHD)	Within TEC?	Monitoring Zone	Area Occurs in	Aquifer Unit	Aquifer Screened	Comments
HEOP0388	W79D	23°17'47"S	119°51'44"E	513	No	1	Fortescue River - Upper Catchment	Orebody - Brockman Iron Formation	Unknown	Within Brockman Iron Formation
HEOP0417	W107	23°19'41"S	119°51'29"E	508	Yes	1	Fortescue River - Confluence zone	Upper Alluvial - palaeochannel over proterzoic bedrock	Screened calcrete	Downstream Ophthalmia Dam and within Fortescue River riparian zone
HEOP0425	W115	23°19'33"S	119°52'19"E	509	Yes	1	Fortescue River - Confluence zone	Upper Alluvial - palaeochannel over proterzoic bedrock	Screened over shale mostly, 2 m over gravel	Downstream Ophthalmia Dam and just outside Fortescue River & Warrawanda Creek confluence riparian zone
HEOP0504	W193D	23°17'57"S	119°51'57"E	504	No	1	Ethel Gorge	Upper Alluvial / calcrete	Unknown	Within Ethel Gorge riparian zone
HEOP0574M	W262	23°18'22"S	119°51'42"E	506	Yes	1	Ethel Gorge	Upper Alluvial / calcrete	Shallow bore Shallow bore screened in gravel and calcrete	Within Ethel Gorge calcrete within riparian zone
OB23REG1		23°19'37"S	119°50'59"E	512	Yes	1	Homestead Creek Catchment	Upper Alluvial - palaeochannel over proterzoic bedrock	Unknown	Outside Homestead Creek riparian zone
T399		23°17'03"S	119°52'07"E	502	No	1	Fortescue River - Upper Catchment	Upper Alluvial - palaeochannel over proterzoic bedrock	Unknown	Within riparian zone of tributary of Fortescue River
W152	HEOP0462M	23°15'54"S	119°53'12"E	498	No	1	Fortescue River - Upper Catchment	Upper Alluvial - palaeochannel over proterzoic bedrock	Unknown	Near Fortescue River riparian zone
W056	W56	23°18'29"S	119°51'39"E	507	Yes	1	Ethel Gorge	Upper Alluvial / calcrete	Screened only in weathered bedrock	Within Ethel Gorge calcrete elevated above riparian flood zone
W116		23°14'48"S	119°54'26"E	494	No	1	Fortescue River - Upper Catchment	Upper Alluvial - palaeochannel over proterzoic bedrock	Screened over shale mostly, 10 m over gravel	Near Fortescue River riparian zone
W117		23°14'43"S	119°54'12"E	496	No	1	Fortescue River - Upper Catchment	Upper Alluvial - palaeochannel over proterzoic bedrock	Unknown. Log indicates gravel (0-25 mbgl) over shale (25-38.4 mbgl)	Near Fortescue River riparian zone
EEX931		23°20'11"S	119°52'49"E	509	Yes	1B	Fortescue River - Confluence zone	Upper Alluvial - palaeochannel over proterozoic bedrock	Unknown	Is situated approx. 250 m north (downstream) of Ophthalmia Dam wall
HEA0121	WP23-12i	23°19'07"S	119°50'56"E	508	Yes	3	Homestead Creek Catchment	Orebody - Brockman Iron Formation	Within Brockman Iron Formation - requires Pit Access	Within Brockman Iron Formation
HEA0126	WP14S	23°18'57"S	119°51'08"E	507	Yes	3	Homestead Creek Catchment	Orebody - Brockman Iron Formation	Within Brockman Iron Formation - requires Pit access	Within Brockman Iron Formation
HEA0133	P20S	23°19'01"S	119°51'05"E	508	Yes	3	Homestead Creek Catchment	Orebody - Brockman Iron Formation	Within Brockman Iron Formation - requires Pit access	Within Brockman Iron Formation
HEOP0524 - NEW		23°20'14"S	119°50'8"E	510	No	3	Homestead Creek Catchment	Upper Alluvial - palaeochannel over proterozoic bedrock	Unknown	Is situated approx. 1.1 kilometres west of Ophthalmia Dam wall.
T411A		23°20'34"S	119°47'16"E	526	No	3	Homestead Creek Catchment	Upper Alluvial - palaeochannel over proterzoic bedrock	Unknown	Within Homestead Creek riparian zone
HEOP0398M*	W088	23°23'37"S	119°49'17"E	521	No	4	Fortescue River Catchment	Upper Alluvial - palaeochannel over granites	Not within Fortescue River riparian zone. East of river	EWS Infrastructure constructed on top of bore - NPI were able to remove for the Program.
EA0285R	W196	23°24'07"S	119°50'25"E	518	No	4	Warrawanda Creek Catchment	Upper Alluvial - palaeochannel over granites	Unknown	Within low lying broad drainage area that is between Fortescue River and Warwanda Creek.
HEOP0524 - UNKNOWN3	UNKNOWN3	23°25'35"S	119°46'37"E	529	No	4	Fortescue River Catchment	Upper Alluvial - palaeochannel over granites	Unknown	Not within Fortescue River riparian zone. West of river
W028		23°24'12"S	119°47'46"E	523	No	4	Fortescue River Catchment	Upper Alluvial - palaeochannel over granites	Screened base of calcrete (largely unsaturated), sand and granite	Within Fortescue River riparian zone
W029		23°24'13"S	119°47'45"E	517	No	4	Fortescue River Catchment	Upper Alluvial - palaeochannel over granites	Screened base of calcrete (largely unsaturated), sand and granite	Within Fortescue River riparian zone
W201		23°23'52"S	119°49'52"E	532	No	4	Warrawanda Creek Catchment	Upper Alluvial - palaeochannel over granites	Unknown	Within low lying broad drainage area that is between Fortescue River and Warrawanda Creek and shows expressions of groundwater salinity being high and close to surface through vegetation type present and salty soil crust. Falls within area that salt has naturally accumulated due to low groundwater flow regime.
W231		23°12'45"S	119°54'18"E	490	No	5	Fortescue River - Upper Catchment	Upper Alluvial - palaeochannel over proterzoic bedrock	Screened mostly in basement.	Approx. 1.25 km from confluence of Kalgan Creek and Fortescue River
HEOP0317M	W013	23°20'21"S	119°45'39"E	533	No	6	Whaleback Creek Catchment	Upper Alluvial - palaeochannel over proterzoic bedrock	Unknown.	Within Whaleback Creek riparian zone

Appendix B Historic SWL data

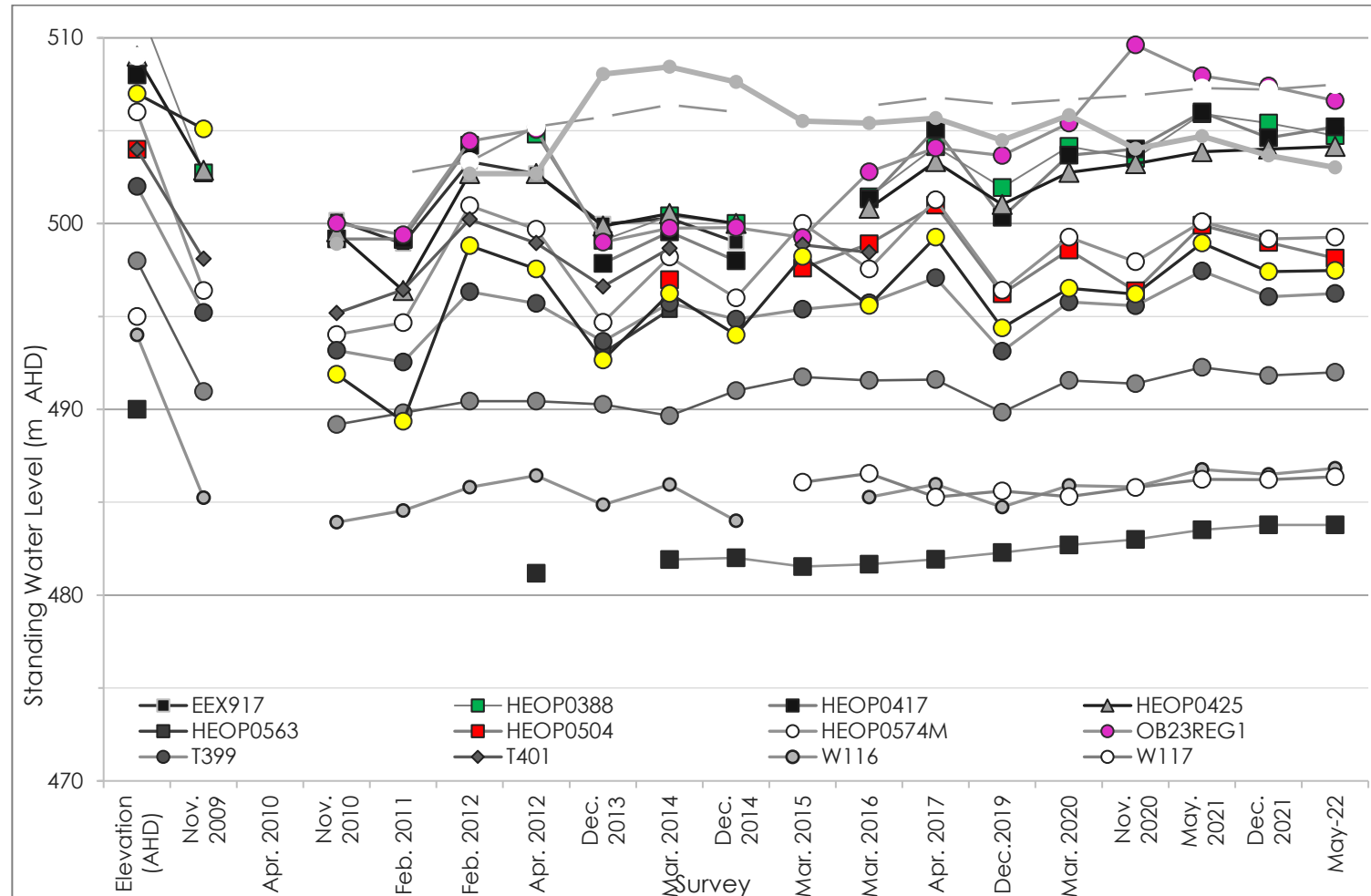


Figure B1: Historic SWL from monitored bores from 2009 to 2022 in MZ1, MZ1B and MZ5

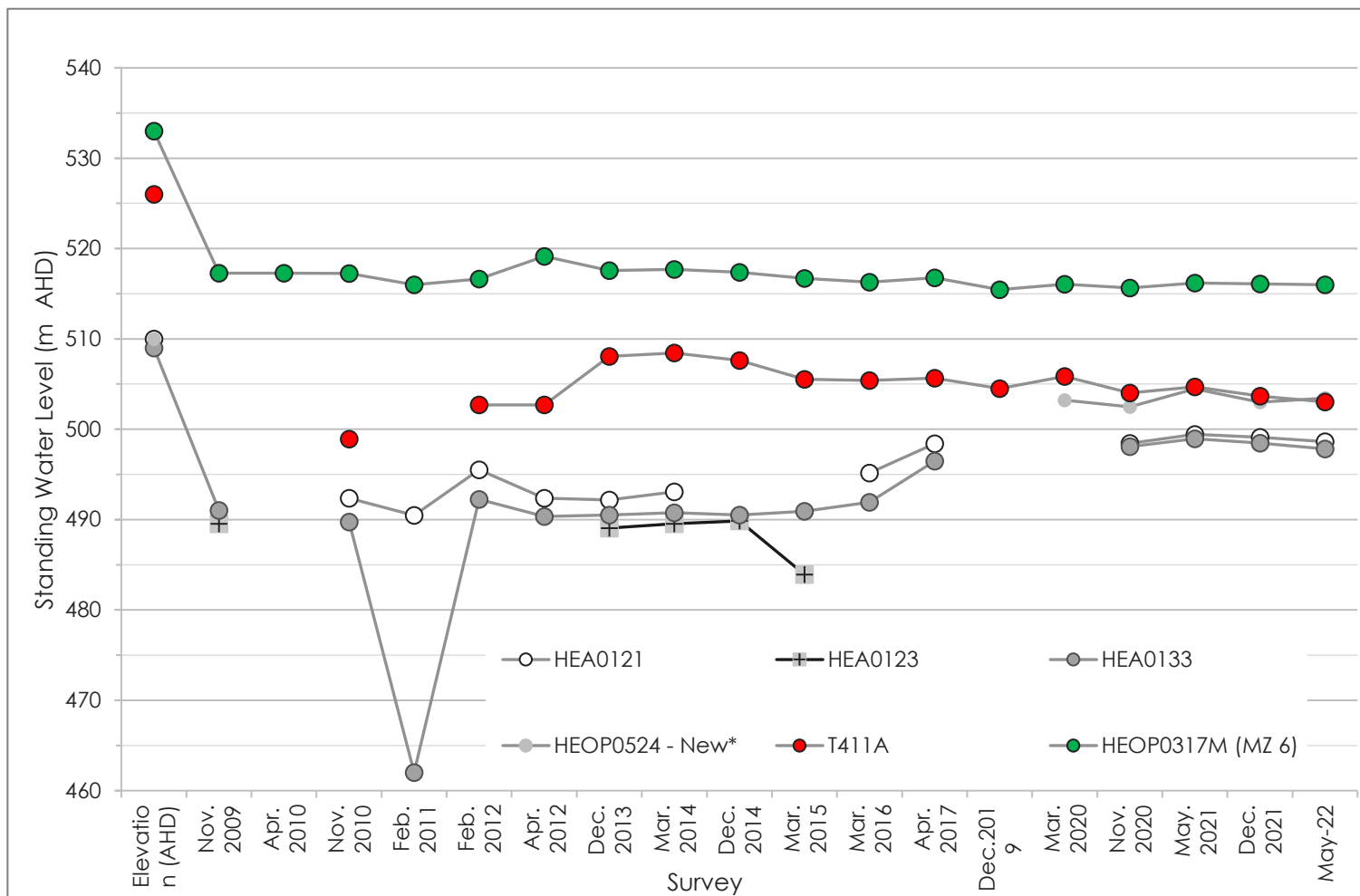


Figure B2: Historic SWL from monitored bores from 2009 to 2022 in MZ3 and MZ6

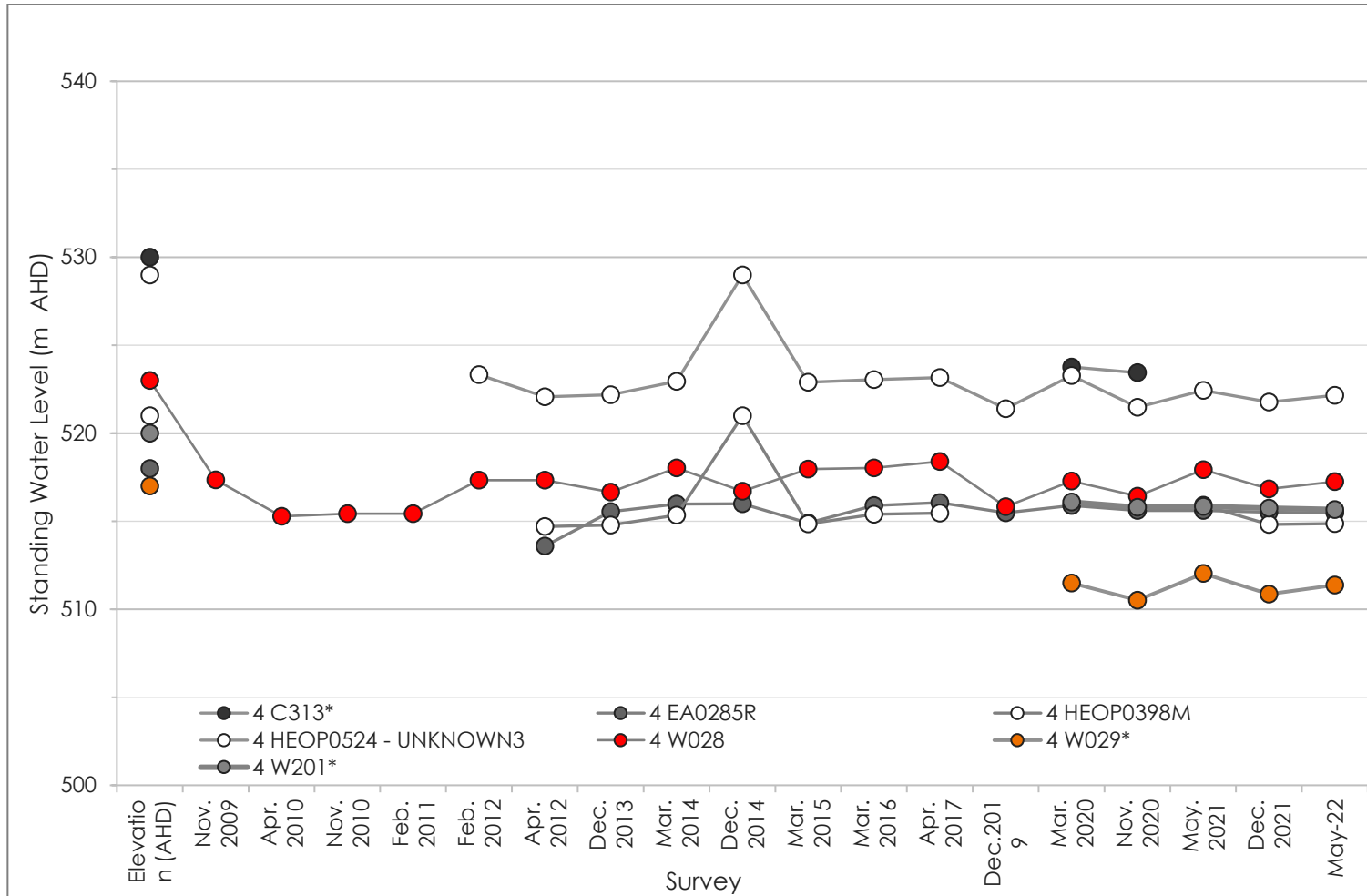


Figure B3: Historic SWL from monitored bores from 2009 to 2022 in MZ4

Appendix C Molecular identification of stygofauna for the 2021 dry season survey and 2022 wet season survey (Leijs, 2022).

Molecular identification of stygofauna (Paramelitidae, Phreodrilidae, Naididae and Tainisopidae) from Ethel Gorge, Western Australia

Summary

- Three species of Paramelitid amphipods were identified, which matched species and haplotypes already known from the area. A fourth species could not be matched with any other in our database and should be considered new.
- One species of Phreodrilid oligochaete and one species of Naidid oligochaete were found, both matching species identified in earlier work. Both species had haplotypes not found before.
- Two specimens of *Pygolabis humphreysi* were sequenced, of which one had a haplotype sampled before, and one had a very closely related haplotype not found before.

Methods

Biodiversity assessment of the collected fauna (Table 1) was performed using PCR amplification and sequencing in both directions of a 648 bp fragment of CO1, commonly used for DNA barcoding (Hebert et al. 2003). The sequences were added to large datasets that consists of related taxa from other areas complemented with published data from Genbank and unpublished sequence data at the South Australian Museum and the Western Australian Museum.

Phylogenetic analyses using neighbour joining of uncorrected sequence distances in PAUP* (Swofford 1998) were used to match the received specimens with previously identified analysed specimens. Results of phylogenetic analyses are presented as partial phylogenetic trees showing the target species with some closest related species. Results were compared with and build on to earlier reports, particularly with species naming codes and haplotype diversity.

Extraction	code	Stantec Ident.	SAM Identification	haplotype	locality	extract. date	coll. date	DNA result
ST2193	LN56169	Phreodrilidae	Naididae <i>Pristina</i> sp. OB	9(new)	HEOPO388	18-Jul-22	11/05/2022	good seq.
ST2194	LN56933	Chydaekata	<i>C. acuminata</i>	1	HEAO126	18-Jul-22	12/05/2022	good seq.
ST2195	LN56681	<i>Pygolabis humphreysi</i>	<i>P. humphreysi</i>	24a (new)	HEOPO425	18-Jul-22	11/05/2022	good seq.
ST2196	LN57201	Phreodrilidae	Phreodrilidae sp.3 (OP1)	8	HEOPO524-Unknown 3	18-Jul-22	10/05/2022	good seq.
ST2197	LN57193	Chydaekata	<i>C. acuminata</i>	1	T399	18-Jul-22	12/05/2022	good seq.
ST2198	LN57194	Chydaekata AMP005	<i>C. acuminata</i>	1	T399	18-Jul-22	12/05/2022	good seq.
ST2199	LN57192	Chydaekata	Paramelitid OB2	1	W152	18-Jul-22	9/05/2022	good seq.
ST2200	LN39327	<i>Pygolabis humphreysi</i>	<i>P. humphreysi</i>	24	HEOPO425	18-Jul-22	7/12/2021	good seq.
ST2201	LN57191	Chydaekata			HEOPO574M	18-Jul-22	7/12/2012	seq. failed
ST2202	LN57195	Amphipoda indet	<i>Maarka</i> sp. (new)	new	HEOPO574M	18-Jul-22	7/12/2012	good seq.
ST2203	LN56946	Maarka sp			HEOPO574M	18-Jul-22	7/12/2012	seq. failed
ST2204	LN57190	Chydaekata	<i>C. sp. OB1-AMP005</i>	1	W028	18-Jul-22	9/12/2021	good seq.
ST2205	LN57217	Chydaekata AMP005	<i>C. sp. OB1-AMP005</i>	1	W029	18-Jul-22	9/12/2021	good seq.
ST2206	LN57218	Chydaekata AMP005	<i>C. acuminata</i>	1	W152	18-Jul-22	7/12/2021	good seq.
ST2207	LN57202	Phreodrilidae	Phreodrilidae sp.3 (OP1)	9	W152	18-Jul-22	9/05/2022	good seq.

Table 1. Overview of the Paramelitidae and Phreodrilidae specimens analysed from Ophthalmia Dam. The first column gives the DNA extraction numbers, the last column indicates whether the DNA sequencing was successful. The yellow highlighted specimens had weak PCR's and did not result in a DNA sequences. The orange highlighted fields show updated identifications.

Results

Amphipoda

Eight out of the ten received amphipod specimens resulted in high quality sequences (Table 1). The amphipod neighbour-joining analysis showed that seven of the sequenced specimens closely matched species and haplotypes sampled before: These are *Chydaekata acuminata* haplotype 1 (Table 1; ST2194, ST2197, ST2198, ST2206); *Chydaekata* sp. *OB-AMP005* (Table 1: ST2204, ST2205); and Paramelitid OB2 (ST2199). One specimen, ST2202-LN57195 grouped with two Paramelitid species identified as *Maarrka*. The pairwise sequence divergence of this specimen with its closest sister species (Figure 1), species found in Weeli wolli Creek and Marillana Creek, is 12.65-13.65 %. These large sequence divergences indicate that specimen ST2202-LN57195 should be considered as a species not detected before.



Figure 1. Partial neighbour joining cladogram of *Maarrka*. Indicated in yellow is the newly sequenced specimens.

Naididae

One Naididae specimen was sequenced and matched previously sequenced specimens belonging to *Pristina* sp. *OB*. The haplotype diversity in this species is relatively high: 9 different haplotypes were found in ten sequenced specimens. The new sequenced specimen showed an additional haplotype (Figure 2) related to haplotype 1.

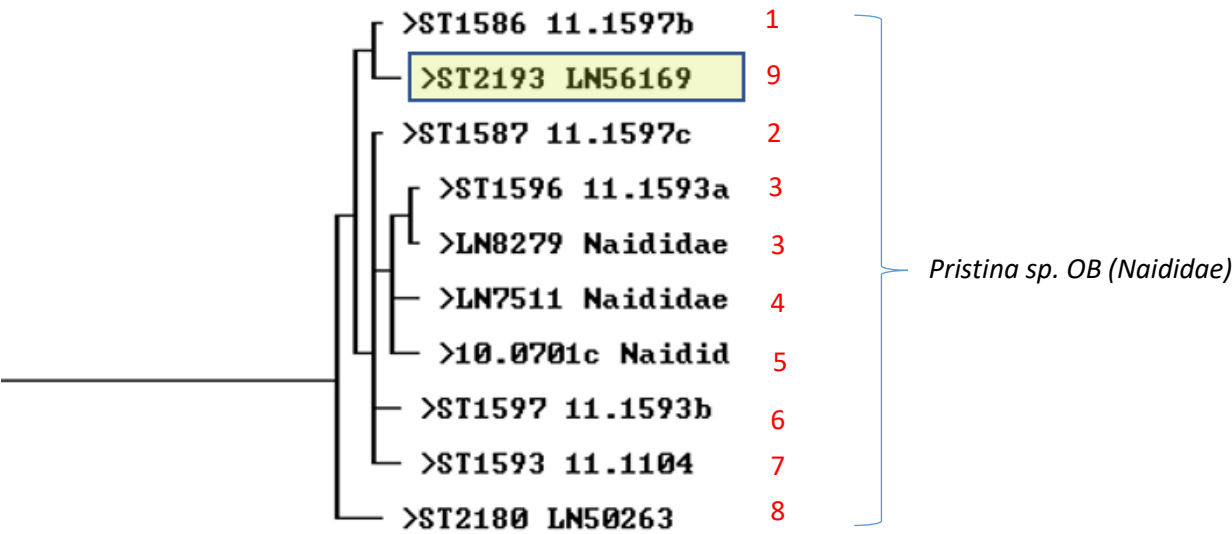


Figure 2. Partial neighbour joining cladogram of Oligochaeta. Indicated in yellow is the newly sequenced specimen. Haplotypes are indicated with numbers in red.

Phreodrilidae

The two sequenced Phreodrilidae specimens belonged to a species previously sequenced from the area. Both specimens had haplotypes not found before (Figure 3).

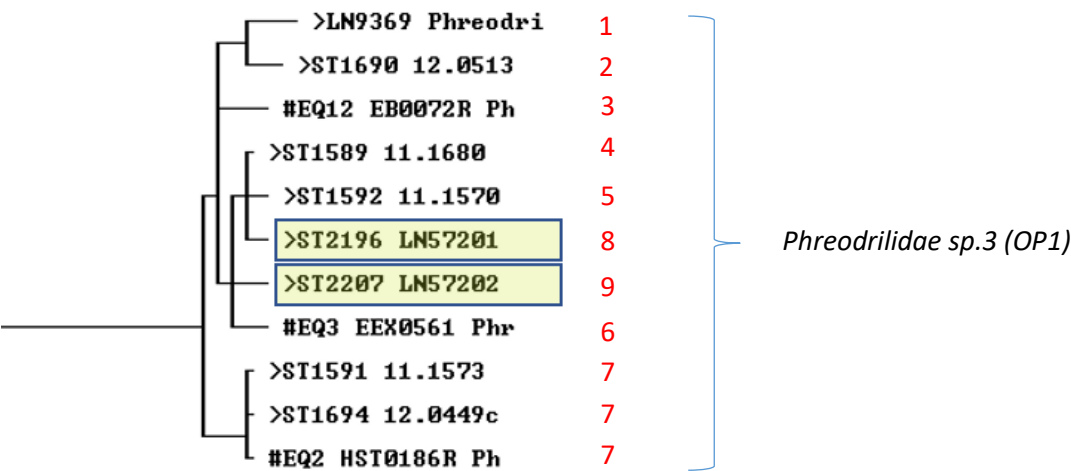


Figure 3. Partial neighbour joining cladogram of Phreodillidae. Indicated in yellow are the newly sequenced specimens. Haplotypes are indicated with numbers in red.

Taenisopidae

Two specimens of *Pygolabis humphreysi* were sequenced (Table 1, Figure 4.), of which ST2200-LN39327 had a haplotype sampled before (haplotype 24), and ST2195-LN56681 only had one nucleotide difference (out of 648) compared to ST2200-LN39327.

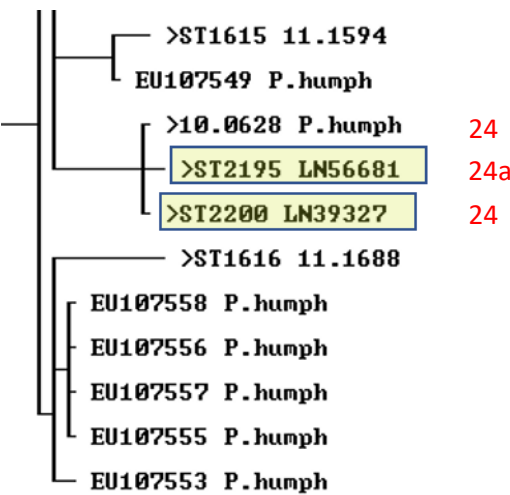


Figure 4. Partial neighbour joining cladogram of *Pygolabis humphreysi*. Indicated in yellow are the newly sequenced specimens. Haplotypes are indicated with numbers in red.

Sequences

Oligochaeta

>ST2193_LN56169 (Pristina sp. OB haplotype 9)

GCCAGTGGTCAACAAATCATAAAGATATTGGGACACTCTACCTTATTTTAGGGGTCTGAGCCGGAATAGT
CGGAACCTGGAACAAGAATTCTAATTCGAGCTGAGTTATCACAACCGGGATCATTTTTAGGAAGGGATCAA
CTATATAACACCCTTGTAACCTGCACATGCATTTTTAATAATCTTCTTTCTGGTCATACCAGTATTTATTG
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GGAACCGGATGAACTGTTTACCCTCCGCTAGCAAGTAATATTGCTCACGCAGGACCCTCTGTAGACATGG
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TCACCCTGAAGTTTAGTCTAGAAGTTTTTTTTTGGGGGGGGAAGAAA

>ST2196_LN57201 (Phreodrilidae sp.3 (OP1) haplotype 8)

CCAGTGGTCAACAAATCATAAAGATATTGGAACCTTATACTTCCTATTAGGCATTTGAGCAGGAATAGTT
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TACTATTGCTCCTGTGCTACCAGTACTTGCCGGGGCAATTACTATACTTTTAACTGATCGAAATCTAAA
TACATCCTTCTTCGACCCTGCGGGGGGAGGAGACCCAATTCTATATCAACATCTCTTTTGATTTTTTGGT
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>ST2207_LN57202 (Phreodrilidae sp.3 (OP1) haplotype 9)

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GCTCCTGTGCTACCAGTACTTGCCGGGGCAATTACTATACTTTTAACTGATCGAAATCTAAATACATCC
TTCTTCGACCCTGCGGGGGGAGGAGACCCAATTCTATATCAACATCTCTTTTGATTTTTTGGTCACCCTG
AAGTTATC

Amphopoda

>ST2194_LN56933 (Chydaekata acuminata haplotype 1)

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ACCCTGAAGTTTAGTCATA

>ST2197_LN57193 (Chydaekata acuminata haplotype 1)

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>ST2198_LN57194 (Chydaekata acuminata haplotype 1)

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>ST2199_LN57192 (Paramelitid OB2 haplotype 1)

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CACCTGAAGTTAGT

>ST2204_LN57190 (Chydaekata sp. OB1-AMP005 haplotype 1)

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>ST2205_LN57217 (Chydaekata sp. OB1-AMP005 haplotype 1)

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ACCCTGAAGTTTAGTCAT

>ST2206_LN57218 (Chydaekata acuminata haplotype 1)

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ATAAGATTCTGATTACTACCTCCTTCATTAACATTACTATTAATAAGAGGTATAGTGGAAAGAGGAGTAG
GAACTGGTTGAACAGTCTACCCACCTTTATCCTCAACTATTTCTCATAGAGGAAGAAGAGTAGATATAGC
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AACATACGACCTTTACATATATCTATAGATATAAATACCTCTATTTGTATGATCAGTATTTATTACAGCTA
TTCTCTTACTTCTTTTATTACCAGTTTTAGCTGGTGCTATTACTATACTTCTTACTGATCGAAATCTAAA
TACCTCCTTTTTTCGATCCAAGAGGAGGAGGAGATCCTATTCTATACCAACACCTATTCTGATTTTTTTGGT
CACCTGAAGTTTAGTC

>ST2202_LN57195 (Maarrka sp.new haplotype 1)

GCAGTGGTCAACAAATCATAAAGATATTGGCACACTTTACTTTATTCTAGGTGCTTGATCTAGAATATTA
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TATATAATGTGATAGTTACAGCTCATGCTTTCATTATAATTTTTTTTATAGTAATGCCTATTATAAATTGG
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ATAAGTTTTTGACTCCTTCCTCCGTCTCTCACTCTACTTTTAATAAGAAGAATAGTAGAAAGAGGAGTAG
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TTCTCCTTCTTCTTTCTCTTCCAGTTCTTGCTGGAGCAATCACTATACTTTTAACCGATCGTAATTTAAA
TACTTCTTTTTTTGACCCTGTAGGAGGAGGTGACCCTATCCTTTATCAACATCTTTTCTGATTTTTTTGGT
CACCTGAAGTTAGT

Pygolabis humpreysi

>ST2195_LN56681 (haplotype 24a)

GCAGTGGTCAACAAATCATAAAGATATTGGTACTTTGTATTTTATTTTCGGTGCTTGGGCTGGTGCGGTT
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TACTTTTGCTATTGTCTGTTACCTGTACTCGCTGGGGCGATTACcATGCTATTAACGGATCGTAATTTAAA
TACTTCTTTTTTTGACCCAGAGGaGGTGGAGATCCTATTTTATTTCAACATTTATTTTGATTTTTTTGGT
CACCTGACTCTAAGTTCATACAAAATT

>ST2200_LN39327 (haplotype 24)

GCAGTGGTCAACAAATCATAAAGATATTGGTACTTTGTATTTTATTTTCGGTGCTTGGGCTGGTGCGGTT
GGTACAGGTCTTAGTATAAATTATTCGATCGGAGTTGGGTCAACCTGGCAGTTTTATCGGGGATGATCAAA
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GATTTTTTCTTTGCATTTAGCTGGGGCTTCTTCTATTTTGAGGGCTATCAATTTTATCACCACCTTTTATT
AATATGCGAGCGATGGGGATGAGACTGGATCGTGTTCCCTTTATTTCGTGTGGTCGGTAGTTATTACGGCGG
TACTTTTGCTATTGTCTGTTACCTGTACTCGCTGGGGCGATTACGATGCTATTAACGGATCGTAATTTAAA
TACTTCTTTTTTTGACCCAGAGGAGGTGGAGATCCTATTTTATT

Appendix D Specimen records

Table D-1: full record of species' occurrence in the Project area.

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425 (W115)	24/08/2003	791464	7418372	50K	Ostracoda		Ostracoda indet.	11 to 25
P14-S	24/08/2003	791562	7418497	50K	Isopoda		Isopoda indet.	11 to 25
P20-D	24/08/2003	791464	7418372	50K	Amphipoda		Amphipoda indet.	2 to 5
P20-D	24/08/2003	791464	7418372	50K	Isopoda		Isopoda indet.	11 to 25
WPP3-1 / EES0501	24/08/2003	788027	7416903	50K	Amphipoda		Amphipoda indet.	1
WPP3-1 / EES0501	24/08/2003	788027	7416903	50K	Amphipoda		Amphipoda indet.	2 to 5
WPP3-1 / EES0501	24/08/2003	788027	7416903	50K	Isopoda		Isopoda indet.	1
WPP3-1 / EES0501	24/08/2003	788027	7416903	50K	Isopoda		Isopoda indet.	6 to 10
WPP3-4S	24/08/2003	787918	7416717	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	11 to 25
HEOP0425 (W115)	17/12/2007	811622	7415476	50K	Oligochaeta	Enchytraeidae	Enchytraeus indet.	
HEOP0425 (W115)	17/12/2007	811623	7415477	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	17/12/2007	811623	7415477	50K	Oligochaeta		Oligochaeta indet.	2 to 5
EA0284R	13/03/2008	789515	7419577	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1 (B33)	1
HEOP0425 (W115)	15/03/2008	787887	7420296	50K	Oligochaeta	Enchytraeidae	Enchytraeus indet.	1
HEOP0425 (W115)	15/03/2008	787887	7420295	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	19/03/2008	811622	7415476	50K	Oligochaeta	Enchytraeidae	Enchytraeus indet.	
HEOP0425 (W115)	19/03/2008	811625	7415471	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	19/03/2008	813071	7417619	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	19/03/2008	813072	7417620	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	
VT-C / HMG0064	19/03/2008	811622	7415476	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	
VT-C / HMG0064	19/03/2008	811625	7415471	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	2 to 5
EA0284R	21/03/2008	789511	7419571	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
EA0284R	31/07/2008	789511	7419571	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	2
OB25PH1	23/08/2008	788417	7416817	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2 to 5
OB25PH1	23/08/2008	788417	7416817	50K	Amphipoda	Paramelitidae	Paramelitidae spB	2 to 5
WP23-26 / HEA0144	23/08/2008	791334	7418635	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	11 to 25
EAS0049 / UNKN.REF. OPTH1	25/08/2008	793618	7416591	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	6 to 10
EAS0049 / UNKN.REF. OPTH1	25/08/2008	793618	7416591	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
EEX917	25/08/2008	793530	7417045	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
EEX917	25/08/2008	793530	7417045	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
EEX917	25/08/2008	793530	7417045	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2 to 5
EEX917	25/08/2008	793530	7417045	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1
EEX917	25/08/2008	793530	7417045	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	25/08/2008	793530	7417045	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	25/08/2008	793530	7417045	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	2 to 5
HEA0117	26/08/2008	791508	7418498	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	11 to 25
HEOP0425 (W115)	26/08/2008	791605	7418527	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	6 to 10
HEOP0425 (W115)	26/08/2008	791702	7418654	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2 to 5
HEOP0425 (W115)	26/08/2008	791714	7418659	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
P11S	26/08/2008	791505	7418484	50K	Amphipoda	Paramelitidae	Chydaekata indet.	6 to 10
P11S	26/08/2008	791505	7418484	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2 to 5
WP25/14 / HEC0117	26/08/2008	788868	7417073	50K	Amphipoda	Paramelitidae	Chydaekata indet.	2 to 5
HEA0143	27/08/2008	791781	7418723	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2 to 5
HEA0143	27/08/2008	791781	7418723	50K	Isopoda		Isopoda indet.	1
W229 / HEOP0468	27/08/2008	793400	7430867	50K	Amphipoda	Paramelitidae	Paramelitidae spA	1
W231	27/08/2008	798323	7429829	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
WP23-22S / HEA0138	27/08/2008	792221	7419067	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2 to 5
WP23-22S / HEA0138	27/08/2008	792221	7419067	50K	Amphipoda	Paramelitidae	Paramelitidae spA	2 to 5
WP23-23	27/08/2008	791870	7418860	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	11 to 25
OB23REG1	28/08/2008	791423	7417419	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	26 to 50
P13S / HEA0123	28/08/2008	791424	7418598	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
P13S / HEA0123	28/08/2008	791424	7418598	50K	Amphipoda	Paramelitidae	Maarrka etheli	1
WP236	28/08/2008	791754	7418119	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2 to 5
WP23-9S / HEA0114	28/08/2008	792013	7418810	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	2 to 5
WP23-9S / HEA0114	28/08/2008	792013	7418810	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
WP23-9S / HEA0114	28/08/2008	792013	7418810	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	6 to 10
WP23-9S / HEA0114	28/08/2008	792013	7418810	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1
HEOP0425 (W115)	29/08/2008	788363	7410083	50K	Oligochaeta	Phreodrilidae	Insulodrilus WA31	51 to 100
NONE/OB25P1UNK	29/08/2008	785566	7417334	50K	Amphipoda	Paramelitidae	Chydaekata indet.	2 to 5
W088	29/08/2008	788362	7410086	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
D14/7	30/08/2008	790237	7411760	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
HEOP0425 (W115)	30/08/2008	782000	7404224	50K	Ostracoda	Candonidae	Areacandona mulgae	51 to 100
HEOP0425 (W115)	30/08/2008	782000	7404224	50K	Ostracoda	Cypridae	Stenocypris malcolmsi	1

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425 (W115)	30/08/2008	785761	7409020	50K	Oligochaeta	Enchytraeidae	Enchytraeus PST1/PST2	2 to 5
HEOP0425 (W115)	30/08/2008	789784	7411758	50K	Oligochaeta	Enchytraeidae	Enchytraeidae PST1	101 to 500
HEOP0425 (W115)	30/08/2008	790299	7409115	50K	Oligochaeta	Phreodrilidae	Phreodrilus indet.	2 to 5
HEOP0425 (W115)	30/08/2008	790448	7413044	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	2 to 5
HEOP0425 (W115)	30/08/2008	793879	7409020	50K	Oligochaeta	Phreodrilidae	Phreodrilus indet.	1
W028	30/08/2008	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
W028	30/08/2008	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	26 to 50
W028	30/08/2008	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
W029	30/08/2008	785784	7409064	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
W029	30/08/2008	785784	7409064	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
W029	30/08/2008	785784	7409064	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	26 to 50
W178	30/08/2008	782000	7404224	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	1
W190	30/08/2008	793879	7409020	50K	Bathynellacea	Parabathynellidae	Atopobathynella indet.	2 to 5
W190	30/08/2008	793879	7409020	50K	Amphipoda	Paramelitidae	Chydaekata indet.	11 to 25
W190	30/08/2008	793879	7409020	50K	Copepoda: Cyclopoida	Cyclopidae	Metacyclops pilbraicus	1
F3 / HEOP0399	31/08/2008	790336	7415083	50K	Bathynellacea	Parabathynellidae	Atopobathynella indet.	1
HEOP0425 (W115)	31/08/2008	783760	7406443	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	11 to 25
HEOP0425 (W115)	31/08/2008	783763	7406531	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	26 to 50
HEOP0425 (W115)	31/08/2008	791748	7417311	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	6 to 10
W078 / HEOP0387	31/08/2008	791748	7417311	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
HEOP0425 (W115)	1/09/2008	785411	7416042	50K	Oligochaeta	Phreodrilidae	Phreodrilus indet.	1
HEOP0425 (W115)	1/09/2008	789494	7416982	50K	Oligochaeta	Phreodrilidae	Insulodrilus WA31	1
HEOP0425 (W115)	1/09/2008	789494	7416982	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	1/09/2008	789495	7416997	50K	Oligochaeta	Phreodrilidae	Phreodrilus ?peniculus	1
HEOP0425 (W115)	1/09/2008	791080	7418453	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	11 to 25
W273 / HEOP0585	1/09/2008	791080	7418453	50K	Amphipoda	Paramelitidae	Chydaekata indet.	2 to 5
W275	1/09/2008	789495	7416997	50K	Amphipoda	Paramelitidae	Chydaekata indet.	2 to 5
W276	1/09/2008	789494	7416982	50K	Amphipoda	Paramelitidae	Chydaekata indet.	2 to 5
EEX931	2/09/2008	793529	7417044	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
HEOP0425 (W115)	2/09/2008	791947	7417303	50K	Oligochaeta	Naididae	Naididae indet.	2 to 5
HEOP0425 (W115)	2/09/2008	792271	7417285	50K	Ostracoda	Cyprididae	Cypetta indet.	1
HEOP0425 (W115)	2/09/2008	792271	7417285	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	6 to 10
HEOP0425 (W115)	2/09/2008	792271	7417285	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
HEOP0425 (W115)	2/09/2008	792684	7419693	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	6 to 10
HEOP0425 (W115)	2/09/2008	793686	7417502	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	1



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425 (W115)	2/09/2008	794516	7416624	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	2/09/2008	794516	7416624	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
W078 / HEOP0387	2/09/2008	791947	7417303	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	2 to 5
W078 / HEOP0387	2/09/2008	791947	7417303	50K	Amphipoda	Paramelitidae	Chydaekata indet.	2 to 5
W078 / HEOP0387	2/09/2008	791947	7417303	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	6 to 10
W105 / HEOP0415	2/09/2008	792911	7417363	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
W105 / HEOP0415	2/09/2008	792911	7417363	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2 to 5
W105 / HEOP0415	2/09/2008	792911	7417363	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella indet.	1
W115 / HEOP0425	2/09/2008	793686	7417502	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	2 to 5
W115 / HEOP0425	2/09/2008	793686	7417502	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
W115 / HEOP0425	2/09/2008	793686	7417502	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	26 to 50
W115 / HEOP0425	2/09/2008	793686	7417502	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	26 to 50
W193S	2/09/2008	793141	7420398	50K	Amphipoda	Paramelitidae	Chydaekata indet.	6 to 10
W193S	2/09/2008	793141	7420398	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2 to 5
W247 / HEOP0559	2/09/2008	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2 to 5
W247 / HEOP0559	2/09/2008	795402	7416424	50K	Isopoda		Isopoda indet.	1
W262	2/09/2008	792684	7419693	50K	Amphipoda	Paramelitidae	Chydaekata indet.	2 to 5
W262	2/09/2008	792684	7419693	50K	Isopoda		Isopoda indet.	26 to 50
HEOP0425 (W115)	3/09/2008	790927	7417327	50K	Isopoda	Tainisopidae	Pygolabis indet.	1
W79D	3/09/2008	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1
W79D	3/09/2008	790927	7417327	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	2 to 5
EMR0041	4/09/2008	775208	7420882	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
EMR0041	4/09/2008	775208	7420882	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
EMR0041	4/09/2008	775208	7420882	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2 to 5
HEOP0425 (W115)	4/09/2008	774588	7420829	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	4/09/2008	774588	7420829	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	2 to 5
HEOP0425 (W115)	4/09/2008	774588	7420829	50K	Oligochaeta	Enchytraeidae	Enchytraeidae PST1	2 to 5
HEOP0425 (W115)	4/09/2008	774588	7420829	50K	Oligochaeta	Phreodrilidae	Insulodrilus indet.	1
HEOP0425 (W115)	4/09/2008	774588	7420829	50K	Oligochaeta	Phreodrilidae	Insulodrilus WA31	1
HEOP0425 (W115)	4/09/2008	774588	7420829	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	6 to 10
HEOP0425 (W115)	4/09/2008	775208	7420882	50K	Ostracoda	Candonidae	Candonidae indet.	1
HEOP0425 (W115)	4/09/2008	775208	7420882	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	2 to 5
HEOP0425 (W115)	4/09/2008	793568	7421251	50K	Oligochaeta	Naididae	Naididae poss1/1Aor5	26 to 50
HEOP0425 (W115)	4/09/2008	794715	7423031	50K	Oligochaeta	Enchytraeidae	Enchytraeidae PST1	2 to 5
HEOP0425 (W115)	4/09/2008	795334	7424212	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	2 to 5

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425 (W115)	4/09/2008	795334	7424212	50K	Oligochaeta	Enchytraeidae	Enchytraeidae PST1	2 to 5
HEOP0425 (W115)	4/09/2008	796549	7425024	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	4/09/2008	797017	7425857	50K	Oligochaeta	Phreodrilidae	Phreodrilus indet.	2 to 5
HEOP0425 (W115)	4/09/2008	797017	7425857	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	6 to 10
W152	4/09/2008	795334	7424212	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	26 to 50
W152	4/09/2008	795334	7424212	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
W152	4/09/2008	795334	7424212	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	1
W226	4/09/2008	797017	7425857	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	26 to 50
W226	4/09/2008	797017	7425857	50K	Copepoda: Harpacticoida	Ameiridae	Stygonitocrella bispinosa	1
W251	4/09/2008	794715	7423031	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	6 to 10
W260	4/09/2008	793568	7421251	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	2 to 5
W260	4/09/2008	793568	7421251	50K	Copepoda: Cyclopoida	Cyclopidae	Metacyclops pilbraicus	2 to 5
W260	4/09/2008	793568	7421251	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	6 to 10
WP122	4/09/2008	796549	7425024	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	11 to 25
WP122	4/09/2008	796549	7425024	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	11 to 25
HEOP0425 (W115)	24/11/2008	810597	7410107	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	6 to 10
HEOP0425 (W115)	24/11/2008	810609	7410205	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	2 to 5
HEOP0425 (W115)	24/11/2008	811559	7409899	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	101 to 500
HEOP0425 (W115)	25/11/2008	808788	7410231	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	2 to 5
HEOP0425 (W115)	25/11/2008	808807	7410230	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	2 to 5
HEOP0425 (W115)	25/11/2008	809097	7410221	50K	Ostracoda	Candonidae	Candonopsis indet.	1
HEOP0425 (W115)	25/11/2008	809105	7410261	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	2 to 5
HEOP0425 (W115)	25/11/2008	809948	7410488	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	11 to 25
HEOP0425 (W115)	25/11/2008	810266	7410151	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	101 to 500
HEOP0425 (W115)	25/11/2008	810266	7410151	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	101 to 500
HEOP0425 (W115)	26/11/2008	809550	7410599	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	26/11/2008	810294	7410800	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	26/11/2008	810867	7410480	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	6 to 10
HEOP0425 (W115)	26/11/2008	814925	7409615	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	26/11/2008	817324	7409463	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	6 to 10
HEOP0425 (W115)	27/11/2008	818499	7411105	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	1/04/2009	792282	7417310	50K	Ostracoda	Cyprididae	Cypetta seurati	11 to 25
HEOP0425 (W115)	1/04/2009	792282	7417310	50K	Ostracoda	Candonidae	Notocandona indet.	26 to 50
HEOP0425 (W115)	1/04/2009	792282	7417310	50K	Ostracoda		Ostracoda indet.	2 to 5
HEOP0425 (W115)	1/04/2009	792282	7417310	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	11 to 25



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425 (W115)	1/04/2009	792669	7419694	50K	Ostracoda	Candonidae	Candonidae indet.	1
HEOP0425 (W115)	1/04/2009	792669	7419694	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	1
HEOP0425 (W115)	1/04/2009	792901	7417371	50K	Ostracoda		Ostracoda indet.	1
HEOP0425 (W115)	1/04/2009	792901	7417371	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
W010 / HEOP0314	1/04/2009	788832	7414669	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2 to 5
W028	1/04/2009	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
W028	1/04/2009	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	11 to 25
W028	1/04/2009	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	11 to 25
W028	1/04/2009	785756	7409060	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	2 to 5
W029ii	1/04/2009	785766	7409023	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
W105 / HEOP0415	1/04/2009	792901	7417371	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	6 to 10
W105 / HEOP0415	1/04/2009	792901	7417371	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	6 to 10
W105 / HEOP0415	1/04/2009	792901	7417371	50K	Amphipoda	Paramelitidae	Maarrka indet.	1
W105 / HEOP0415	1/04/2009	792901	7417371	50K	Copepoda: Cyclopoida	Cyclopidae	Mesocyclops notius	11 to 25
W107 / HEOP0417	1/04/2009	792282	7417310	50K	Amphipoda	Paramelitidae	Chydaekata indet.	2 to 5
W107 / HEOP0417	1/04/2009	792282	7417310	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	51 to 100
W262	1/04/2009	792669	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Cyclopoida indet.	6 to 10
HEOP0425 (W115)	2/04/2009	810607	7410204	50K	Oligochaeta		Oligochaeta indet.	2 to 5
HEOP0425 (W115)	3/04/2009	810013	7410479	50K	Oligochaeta		Oligochaeta indet.	11 to 25
HEOP0425 (W115)	4/04/2009	809098	7410268	50K	Ostracoda		Ostracoda indet.	1
HEOP0425 (W115)	4/04/2009	809553	7410603	50K	Ostracoda	Candonidae	Notocandona gratia	2 to 5
HEOP0425 (W115)	4/04/2009	809553	7410603	50K	Oligochaeta		Oligochaeta indet.	26 to 50
PP23	4/04/2009	808790	7410233	50K	Copepoda: Cyclopoida	Cyclopidae	Cyclopoida indet.	1
HEOP0425 (W115)	12/05/2009	774588	7420829	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	12/05/2009	785047	7415790	50K	Ostracoda		Ostracoda indet.	2 to 5
HEOP0425 (W115)	12/05/2009	785448	7416020	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	12/05/2009	785448	7416020	50K	Ostracoda		Ostracoda indet.	2 to 5
HEOP0425 (W115)	12/05/2009	785448	7416020	50K	Oligochaeta	Phreodrilidae	Phreodrilus indet.	1
HEOP0425 (W115)	12/05/2009	788100	7416344	50K	Oligochaeta		Oligochaeta indet.	11 to 25
HEOP0425 (W115)	12/05/2009	788100	7416344	50K	Ostracoda		Ostracoda indet.	6 to 10
HEOP0425 (W115)	12/05/2009	789496	7416974	50K	Oligochaeta		Oligochaeta indet.	1
HEOP0425 (W115)	12/05/2009	789497	7417002	50K	Oligochaeta		Oligochaeta indet.	6 to 10
HEOP0425 (W115)	12/05/2009	789497	7417002	50K	Isopoda	Tainisopidae	Pygolabis weeliwolli	1
W065 / HEOP0374	12/05/2009	788100	7416344	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	51 to 100
W276	12/05/2009	789496	7416974	50K	Amphipoda		Amphipoda indet.	26 to 50

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W276	12/05/2009	789496	7416974	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	26 to 50
W276	12/05/2009	789496	7416974	50K	Isopoda		Isopoda indet.	2 to 5
HEOP0425 (W115)	13/05/2009	791975	7417317	50K	Ostracoda		Ostracoda indet.	2 to 5
HEOP0425 (W115)	13/05/2009	791975	7417317	50K	Isopoda	Tainisopidae	Pygolabis weeliwolli	1
HEOP0425 (W115)	13/05/2009	792274	7417288	50K	Ostracoda		Ostracoda indet.	26 to 50
HEOP0425 (W115)	13/05/2009	792681	7409674	50K	Ostracoda		Ostracoda indet.	26 to 50
HEOP0425 (W115)	13/05/2009	792885	7417378	50K	Oligochaeta		Oligochaeta indet.	1
HEOP0425 (W115)	13/05/2009	792885	7417378	50K	Ostracoda		Ostracoda indet.	1
HEOP0425 (W115)	13/05/2009	795350	7424218	50K	Isopoda	Tainisopidae	Pygolabis weeliwolli	1
HEOP0425 (W115)	13/05/2009	797738	7432807	50K	Ostracoda		Ostracoda indet.	2 to 5
W078i / HEOP0387i	13/05/2009	791975	7417317	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
W078i / HEOP0387i	13/05/2009	791975	7417317	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	2 to 5
W105 / HEOP0415	13/05/2009	792885	7417378	50K	Amphipoda		Amphipoda indet.	2 to 5
W105 / HEOP0415	13/05/2009	792885	7417378	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	101 to 500
W105 / HEOP0415	13/05/2009	792885	7417378	50K	Isopoda		Isopoda indet.	1
W107 / HEOP0417	13/05/2009	792274	7417288	50K	Amphipoda		Amphipoda indet.	1
W107 / HEOP0417	13/05/2009	792274	7417288	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	101 to 500
W152	13/05/2009	795350	7424218	50K	Amphipoda		Amphipoda indet.	2 to 5
W152	13/05/2009	795350	7424218	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	101 to 500
W157D	13/05/2009	797847	7427959	50K	Amphipoda		Amphipoda indet.	1
W193	13/05/2009	793093	7420474	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	6 to 10
W213	13/05/2009	797738	7432807	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	1
W247 / HEOP0559	13/05/2009	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	26 to 50
W262	13/05/2009	792681	7409674	50K	Amphipoda		Amphipoda indet.	11 to 25
W262	13/05/2009	792681	7409674	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	11 to 25
HEOP0425 (W115)	14/05/2009	790901	7417461	50K	Ostracoda		Ostracoda indet.	101 to 500
HEOP0425 (W115)	14/05/2009	790935	7417331	50K	Ostracoda		Ostracoda indet.	11 to 25
HEOP0425 (W115)	14/05/2009	790935	7417331	50K	Isopoda	Tainisopidae	Pygolabis weeliwolli	1
HEOP0425 (W115)	14/05/2009	791498	7417287	50K	Oligochaeta		Oligochaeta indet.	2 to 5
HEOP0425 (W115)	14/05/2009	791498	7417287	50K	Ostracoda		Ostracoda indet.	1
HEOP0425 (W115)	14/05/2009	791498	7417287	50K	Isopoda	Tainisopidae	Pygolabis weeliwolli	1
HEOP0425 (W115)	14/05/2009	791939	7418257	50K	Ostracoda		Ostracoda indet.	11 to 25
HEOP0425 (W115)	14/05/2009	791970	7416640	50K	Ostracoda		Ostracoda indet.	1
HEOP0425 (W115)	14/05/2009	792121	7418670	50K	Ostracoda		Ostracoda indet.	2 to 5
W077	14/05/2009	791498	7417287	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1



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W077	14/05/2009	791498	7417287	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	26 to 50
W079D	14/05/2009	790935	7417331	50K	Amphipoda		Amphipoda indet.	2 to 5
W079D	14/05/2009	790935	7417331	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	51 to 100
W079S	14/05/2009	790901	7417461	50K	Amphipoda		Amphipoda indet.	6 to 10
W079S	14/05/2009	790901	7417461	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	26 to 50
W120 / HEOP0430	14/05/2009	792121	7418670	50K	Amphipoda		Amphipoda indet.	1
W120 / HEOP0430	14/05/2009	792121	7418670	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	11 to 25
W120 / HEOP0430	14/05/2009	792121	7418670	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	6 to 10
HEOP0425 (W115)	15/05/2009	781976	7404206	50K	Ostracoda		Ostracoda indet.	51 to 100
HEOP0425 (W115)	15/05/2009	783760	7406443	50K	Oligochaeta		Oligochaeta indet.	51 to 100
HEOP0425 (W115)	15/05/2009	785784	7409064	50K	Ostracoda		Ostracoda indet.	6 to 10
HEOP0425 (W115)	15/05/2009	785784	7409064	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	15/05/2009	788769	7402683	50K	Ostracoda		Ostracoda indet.	1
HEOP0425 (W115)	15/05/2009	789791	7411751	50K	Oligochaeta		Oligochaeta indet.	2 to 5
HEOP0425 (W115)	15/05/2009	790269	7409124	50K	Ostracoda		Ostracoda indet.	1
HEOP0425 (W115)	15/05/2009	790297	7409115	50K	Oligochaeta		Oligochaeta indet.	51 to 100
HEOP0425 (W115)	15/05/2009	793838	7409002	50K	Oligochaeta		Oligochaeta indet.	6 to 10
HEOP0425 (W115)	15/05/2009	793838	7409002	50K	Ostracoda		Ostracoda indet.	2 to 5
W013	15/05/2009	782300	7416227	50K	Amphipoda		Amphipoda indet.	1
W028	15/05/2009	785756	7409060	50K	Amphipoda		Amphipoda indet.	2 to 5
W028	15/05/2009	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	101 to 500
W029i	15/05/2009	785784	7409064	50K	Amphipoda		Amphipoda indet.	2 to 5
W029i	15/05/2009	785784	7409064	50K	Copepoda: Cyclopoida	Cyclopidae	Cyclopoida indet.	101 to 500
W029i	15/05/2009	785784	7409064	50K	Copepoda: Harpacticoida		Harpacticoida indet.	6 to 10
W099	15/05/2009	789791	7411751	50K	Amphipoda		Amphipoda indet.	2 to 5
W179	15/05/2009	782933	7405726	50K	Amphipoda		Amphipoda indet.	1
W179	15/05/2009	782933	7405726	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	1
W190	15/05/2009	793838	7409002	50K	Amphipoda		Amphipoda indet.	11 to 25
W190	15/05/2009	793838	7409002	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	2 to 5
W190	15/05/2009	793838	7409002	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	51 to 100
W196	15/05/2009	790297	7409115	50K	Copepoda: Cyclopoida	Cyclopidae	Cyclopoida indet.	26 to 50
EEX917	16/05/2009	793314	7416840	50K	Amphipoda		Amphipoda indet.	2 to 5
EEX917	16/05/2009	793314	7416840	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	101 to 500
HEOP0425 (W115)	16/05/2009	792846	7420507	50K	Oligochaeta		Oligochaeta indet.	51 to 100
HEOP0425 (W115)	16/05/2009	792846	7420507	50K	Ostracoda		Ostracoda indet.	101 to 500

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HEOP0425 (W115)	16/05/2009	793143	7420419	50K	Oligochaeta		Oligochaeta indet.	6 to 10
HEOP0425 (W115)	16/05/2009	793143	7420419	50K	Ostracoda		Ostracoda indet.	1
HEOP0425 (W115)	16/05/2009	793314	7416840	50K	Ostracoda		Ostracoda indet.	1
HEOP0425 (W115)	16/05/2009	793570	7421248	50K	Oligochaeta		Oligochaeta indet.	11 to 25
HEOP0425 (W115)	16/05/2009	793570	7421248	50K	Ostracoda		Ostracoda indet.	26 to 50
HEOP0425 (W115)	16/05/2009	793570	7421248	50K	Isopoda	Tainisopidae	Pygolabis weeliwolli	11 to 25
HEOP0425 (W115)	16/05/2009	794712	7423019	50K	Oligochaeta		Oligochaeta indet.	51 to 100
HEOP0425 (W115)	16/05/2009	794712	7423019	50K	Ostracoda		Ostracoda indet.	51 to 100
HEOP0425 (W115)	16/05/2009	794712	7423019	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	16/05/2009	796548	7425026	50K	Oligochaeta		Oligochaeta indet.	1
HEOP0425 (W115)	16/05/2009	797021	7425859	50K	Oligochaeta		Oligochaeta indet.	1
HEOP0425 (W115)	16/05/2009	797021	7425859	50K	Ostracoda		Ostracoda indet.	11 to 25
HEOP0425 (W115)	16/05/2009	797051	7426357	50K	Oligochaeta		Oligochaeta indet.	51 to 100
HEOP0425 (W115)	16/05/2009	797051	7426357	50K	Ostracoda		Ostracoda indet.	2 to 5
HEOP0425 (W115)	16/05/2009	797328	7429823	50K	Ostracoda		Ostracoda indet.	2 to 5
HEOP0425 (W115)	16/05/2009	797480	7426205	50K	Ostracoda		Ostracoda indet.	1
HEOP0425 (W115)	16/05/2009	797480	7426205	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	16/05/2009	797572	7425844	50K	Ostracoda		Ostracoda indet.	51 to 100
T401	16/05/2009	792846	7420507	50K	Amphipoda		Amphipoda indet.	1
T401	16/05/2009	792846	7420507	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	2 to 5
T401	16/05/2009	792846	7420507	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	51 to 100
W193S	16/05/2009	793143	7420419	50K	Amphipoda		Amphipoda indet.	2 to 5
W193S	16/05/2009	793143	7420419	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	6 to 10
W193S	16/05/2009	793143	7420419	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	26 to 50
W214	16/05/2009	797572	7425844	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
W214	16/05/2009	797572	7425844	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	101 to 500
W216	16/05/2009	798891	7430304	50K	Amphipoda		Amphipoda indet.	1
W216	16/05/2009	798891	7430304	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	51 to 100
W226	16/05/2009	797021	7425859	50K	Amphipoda		Amphipoda indet.	1
W231	16/05/2009	797328	7429823	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	2 to 5
W244	16/05/2009	798631	7429292	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
W244	16/05/2009	798631	7429292	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	1
W251	16/05/2009	794712	7423019	50K	Amphipoda		Amphipoda indet.	11 to 25
W251	16/05/2009	794712	7423019	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	101 to 500
W251	16/05/2009	794712	7423019	50K	Copepoda: Harpacticoida		Harpacticoida indet.	2 to 5



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W260	16/05/2009	793570	7421248	50K	Amphipoda		Amphipoda indet.	11 to 25
W260	16/05/2009	793570	7421248	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	51 to 100
WP116	16/05/2009	797480	7426205	50K	Amphipoda		Amphipoda indet.	2 to 5
WP116	16/05/2009	797480	7426205	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	2 to 5
WP116	16/05/2009	797480	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	11 to 25
WP117	16/05/2009	797051	7426357	50K	Amphipoda		Amphipoda indet.	1
WP117	16/05/2009	797051	7426357	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
WP117	16/05/2009	797051	7426357	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	501 to 1000
WP122	16/05/2009	796548	7425026	50K	Amphipoda		Amphipoda indet.	51 to 100
WP122	16/05/2009	796548	7425026	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
WP122	16/05/2009	796548	7425026	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	>1000
A Wall Composite	17/05/2009	791667	7416006	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	2 to 5
A Wall Composite	17/05/2009	791667	7416006	50K	Isopoda		Isopoda sp2	2 to 5
C Wall Comp	17/05/2009	794971	7415867	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	11 to 25
F5	17/05/2009	789311	7414640	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	6 to 10
HEOP0425 (W115)	17/05/2009	789311	7414640	50K	Oligochaeta		Oligochaeta indet.	2 to 5
HEOP0425 (W115)	17/05/2009	789311	7414640	50K	Ostracoda		Ostracoda indet.	2 to 5
HEOP0425 (W115)	17/05/2009	792217	7419069	50K	Oligochaeta		Oligochaeta indet.	1
HEOP0425 (W115)	17/05/2009	792217	7419069	50K	Ostracoda		Ostracoda indet.	2 to 5
HEOP0425 (W115)	17/05/2009	792219	7419067	50K	Oligochaeta		Oligochaeta indet.	51 to 100
HEOP0425 (W115)	17/05/2009	794516	7416621	50K	Oligochaeta		Oligochaeta indet.	2 to 5
P22D	17/05/2009	792222	7419066	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	2 to 5
P22I	17/05/2009	792219	7419067	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	26 to 50
P22S / HEA0139	17/05/2009	792217	7419069	50K	Amphipoda		Amphipoda indet.	1
P22S / HEA0139	17/05/2009	792217	7419069	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	11 to 25
W088	17/05/2009	788362	7410086	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	26 to 50
W088	17/05/2009	788362	7410086	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	11 to 25
HEOP0425 (W115)	21/05/2009	797746	7412644	50K	Oligochaeta		Oligochaeta indet.	2 to 5
HEOP0425 (W115)	21/05/2009	805054	7412794	50K	Ostracoda	Cyprididae	Cypetta vidua	26 to 50
HEOP0425 (W115)	21/05/2009	805054	7412794	50K	Oligochaeta		Oligochaeta indet.	2 to 5
HEOP0425 (W115)	21/05/2009	805672	7405445	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	11 to 25
HEOP0425 (W115)	21/05/2009	805672	7405445	50K	Oligochaeta	Naididae	Pristina sp. OB	1
HEOP0425 (W115)	21/05/2009	809275	7414245	50K	Oligochaeta		Oligochaeta indet.	2 to 5
HEOP0425 (W115)	21/05/2009	809275	7414245	50K	Ostracoda	Cypridopsidae	Sarscypridopsis ochracea	2 to 5
HEOP0425 (W115)	21/05/2009	809276	7414244	50K	Oligochaeta	Phreodrilidae	Phreodrilus indet.	

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425 (W115)	21/05/2009	809276	7414244	50K	Ostracoda	Cyprididae	Sarscypridopsis ochracea	
Ophthalmia	21/05/2009	797746	7412644	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris B7	6 to 10
HEOP0425 (W115)	23/09/2009	776240	7417036	50K	Ostracoda		Ostracoda indet.	26 to 50
WBGW019D	23/09/2009	775009	7416405	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	11 to 25
WBGW045D	23/09/2009	776240	7417036	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	501 to 1000
WBGW045D	23/09/2009	776240	7417036	50K	Bathynellacea	Parabathynellidae	Notobathynella indet.	2 to 5
HEOP0425 (W115)	24/09/2009	770553	7411315	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	6 to 10
HEOP0425 (W115)	24/09/2009	770556	7411370	50K	Ostracoda		Ostracoda indet.	2 to 5
HEOP0425 (W115)	24/09/2009	774911	7417474	50K	Isopoda	Tainisopidae	Pygolabis weeliwolli	1
HEOP0425 (W115)	24/09/2009	777878	7416420	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	24/09/2009	777878	7416420	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
WBGW0050D	24/09/2009	774911	7417474	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	6 to 10
WBGW007	24/09/2009	776651	7414100	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	6 to 10
WBGW010	24/09/2009	777878	7416420	50K	Amphipoda		Amphipoda indet.	2 to 5
WBGW010	24/09/2009	777878	7416420	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	2 to 5
WBGW010	24/09/2009	777878	7416420	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	26 to 50
HEOP0425 (W115)	25/09/2009	770549	7411068	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	11 to 25
HEOP0425 (W115)	27/09/2009	770946	7411106	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	11 to 25
HEOP0425 (W115)	27/09/2009	770948	7411056	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
F3NR	20/11/2009	790090	7415143	50K	Copepoda: Cyclopoida	Cyclopidae	Microcyclops varicans	2
F3NR	20/11/2009	790090	7415143	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB2	1
F3NR	20/11/2009	790090	7415143	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	9
HEOP0425 (W115)	20/11/2009	785756	7409060	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	20/11/2009	790090	7415143	50K	Ostracoda	Cyprididae	Ilyodromus indet.	1
HEOP0425 (W115)	20/11/2009	790090	7415143	50K	Ostracoda	Candonidae	Ostracoda sp. UNK8	1
W013	20/11/2009	782300	7416227	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	25
W028	20/11/2009	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	47
W028	20/11/2009	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	47
W028	20/11/2009	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	60
W028	20/11/2009	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	60
W028	20/11/2009	785756	7409060	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	21
W028	20/11/2009	785756	7409060	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
W028	20/11/2009	785756	7409060	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
W028	20/11/2009	785756	7409060	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	20
EX895	21/11/2009	793633	7416841	50K	Amphipoda	Paramelitidae	Chydaekata indet.	6



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
EX895	21/11/2009	793633	7416841	50K	Isopoda	Microcerberidae	Coxicerberus sp. OB1	1
EX895	21/11/2009	793633	7416841	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	48
EX895	21/11/2009	793633	7416841	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	9
EX895	21/11/2009	793633	7416841	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	30
EX895	21/11/2009	793633	7416841	50K	Ostracoda		Ostracoda indet.	1
EX895	21/11/2009	793633	7416841	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	7
EX895	21/11/2009	793633	7416841	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
EX895	21/11/2009	793633	7416841	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	1
EX895	21/11/2009	793633	7416841	50K	Oligochaeta	Naididae	Pristina sp. OB	1
HEOP0425 (W115)	21/11/2009	788162	7416862	50K	Ostracoda	Cypridae	Ilyodromus indet.	1
HEOP0425 (W115)	21/11/2009	788162	7416862	50K	Ostracoda	Candonidae	Ostracoda sp. UNK8	1
HEOP0425 (W115)	21/11/2009	791421	7418598	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	21/11/2009	791421	7418598	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	1
HEOP0425 (W115)	21/11/2009	791424	7418598	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	21/11/2009	791605	7418527	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
HEOP0425 (W115)	21/11/2009	792588	7419470	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
HEOP0425 (W115)	21/11/2009	792588	7419470	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	21/11/2009	793633	7416841	50K	Ostracoda	Candonidae	Candonidae indet.	1
HEOP0425 (W115)	21/11/2009	793633	7416841	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	9
HEOP0425 (W115)	21/11/2009	793633	7416841	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	1
HEOP0425 (W115)	21/11/2009	793633	7416841	50K	Oligochaeta	Naididae	Pristina sp. OB	1
HEOP0425 (W115)	21/11/2009	793687	7417497	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	7
HEOP0425 (W115)	21/11/2009	793687	7417497	50K	Amphipoda	Paramelitidae	Chydaekata indet.	2
HEOP0425 (W115)	21/11/2009	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	41
HEOP0425 (W115)	21/11/2009	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	2
HEOP0425 (W115)	21/11/2009	793687	7417497	50K	Ostracoda	Candonidae	Origocandona inanitas	5
HEOP0425 (W115)	21/11/2009	793687	7417497	50K	ostracoda	Candonidae	Origocandona inanitas	5
HEOP0425 (W115)	21/11/2009	793687	7417497	50K	Ostracoda	Candonidae	Ostracoda sp. UNK9	2 to 5
HEOP0425 (W115)	21/11/2009	793687	7417497	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	9
HEOP0425 (W115)	21/11/2009	793687	7417497	50K	Acarina	Pezidae	Peza sp. OB	5
HEOP0425 (W115)	21/11/2009	793687	7417497	50K	Ostracoda	Candonidae	Pilbaracandona colonia	2
HEOP0425 (W115)	21/11/2009	793687	7417497	50K	ostracoda	Candonidae	Pilbaracandona colonia	2
HEOP0425 (W115)	21/11/2009	793687	7417497	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	4
HEOP0425 (W115)	21/11/2009	793687	7417497	50K	ostracoda	Candonidae	Pilbaracandona eberhardi	4
HEOP0425 (W115)	21/11/2009	793687	7417497	50K	Oligochaeta	Naididae	Pristina sp. OB	1

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425 (W115)	21/11/2009	793687	7417497	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	21/11/2009	793687	7417497	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	21/11/2009	795402	7416424	50K	Ostracoda	Cypridae	Cypridae indet.	4
HEOP0425 (W115)	21/11/2009	795402	7416424	50K	Ostracoda	Cypridae	Sarscypridopsis ochracea	2 to 5
HEOP0425 (W115)	21/11/2009	796221	7425806	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
P13S / HEA0123	21/11/2009	791421	7418598	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2
P13S / HEA0123	21/11/2009	791421	7418598	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	1
P13S / HEA0123	21/11/2009	791421	7418598	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
P13S / HEA0123	21/11/2009	791421	7418598	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	1
P20S / HEA0134	21/11/2009	791605	7418527	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	16
P20S / HEA0134	21/11/2009	791605	7418527	50K	Ostracoda		Gomphodella hirsuta	1
W056	21/11/2009	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	1
W247 / HEOP0559	21/11/2009	795402	7416424	50K	Isopoda	Microcerberidae	Coxicerberus sp. OB1	3
W247 / HEOP0559	21/11/2009	795402	7416424	50K	Isopoda	Microcerberidae	Coxicerberus sp. OB1	3
W247 / HEOP0559	21/11/2009	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	53
W247 / HEOP0559	21/11/2009	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	53
W247 / HEOP0559	21/11/2009	795402	7416424	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	4
W247 / HEOP0559	21/11/2009	795402	7416424	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	4
W247 / HEOP0559	21/11/2009	795402	7416424	50K	Ostracoda		Sarscypridopsis ochracea	4
W56	21/11/2009	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	25
W56	21/11/2009	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	13
W56	21/11/09	792588	7419470	50K	Ostracoda		Gomphodella hirsuta	1
W56	21/11/2009	792588	7419470	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	1
W56	21/11/2009	792588	7419470	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	9
W56	21/11/2009	792588	7419470	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	2
W56	21/11/2009	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	1
W56	21/11/09	792588	7419470	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
WP126NRE	21/11/2009	796221	7425806	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	15
WP126NRE	21/11/2009	796221	7425806	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	7
WP126NRE	21/11/2009	796221	7425806	50K	ostracoda		Gomphodella hirsuta	1
WP126NRE	21/11/2009	796221	7425806	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	2
WP126NRE	21/11/2009	796221	7425806	50K	Copepoda: Cyclopoida	Cyclopidae	Orbuscyclops westaustraliensis	1
WP126NRE	21/11/2009	796221	7425806	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	2
WP126NRE	21/11/2009	796221	7425806	50K	Oligochaeta	Naididae	Pristina sp. OB	8
WP131	21/11/2009	797151	7428137	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	32



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
WP131	21/11/2009	797151	7428137	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	3
WP131	21/11/2009	797151	7428137	50K	Ostracoda	Candonidae	Notacandona gratia	30
WP131	21/11/2009	797151	7428137	50K	Copepoda: Cyclopoida	Cyclopidae	Orbuscyclops westaustraliensis	1
WP131	21/11/2009	797151	7428137	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	30
WP131	21/11/2009	797151	7428137	50K	Isopoda	Stenoniscidae	Stenoniscidae? sp. OB	2
HEOP0388	22/11/2009	790859	7417267	50K	Ostracoda	Candonidae	Candoninae indet.	1
HEOP0388	22/11/2009	790859	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	19
HEOP0388	22/11/2009	790859	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	2
HEOP0388	22/11/2009	790859	7417267	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	6
HEOP0388	22/11/2009	790859	7417267	50K	Ostracoda		Gomphodella hirsuta	1
HEOP0388	22/11/2009	790859	7417267	50K	Amphipoda	Paramelitidae	Maarka etheli	1
HEOP0388	22/11/2009	790859	7417267	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	1
HEOP0388	22/11/2009	790859	7417267	50K	Ostracoda	Candonidae	Origocandona inanitas	1
HEOP0388	22/11/2009	790859	7417267	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	2 to 5
HEOP0388	22/11/2009	790859	7417267	50K	Acarina	Pezidae	Peza sp. OB	2
HEOP0425 (W115)	22/11/2009	790859	7417267	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	6 to 10
HEOP0425 (W115)	22/11/2009	790859	7417267	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
HEOP0425 (W115)	22/11/2009	790859	7417267	50K	Ostracoda	Candonidae	Origocandona inanitas	1
HEOP0425 (W115)	22/11/2009	790859	7417267	50K	Ostracoda	Candonidae	Ostracoda sp. UNK3b	1
HEOP0425 (W115)	22/11/2009	790927	7417327	50K	Ostracoda	Candonidae	Candoninae indet.	1
HEOP0425 (W115)	22/11/2009	790927	7417327	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	6
HEOP0425 (W115)	22/11/2009	790927	7417327	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
HEOP0425 (W115)	22/11/2009	790927	7417327	50K	Ostracoda	Candonidae	Origocandona inanitas	1
HEOP0425 (W115)	22/11/2009	792677	7419694	50K	Ostracoda	Candonidae	Areacandona indet.	1
HEOP0425 (W115)	22/11/2009	792677	7419694	50K	Ostracoda	Candonidae	Candonidae indet.	1
HEOP0425 (W115)	22/11/2009	792677	7419694	50K	Ostracoda	Candonidae	Notocandona indet.	1
HEOP0425 (W115)	22/11/2009	792677	7419694	50K	Ostracoda	Candonidae	Ostracoda sp. UNK9	3
HEOP0425 (W115)	22/11/2009	792677	7419694	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	22/11/2009	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona colonia	4
HEOP0425 (W115)	22/11/2009	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	6
HEOP0425 (W115)	22/11/2009	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	2
HEOP0425 (W115)	22/11/2009	792845	7420504	50K	Ostracoda	Candonidae	Areacandona indet.	1
HEOP0425 (W115)	22/11/2009	792845	7420504	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	13
HEOP0425 (W115)	22/11/2009	792845	7420504	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	22/11/2009	792845	7420504	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	1

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425 (W115)	22/11/2009	793447	7422107	50K	Ostracoda	Candonidae	Areacandona indet.	1
HEOP0425 (W115)	22/11/2009	793447	7422107	50K	Ostracoda	Candonidae	Areacandona sp. OB2	2 to 5
HEOP0425 (W115)	22/11/2009	793447	7422107	50K	Ostracoda	Candonidae	Candonopsis tenuis	1
HEOP0425 (W115)	22/11/2009	793447	7422107	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	7
HEOP0425 (W115)	22/11/2009	793447	7422107	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	4
HEOP0425 (W115)	22/11/2009	793447	7422107	50K	Ostracoda	Candonidae	Origocandona inanitas	1
HEOP0425 (W115)	22/11/2009	793447	7422107	50K	Ostracoda	Candonidae	Ostracoda indet.	1
HEOP0425 (W115)	22/11/2009	793447	7422107	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	5
HEOP0425 (W115)	22/11/2009	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	11
HEOP0425 (W115)	22/11/2009	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	2
HEOP0425 (W115)	22/11/2009	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona sp. OB1	3
HEOP0425 (W115)	22/11/2009	795188	7424048	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	2
HEOP0425 (W115)	22/11/2009	795188	7424048	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	3
T399	22/11/2009	793447	7422107	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
T399	22/11/2009	793447	7422107	50K	Ostracoda		Candonopsis tenuis	1
T399	22/11/2009	793447	7422107	50K	Amphipoda	Paramelitidae	Chydaekata indet.	3
T399	22/11/2009	793447	7422107	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	300
T399	22/11/2009	793447	7422107	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	7
T399	22/11/2009	793447	7422107	50K	Ostracoda		Gomphodella hirsuta	4
T399	22/11/2009	793447	7422107	50K	Ostracoda	Candonidae	Origocandona inanitas	1
T399	22/11/2009	793447	7422107	50K	Ostracoda		Ostracoda indet.	1
T399	22/11/2009	793447	7422107	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	9
T399	22/11/2009	793447	7422107	50K	Acarina	Pezidae	Peza sp. OB	1
T399	22/11/2009	793447	7422107	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	5
T399	22/11/2009	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	11
T399	22/11/2009	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	2
T399	22/11/2009	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona sp. OB1	3
T399	22/11/2009	793447	7422107	50K	Oligochaeta	Naididae	Pristina sp. OB	4
T401	22/11/2009	792845	7420504	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	7
T401	22/11/2009	792845	7420504	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cockingi	9
T401	22/11/2009	792845	7420504	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	17
T401	22/11/2009	792845	7420504	50K	Ostracoda		Gomphodella hirsuta	13
T401	22/11/2009	792845	7420504	50K	Ostracoda		Ostracoda indet.	1
T401	22/11/2009	792845	7420504	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	8
T401	22/11/2009	792845	7420504	50K	Acarina	Pezidae	Peza sp. OB	1



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
T401	22/11/2009	792845	7420504	50K	Oligochaeta		Phreodrilidae indet.	1
T401	22/11/2009	792845	7420504	50K	Ostracoda		Pilbaracandona eberhardi	1
T401	22/11/2009	792845	7420504	50K	Oligochaeta	Naididae	Pristina sp. OB	28
T401	22/11/2009	792845	7420504	50K	Isopoda		Pygolabis humphreysi	1
W116	22/11/2009	797472	7426205	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
W116	22/11/2009	797472	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	156
W116	22/11/2009	797472	7426205	50K			Enchytraeidae sp. OB_MC	1
W116	22/11/2009	797472	7426205	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	3
W116	22/11/2009	797472	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Orbuscyclops westaustraliensis	18
W116	22/11/2009	797472	7426205	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	17
W116	22/11/2009	797472	7426205	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	7
W152	22/11/2009	795188	7424048	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
W152	22/11/2009	795188	7424048	50K	Amphipoda	Paramelitidae	Chydaekata indet.	4
W152	22/11/2009	795188	7424048	50K	Amphipoda	Paramelitidae	Chydaekata indet.	4
W152	22/11/2009	795188	7424048	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	178
W152	22/11/2009	795188	7424048	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	2
W152	22/11/2009	795188	7424048	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	11
W152	22/11/2009	795188	7424048	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	3
W152	22/11/2009	795188	7424048	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	3
W262	22/11/2009	792677	7419694	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	2
W262	22/11/2009	792677	7419694	50K	Bathynellacea	Bathynellidae	Bathynellidae sp. OB2	2
W262	22/11/2009	792677	7419694	50K	Bathynellacea	Parabathynellidae	Billibathynella sp. OB1	1
W262	22/11/2009	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	9
W262	22/11/2009	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	19
W262	22/11/2009	792677	7419694	50K	Amphipoda	Paramelitidae	Maarrka etheli	1
W262	22/11/2009	792677	7419694	50K	Ostracoda		Ostracoda indet.	2
W262	22/11/2009	792677	7419694	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	2
W262	22/11/2009	792677	7419694	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
W262	22/11/2009	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona colonia	4
W262	22/11/2009	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	6
W262	22/11/2009	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	2
W79D	22/11/2009	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	19
W79D	22/11/2009	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	2
W79D	22/11/2009	790927	7417327	50K	Amphipoda	Paramelitidae	Maarrka etheli	1
W79D	22/11/2009	790927	7417327	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	1

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W79D	22/11/2009	790927	7417327	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	3
W79D	22/11/2009	790927	7417327	50K	Acarina	Pezidae	Peza sp. OB	2
WBGW007	20/01/2010	776651	7414100	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	2 to 5
WBGW007	20/01/2010	776651	7414100	50K			Oligochaeta indet.	2 to 5
WBGW010	20/01/2010	777878	7416420	50K	Amphipoda		Amphipoda indet.	11 to 25
WBGW010	20/01/2010	777878	7416420	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	2 to 5
WBGW010	20/01/2010	777878	7416420	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	6 to 10
WBGW045D	20/01/2010	776240	7417036	50K	Amphipoda		Amphipoda indet.	1
WBGW045D	20/01/2010	776240	7417036	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	101 to 500
WBGW045D	20/01/2010	776240	7417036	50K	Bathynellacea	Parabathynellidae	Notobathynella indet.	2 to 5
EKP0271	21/01/2010	770556	7411370	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	6 to 10
HEA0133	20/04/2010	791605	7418527	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	112
HEOP0425 (W115)	20/04/2010	782300	7416227	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
HEOP0425 (W115)	20/04/2010	785756	7409060	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
W013	20/04/2010	782300	7416227	50K	Bathynellacea	Bathynellidae	Bathynellidae sp. OB2	1
W013	20/04/2010	782300	7416227	50K	Bathynellacea	Bathynellidae	Bathynellidae sp. OB2	1
W013	20/04/2010	782300	7416227	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	80
W013	20/04/2010	782300	7416227	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	6
W013	20/04/2010	782300	7416227	50K			Pygolabis humphreysi	1
W028	20/04/2010	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata sp. OB1	1
W028	20/04/2010	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata sp. OB1	1
W028	20/04/2010	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1000
W028	20/04/2010	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1000
W028	20/04/2010	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	640
W028	20/04/2010	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	640
W028	20/04/2010	785756	7409060	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	160
W028	20/04/2010	785756	7409060	50K			Pygolabis sp. OB	1
W028	20/04/2010	785756	7409060	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	160
HEA0123	21/04/2010	791421	7418598	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	5
HEOP0425	21/04/2010	793687	7417497	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	90
HEOP0425	21/04/2010	793687	7417497	50K	Amphipoda	Paramelitidae	Chydaekata indet.	3
HEOP0425	21/04/2010	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	255
HEOP0425	21/04/2010	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	30
HEOP0425	21/04/2010	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Orbuscyclops westaustraliensis	15
HEOP0425	21/04/2010	793687	7417497	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	3



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425	21/04/2010	793687	7417497	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	10
HEOP0425	21/04/2010	793687	7417497	50K	Acarina	Pezidae	Peza sp. OB	8
HEOP0425	21/04/2010	793687	7417497	50K	oligochaeta	Phreodrilidae	Phreodrilidae inset.	7
HEOP0425	21/04/2010	793687	7417497	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	7
HEOP0559	21/04/2010	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	20
T399	21/04/2010	793447	7422107	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1000
T399	21/04/2010	793447	7422107	50K	Ostracoda		Gomphodella hirsuta	2
T399	21/04/2010	793447	7422107	50K	Ostracoda		Origocandona inanita	4
T399	21/04/2010	793447	7422107	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	13
T399	21/04/2010	793447	7422107	50K	Oligochaeta		Phreodrilidae indet.	4
T399	21/04/2010	793447	7422107	50K	Ostracoda		Pibarcandona kosmos	2
T399	21/04/2010	793447	7422107	50K	Ostracoda		Pilbaracandona colonia	1
T399	21/04/2010	793447	7422107	50K	Ostracoda		Pilbaracandona eberhardi	9
T399	21/04/2010	793447	7422107	50K	Oligochaeta		Pristina sp. OB	10
T399	21/04/2010	793447	7422107	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
T401	21/04/2010	792845	7420504	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	9
T401	21/04/2010	792845	7420504	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cockingi	4
T401	21/04/2010	792845	7420504	50K	Oligochaeta	Naididae	Pristina sp. OB	14
T401	21/04/2010	792845	7420504	50K	Isopoda		Pygolabis humphreysi	1
W116	21/04/2010	797472	7426205	50K	Bathynellacea	Parabathynellidae	Brevisomabathynella cf. pilbaraensis	1
W116	21/04/2010	797472	7426205	50K	Bathynellacea	Parabathynellidae	Brevisomabathynella pilbaraensis	1
W116	21/04/2010	797472	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	110
W116	21/04/2010	797472	7426205	50K			Enchytraeidae sp. OB_MC	10
W116	21/04/2010	797472	7426205	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	6
W116	21/04/2010	797472	7426205	50K			Notacandona gratia	3
W116	21/04/2010	797472	7426205	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	4
W152	21/04/2010	795188	7424048	50K	Amphipoda	Paramelitidae	Chydaekata indet.	10
W152	21/04/2010	795188	7424048	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	300
W152	21/04/2010	795188	7424048	50K			Enchytraeidae sp. OB_MC	16
W152	21/04/2010	795188	7424048	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	76
W152	21/04/2010	795188	7424048	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	76
W152	21/04/2010	795188	7424048	50K			Pilbaracandona eberhardi	5
W152	21/04/2010	795188	7424048	50K			Pygolabis humphreysi	1
W247 / HEOP0559	21/04/2010	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	20
W56	21/04/2010	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W56	21/04/2010	792588	7419470	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	4
WP131	21/04/2010	797151	7428137	50K	Bathynellacea	Parabathynellidae	Brevisomabathynella cf. pilbaraensis	2
WP131	21/04/2010	797151	7428137	50K	Bathynellacea	Parabathynellidae	Brevisomabathynella pilbaraensis	2
WP131	21/04/2010	797151	7428137	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	10
WP131	21/04/2010	797151	7428137	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	700
WP131	21/04/2010	797151	7428137	50K			Enchytraeidae sp. OB_MC	4
WP131	21/04/2010	797151	7428137	50K			Notacandona gratia	400
WP131	21/04/2010	797151	7428137	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	6
WP131	21/04/2010	797151	7428137	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	303
WP131	21/04/2010	797151	7428137	50K			Phreodrilidae sp. OB1	6
WP131	21/04/2010	797151	7428137	50K			Pygolabis humphreysi	1
F3NR	22/04/2010	790090	7415143	50K	Bathynellacea	Parabathynellidae	Billibathynella cassidis	3
F3NR	22/04/2010	790090	7415143	50K	Bathynellacea	Parabathynellidae	Billibathynella indet.	2
F3NR	22/04/2010	790090	7415143	50K	Copepoda: Cyclopoida	Cyclopidae	Microcyclops varicans	4
F3NR	22/04/2010	790090	7415143	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	300
HEOP0388	22/04/2010	790859	7417267	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
HEOP0388	22/04/2010	790859	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	17
HEOP0388	22/04/2010	790859	7417267	50K	Amphipoda	Paramelitidae	Maarrka etheli	1
HEOP0388	22/04/2010	790859	7417267	50K	Ostracoda	Candonidae	Origocandona inanitas	11
HEOP0388	22/04/2010	790859	7417267	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	6
HEOP0388	22/04/2010	790859	7417267	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
HEOP0425 (W115)	22/04/2010	790927	7417327	50K	Ostracoda	Candonidae	Origocandona inanitas	11
HEOP0425 (W115)	22/04/2010	790927	7417327	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
W79D	22/04/2010	790927	7417327	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
W79D	22/04/2010	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	17
W79D	22/04/2010	790927	7417327	50K	Amphipoda	Paramelitidae	Maarrka etheli	1
W79D	22/04/2010	790927	7417327	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	6
HEOP0425 (W115)	20/07/2010	765289	7408408	50K	Oligochaeta	Enchytraeidae	Enchytraeus Pilbara sp. 2 (PSS)	6 to 10
HEOP0425 (W115)	20/07/2010	765289	7408408	50K	Oligochaeta	Enchytraeidae	Enchytraeus Pilbara sp. 2 (PSS)	6 to 10
HEOP0425 (W115)	20/07/2010	765296	7408457	50K	Oligochaeta	Enchytraeidae	Enchytraeus Pilbara sp. 2 (PSS)	2 to 5
HEOP0425 (W115)	20/07/2010	765296	7408457	50K	Oligochaeta	Enchytraeidae	Enchytraeus Pilbara sp. 2 (PSS)	2 to 5
W013	3/11/2010	782300	7416227	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1 (B33)	1
W013	3/11/2010	782300	7416227	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1 (B33)	1
W028	3/11/2010	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata sp. OB1	6 to 10
W028	3/11/2010	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata sp. OB1	6



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W028	3/11/2010	785756	7409060	50K	Acarina	Pezidae	Peza sp. OB	2 to 5
W028	3/11/2010	785756	7409060	50K	Acarina	Pezidae	Peza sp. OB	2
W028	3/11/2010	785756	7409060	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
W028	3/11/2010	785756	7409060	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
F3NR	4/11/2010	790090	7415143	50K	Copepoda: Cyclopoida	Cyclopidae	Microcyclops varicans	1
F3NR	4/11/2010	790090	7415143	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB2	2
HEOP0425 (W115)	4/11/2010	789497	7417002	50K	Isopoda	Tainisopidae	Pygobasis humphreysi	1
HEOP0425 (W115)	4/11/2010	791351	7418337	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	2
HEOP0425 (W115)	4/11/2010	791421	7418598	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. OB2	1
HEOP0425 (W115)	4/11/2010	791421	7418598	50K	Ostracoda	Candonidae	Pilbaracandona colonia	2
HEOP0425 (W115)	4/11/2010	791504	7418473	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	2 to 5
HEOP0425 (W115)	4/11/2010	791504	7418473	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	2
HEOP0425 (W115)	4/11/2010	791605	7418527	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
HEOP0425 (W115)	4/11/2010	791702	7418654	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	2
HEOP0425 (W115)	4/11/2010	791702	7418654	50K	Ostracoda	Candonidae	Pilbaracandona colonia	1
HEOP0425 (W115)	4/11/2010	793687	7417497	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	7
T411A	4/11/2010	785047	7415790	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1 (B33)	3
W056	4/11/2010	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	4
W115 / HEOP0425	4/11/2010	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	10
W115 / HEOP0425	4/11/2010	793687	7417497	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	2
W247 / HEOP0559	4/11/2010	795402	7416424	50K	Isopoda	Microcerberidae	Coxicerberus sp. OB1	2 to 5
W247 / HEOP0559	4/11/2010	795402	7416424	50K	Isopoda	Microcerberidae	Coxicerberus sp. OB1	2
W247 / HEOP0559	4/11/2010	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2 to 5
W247 / HEOP0559	4/11/2010	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	3
W247 / HEOP0559	4/11/2010	795402	7416424	50K	Acarina	Pezidae	Peza sp. OB	1
W247 / HEOP0559	4/11/2010	795402	7416424	50K	Acarina	Pezidae	Peza sp. OB	1
WP14S / HEA0126	4/11/2010	791702	7418654	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
EEX917	5/11/2010	793530	7417045	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	26
EEX917	5/11/2010	793530	7417045	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
EEX917	5/11/2010	793530	7417045	50K	Isopoda	Tainisopidae	Pygobasis humphreysi	1
EEX931	5/11/2010	793528	7417045	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
HEOP0388	5/11/2010	790859	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
HEOP0388	5/11/2010	790859	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	2 to 5
HEOP0388	5/11/2010	790859	7417267	50K	Amphipoda	Paramelitidae	Maaraka etheli	1
HEOP0388	5/11/2010	790859	7417267	50K	Acarina	Pezidae	Peza sp. OB	2 to 5

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0388	5/11/2010	790859	7417267	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2 to 5
HEOP0388	5/11/2010	790859	7417267	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2 to 5
HEOP0425 (W115)	5/11/2010	790859	7417267	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	2 to 5
HEOP0425 (W115)	5/11/2010	790859	7417267	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	2 to 5
HEOP0425 (W115)	5/11/2010	790859	7417267	50K	Ostracoda	Candonidae	Origocandona inanitas	2 to 5
HEOP0425 (W115)	5/11/2010	790859	7417267	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	2 to 5
HEOP0425 (W115)	5/11/2010	790859	7417267	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	1
HEOP0425 (W115)	5/11/2010	790927	7417327	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	2
HEOP0425 (W115)	5/11/2010	790927	7417327	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	2
HEOP0425 (W115)	5/11/2010	790927	7417327	50K	Ostracoda	Candonidae	Origocandona inanitas	4
HEOP0425 (W115)	5/11/2010	790927	7417327	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	5
HEOP0425 (W115)	5/11/2010	790927	7417327	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	1
HEOP0425 (W115)	5/11/2010	790927	7417327	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
HEOP0425 (W115)	5/11/2010	790927	7417327	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	4
HEOP0425 (W115)	5/11/2010	791423	7417419	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	13
HEOP0425 (W115)	5/11/2010	791423	7417419	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	104
HEOP0425 (W115)	5/11/2010	791423	7417419	50K	Oligochaeta	Naididae	Naididae sp. OB	36
HEOP0425 (W115)	5/11/2010	791423	7417419	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	38
HEOP0425 (W115)	5/11/2010	791748	7417311	50K	Oligochaeta	Naididae	Pristina sp.OB	14
HEOP0425 (W115)	5/11/2010	791748	7417311	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	12
HEOP0425 (W115)	5/11/2010	791947	7417303	50K	Oligochaeta	Naididae	Naididae sp. OB	11 to 25
HEOP0425 (W115)	5/11/2010	791947	7417303	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	11 to 25
HEOP0425 (W115)	5/11/2010	792269	7417283	50K	Ostracoda	Candonidae	Candonopsis tenuis	1
HEOP0425 (W115)	5/11/2010	792269	7417283	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	1
HEOP0425 (W115)	5/11/2010	792269	7417283	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
HEOP0425 (W115)	5/11/2010	792677	7419694	50K	Ostracoda	Candonidae	Candoninae indet.	1
HEOP0425 (W115)	5/11/2010	792677	7419694	50K	Ostracoda	Candonidae	Notacandona sp. OB1	1
HEOP0425 (W115)	5/11/2010	792677	7419694	50K	Ostracoda	Candonidae	Origocandona inanitas	3
HEOP0425 (W115)	5/11/2010	792677	7419694	50K	Ostracoda	Candonidae	Ostracoda sp. UNK3b	1
HEOP0425 (W115)	5/11/2010	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona colonia	2
HEOP0425 (W115)	5/11/2010	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	4
HEOP0425 (W115)	5/11/2010	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	3
HEOP0425 (W115)	5/11/2010	792677	7419694	50K	Platyhelminthes		Platyhelminthes indet.	30
HEOP0425 (W115)	5/11/2010	792845	7420504	50K	Oligochaeta	Naididae	Naididae sp. OB	1
HEOP0425 (W115)	5/11/2010	792845	7420504	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	2



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425 (W115)	5/11/2010	792845	7420504	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	2
HEOP0425 (W115)	5/11/2010	792845	7420504	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	1
HEOP0425 (W115)	5/11/2010	792845	7420504	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	1
HEOP0425 (W115)	5/11/2010	792845	7420504	50K	Oligochaeta	Naididae	Pristina sp.OB	1
HEOP0425 (W115)	5/11/2010	792885	7417378	50K	Ostracoda	Candonidae	Areacandona sp. OB3	6 to 10
HEOP0425 (W115)	5/11/2010	792885	7417378	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	1
HEOP0425 (W115)	5/11/2010	792885	7417378	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	3
HEOP0425 (W115)	5/11/2010	792885	7417378	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
HEOP0425 (W115)	5/11/2010	792911	7417363	50K	Ostracoda	Candonidae	Pilbaracandona sp. OB1	1
HEOP0425 (W115)	5/11/2010	792911	7417363	50K	Ostracoda	Candonidae	Pilbaracandona sp. OB2	8
HEOP0425 (W115)	5/11/2010	793447	7422107	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	9
HEOP0425 (W115)	5/11/2010	793447	7422107	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	16
HEOP0425 (W115)	5/11/2010	793447	7422107	50K	Oligochaeta	Naididae	Naididae sp. OB	8
HEOP0425 (W115)	5/11/2010	793447	7422107	50K	Ostracoda	Candonidae	Origocandona inanita	2
HEOP0425 (W115)	5/11/2010	793447	7422107	50K	Ostracoda	Candonidae	Ostracoda sp. UNK3b	2
HEOP0425 (W115)	5/11/2010	793447	7422107	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	3
HEOP0425 (W115)	5/11/2010	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	24
HEOP0425 (W115)	5/11/2010	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	3
HEOP0425 (W115)	5/11/2010	793528	7417045	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	5
HEOP0425 (W115)	5/11/2010	795188	7424048	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	46
HEOP0425 (W115)	5/11/2010	796202	7425820	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	4
HEOP0425 (W115)	5/11/2010	796202	7425820	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	7
HEOP0425 (W115)	5/11/2010	796202	7425820	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	5/11/2010	796202	7425820	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	15
OB23REG1	5/11/2010	791423	7417419	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	8
T399	5/11/2010	793447	7422107	50K	Amphipoda	Paramelitidae	Chydaekata indet.	4
T399	5/11/2010	793447	7422107	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	47
T399	5/11/2010	793447	7422107	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	1
T399	5/11/2010	793447	7422107	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	28
T399	5/11/2010	793447	7422107	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	2
T399	5/11/2010	793447	7422107	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	2
UNK02	5/11/2010	796202	7425820	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	6
UNK02	5/11/2010	796202	7425820	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	2
UNK02	5/11/2010	796202	7425820	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
W078 / HEOP0387	5/11/2010	791748	7417311	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	9

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W078 / HEOP0387	5/11/2010	791748	7417311	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	37
W078 / HEOP0387	5/11/2010	791748	7417311	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	5
W078 / HEOP0387	5/11/2010	791748	7417311	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2
W078 / HEOP0387	5/11/2010	791748	7417311	50K	Copepoda: Cyclopoida	Cyclopidae	Microcyclops varicans	1
W078 / HEOP0387	5/11/2010	791947	7417303	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	26 to 50
W078 / HEOP0387	5/11/2010	791947	7417303	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	6 to 10
W078 / HEOP0387	5/11/2010	791947	7417303	50K	Amphipoda	Paramelitidae	Chydaekata indet.	2 to 5
W078 / HEOP0387	5/11/2010	791947	7417303	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2 to 5
W078 / HEOP0387	5/11/2010	791947	7417303	50K	Copepoda: Cyclopoida	Cyclopidae	Microcyclops varicans	1
W078 / HEOP0387	5/11/2010	791947	7417303	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	2 to 5
W105 / HEOP0415	5/11/2010	792885	7417378	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	6
W105 / HEOP0415	5/11/2010	792885	7417378	50K	Amphipoda	Paramelitidae	Chydaekata indet.	2
W105 / HEOP0415	5/11/2010	792885	7417378	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2
W105 / HEOP0415	5/11/2010	792885	7417378	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1
W105 / HEOP0415	5/11/2010	792885	7417378	50K	Amphipoda	Paramelitidae	Maarrka etheli	1
W105 / HEOP0415	5/11/2010	792885	7417378	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	2
W107 / HEOP0417	5/11/2010	792269	7417283	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
W107 / HEOP0417	5/11/2010	792269	7417283	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
W107 / HEOP0417	5/11/2010	792269	7417283	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	11
W116	5/11/2010	797472	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	6
W116	5/11/2010	797472	7426205	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	4
W152	5/11/2010	795188	7424048	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2
W262	5/11/2010	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2
W262	5/11/2010	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1
W262	5/11/2010	792677	7419694	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	8
W79D	5/11/2010	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
W79D	5/11/2010	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	2
W79D	5/11/2010	790927	7417327	50K	Amphipoda	Paramelitidae	Maarrka etheli	1
W79D	5/11/2010	790927	7417327	50K	Acarina	Pezidae	Peza sp. OB	3
W79D	5/11/2010	790927	7417327	50K	Isopoda	Stenoniscidae	Stenoniscidae? sp. OB	1
HEOP0388	8/02/2011	790859	7417267	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
HEOP0388	8/02/2011	790859	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cf. sobeprolatus	2 to 5
HEOP0388	8/02/2011	790859	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	6 to 10
HEOP0388	8/02/2011	790859	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Microcyclops varicans	1
HEOP0388	8/02/2011	790859	7417267	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0388	8/02/2011	790859	7417267	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2 to 5
HEOP0425 (W115)	8/02/2011	790859	7417267	50K	Ostracoda	Candonidae	Origocandona inanitas	1
HEOP0425 (W115)	8/02/2011	790927	7417327	50K	Ostracoda	Candonidae	Origocandona inanitas	1
HEOP0425 (W115)	8/02/2011	790927	7417327	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
HEOP0425 (W115)	8/02/2011	792677	7419694	50K	Ostracoda	Candonidae	Origocandona inanitas	10
HEOP0425 (W115)	8/02/2011	792677	7419694	50K	Ostracoda	Candonidae	Ostracoda sp. UNK3b	1
HEOP0425 (W115)	8/02/2011	792677	7419694	50K	Ostracoda	Candonidae	Ostracoda sp. UNK9	1
HEOP0425 (W115)	8/02/2011	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona colonia	1
HEOP0425 (W115)	8/02/2011	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona sp. OB1	1
HEOP0425 (W115)	8/02/2011	792845	7420504	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
HEOP0425 (W115)	8/02/2011	792845	7420504	50K	Oligochaeta	Naididae	Naididae sp. OB	2
HEOP0425 (W115)	8/02/2011	792845	7420504	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	8/02/2011	793447	7422107	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	2
HEOP0425 (W115)	8/02/2011	793447	7422107	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	8/02/2011	795188	7424048	50K	Ostracoda	Candonidae	Areacandona sp. OB3	1
HEOP0425 (W115)	8/02/2011	795188	7424048	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	4
HEOP0425 (W115)	8/02/2011	795188	7424048	50K	Ostracoda	Candonidae	Ostracoda indet.	1
HEOP0425 (W115)	8/02/2011	795188	7424048	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	1
HEOP0425 (W115)	8/02/2011	795188	7424048	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	2
HEOP0425 (W115)	8/02/2011	796202	7425820	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	2
HEOP0425 (W115)	8/02/2011	796202	7425820	50K	Ostracoda	Candonidae	Origocandona inanitas	6
HEOP0425 (W115)	8/02/2011	796202	7425820	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	10
HEOP0425 (W115)	8/02/2011	797472	7426205	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	6
HEOP0425 (W115)	8/02/2011	797472	7426205	50K	Nematoda		Nematoda indet.	5
HEOP0425 (W115)	8/02/2011	797472	7426205	50K	Ostracoda	Candonidae	Ostracoda sp. UNK3b	1
HEOP0425 (W115)	8/02/2011	797472	7426205	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	8/02/2011	797472	7426205	50K	Ostracoda	Candonidae	Pilbaracandona sp. OB1	1
T399	8/02/2011	793447	7422107	50K	Amphipoda	Paramelitidae	Chydaekata indet.	4
T399	8/02/2011	793447	7422107	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	11
UNK02	8/02/2011	796202	7425820	50K	Amphipoda	Paramelitidae	Chydaekata indet.	3
UNK02	8/02/2011	796202	7425820	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	64
UNK02	8/02/2011	796202	7425820	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	165
UNK02	8/02/2011	796202	7425820	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
W056	8/02/2011	792588	7419470	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	14
W056	8/02/2011	792588	7419470	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	5

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W056	8/02/2011	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cf. sobeprolatus	3
W056	8/02/2011	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	11
W056	8/02/2011	792588	7419470	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	6
W056	8/02/2011	792588	7419470	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
W056	8/02/2011	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	3
W115 / HEOP0425	8/02/2011	793687	7417497	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	4
W115 / HEOP0425	8/02/2011	793687	7417497	50K	Amphipoda	Paramelitidae	Chydaekata indet.	5
W115 / HEOP0425	8/02/2011	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cf. sobeprolatus	1
W115 / HEOP0425	8/02/2011	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	5
W115 / HEOP0425	8/02/2011	793687	7417497	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	14
W115 / HEOP0425	8/02/2011	793687	7417497	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
W116	8/02/2011	797472	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	45
W116	8/02/2011	797472	7426205	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	2
W116	8/02/2011	797472	7426205	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	2
W152	8/02/2011	795188	7424048	50K	Amphipoda	Paramelitidae	Chydaekata indet.	6
W152	8/02/2011	795188	7424048	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	69
W152	8/02/2011	795188	7424048	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	20
W152	8/02/2011	795188	7424048	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	15
W152	8/02/2011	795188	7424048	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	7
W247 / HEOP0559	8/02/2011	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	11 to 25
W247 / HEOP0559	8/02/2011	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	16
W262	8/02/2011	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cf. sobeprolatus	13
W262	8/02/2011	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	8
W262	8/02/2011	792677	7419694	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	8
W79D	8/02/2011	790927	7417327	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
W79D	8/02/2011	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cf. sobeprolatus	2
W79D	8/02/2011	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	6
W79D	8/02/2011	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Microcyclops varicans	1
W79D	8/02/2011	790927	7417327	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
EEX917	9/02/2011	793530	7417045	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	18
EEX917	9/02/2011	793530	7417045	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
EEX917	9/02/2011	793530	7417045	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	82
EEX917	9/02/2011	793530	7417045	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	2
EEX931	9/02/2011	793528	7417045	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
EEX931	9/02/2011	793528	7417045	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0388	9/02/2011	790859	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	6 to 10
HEOP0388	9/02/2011	790859	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobepronolatus	11 to 25
HEOP0388	9/02/2011	790859	7417267	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
HEOP0388	9/02/2011	790859	7417267	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	9/02/2011	782300	7416227	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	7
HEOP0425 (W115)	9/02/2011	782300	7416227	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	9/02/2011	790859	7417267	50K	Ostracoda	Candonidae	Origocandona inanitas	6 to 10
HEOP0425 (W115)	9/02/2011	790927	7417327	50K	Ostracoda	Candonidae	Origocandona inanitas	8
HEOP0425 (W115)	9/02/2011	790927	7417327	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	9/02/2011	791423	7417419	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	17
HEOP0425 (W115)	9/02/2011	791423	7417419	50K	Oligochaeta	Naididae	Naididae sp. OB	21
HEOP0425 (W115)	9/02/2011	791748	7417311	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
HEOP0425 (W115)	9/02/2011	791947	7417303	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2 to 5
HEOP0425 (W115)	9/02/2011	792885	7417378	50K	Ostracoda	Candonidae	Areacandona sp. OB3	1
HEOP0425 (W115)	9/02/2011	792885	7417378	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	2
HEOP0425 (W115)	9/02/2011	792885	7417378	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	20
HEOP0425 (W115)	9/02/2011	792911	7417363	50K	Ostracoda	Candonidae	Pilbaracandona sp. OB2	1
HEOP0425 (W115)	9/02/2011	793447	7422107	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	1
HEOP0425 (W115)	9/02/2011	793447	7422107	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	4
HEOP0425 (W115)	9/02/2011	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona colonia	1
HEOP0425 (W115)	9/02/2011	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	2
HEOP0425 (W115)	9/02/2011	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	3
HEOP0425 (W115)	9/02/2011	793447	7422107	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	9/02/2011	793528	7417045	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	5
HEOP0425 (W115)	9/02/2011	796202	7425820	50K	Oligochaeta	Naididae	Naididae sp. OB	1
HEOP0425 (W115)	9/02/2011	796202	7425820	50K	Ostracoda	Candonidae	Origocandona inanitas	3
HEOP0425 (W115)	9/02/2011	796202	7425820	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	10
OB23REG1	9/02/2011	791423	7417419	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	2
OB23REG1	9/02/2011	791423	7417419	50K	Bathynellacea	Bathynellidae	Bathynellidae sp. OB1	9
OB23REG1	9/02/2011	791423	7417419	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	36
T399	9/02/2011	793447	7422107	50K	Amphipoda	Paramelitidae	Chydaekata indet.	2
T399	9/02/2011	793447	7422107	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	13
T399	9/02/2011	793447	7422107	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	12
UNK02	9/02/2011	796202	7425820	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
UNK02	9/02/2011	796202	7425820	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cf. sobepronolatus	6

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
UNK02	9/02/2011	796202	7425820	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	32
UNK02	9/02/2011	796202	7425820	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	25
UNK02	9/02/2011	796202	7425820	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	5
W013	9/02/2011	782300	7416227	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
W013	9/02/2011	782300	7416227	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	5
W028	9/02/2011	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	11 to 25
W028	9/02/2011	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	25
W028	9/02/2011	785756	7409060	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
W028	9/02/2011	785756	7409060	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
W078 / HEOP0387	9/02/2011	791748	7417311	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	12
W078 / HEOP0387	9/02/2011	791748	7417311	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
W078 / HEOP0387	9/02/2011	791748	7417311	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	11
W078 / HEOP0387	9/02/2011	791748	7417311	50K	Copepoda: Cyclopoida	Cyclopidae	Microcyclops varicans	4
W078 / HEOP0387	9/02/2011	791748	7417311	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
W078 / HEOP0387	9/02/2011	791947	7417303	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	11 to 25
W078 / HEOP0387	9/02/2011	791947	7417303	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
W078 / HEOP0387	9/02/2011	791947	7417303	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	11 to 25
W078 / HEOP0387	9/02/2011	791947	7417303	50K	Copepoda: Cyclopoida	Cyclopidae	Microcyclops varicans	2 to 5
W078 / HEOP0387	9/02/2011	791947	7417303	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
W105 / HEOP0415	9/02/2011	792885	7417378	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	8
W105 / HEOP0415	9/02/2011	792885	7417378	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cf. sobeprolatus	2
W105 / HEOP0415	9/02/2011	792885	7417378	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	4
W105 / HEOP0415	9/02/2011	792885	7417378	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	3
W107 / HEOP0417	9/02/2011	792269	7417283	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
W79D	9/02/2011	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	10
W79D	9/02/2011	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	12
W79D	9/02/2011	790927	7417327	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
HEOP0425 (W115)	10/02/2011	791351	7418337	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	4
P20S / HEA0134	10/02/2011	791605	7418527	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
WP14S / HEA0126	10/02/2011	791702	7418654	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
WPP3-3D	10/02/2011	788162	7416862	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
EEX917	8/02/2012	793530	7417045	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	2
EEX917	08/02/12	793530	7417045	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	5
EEX917	8/02/2012	793530	7417045	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	65
EEX917	8/02/2012	793530	7417045	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	105



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
EEX917	08/02/12	793530	7417045	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
EEX917	8/02/2012	793530	7417045	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
EEX931	8/02/2012	793528	7417045	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	3
EEX931	8/02/2012	793528	7417045	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
EEX931	8/02/2012	793528	7417045	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	11
HEOP0425 (W115)	8/02/2012	782300	7416227	50K	Ostracoda	Candonidae	Candonopsis tenuis	1
HEOP0425 (W115)	8/02/2012	782300	7416227	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB3	1
HEOP0425 (W115)	8/02/2012	785756	7409060	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	8/02/2012	791423	7417419	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. OB4	4
HEOP0425 (W115)	8/02/2012	791423	7417419	50K	Oligochaeta	Naididae	Pristina sp.OB	10
HEOP0425 (W115)	8/02/2012	792677	7419694	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
HEOP0425 (W115)	8/02/2012	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	1
HEOP0425 (W115)	8/02/2012	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	1
HEOP0425 (W115)	8/02/2012	792845	7420504	50K	Oligochaeta	Naididae	Pristina sp.OB	12
HEOP0425 (W115)	8/02/2012	793447	7422107	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	8/02/2012	793530	7417045	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	1
HEOP0425 (W115)	8/02/2012	793687	7417497	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. OB2	1
HEOP0425 (W115)	8/02/2012	793687	7417497	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	7
HEOP0425 (W115)	8/02/2012	795188	7424048	50K	Ostracoda	Candonidae	Candoninae indet.	1
HEOP0425 (W115)	8/02/2012	795188	7424048	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	1
HEOP0425 (W115)	8/02/2012	795188	7424048	50K	Ostracoda	Candonidae	Pilbaracandona indet.	1
HEOP0425 (W115)	8/02/2012	797472	7426205	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB2	1
OB23REG1	8/02/2012	791423	7417419	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
OB23REG1	8/02/2012	791423	7417419	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	30
OB23REG1	8/02/2012	791423	7417419	50K	Isopoda	Stenoniscidae	Stenoniscidae? sp. OB	1
T399	8/02/2012	793447	7422107	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	18
W013	8/02/2012	782300	7416227	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	2
W013	8/02/2012	782300	7416227	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	100
W013	8/02/2012	782300	7416227	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	3
W028	8/02/2012	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata sp. OB1	3
W028	8/02/2012	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
W028	8/02/2012	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2
W028	8/02/2012	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	67
W028	8/02/2012	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
W028	8/02/2012	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	17

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W056	08/02/12	792588	7419470	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
W115 / HEOP0425	8/02/2012	793687	7417497	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	5
W115 / HEOP0425	8/02/2012	793687	7417497	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
W115 / HEOP0425	8/02/2012	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cf. sobeprolatus	12
W115 / HEOP0425	8/02/2012	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	48
W115 / HEOP0425	8/02/2012	793687	7417497	50K	Acarina	Pezidae	Peza sp. OB	3
W116	8/02/2012	797472	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
W116	8/02/2012	797472	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	109
W116	8/02/2012	797472	7426205	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	10
W152	8/02/2012	795188	7424048	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	2
W152	8/02/2012	795188	7424048	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W152	8/02/2012	795188	7424048	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	100
W152	8/02/2012	795188	7424048	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	3
W247 / HEOP0559	8/02/2012	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	50
W262	8/02/2012	792677	7419694	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
W262	8/02/2012	792677	7419694	50K	Bathynellacea	Bathynellidae	Bathynellidae sp. OB2	1
W262	8/02/2012	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	5
W262	8/02/2012	792677	7419694	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	1
W262	8/02/2012	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	2
W262	8/02/2012	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Thermocyclops aberrans	3
W79D	8/02/2012	790927	7417327	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
W79D	8/02/2012	790927	7417327	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W79D	8/02/2012	790927	7417327	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	2
HEOP0425 (W115)	9/02/2012	783760	7406443	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. OB3	4
HEOP0425 (W115)	9/02/2012	783763	7406531	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. OP1	2
HEOP0425 (W115)	9/02/2012	785047	7415790	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. OP1	3
HEOP0425 (W115)	9/02/2012	790448	7413044	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. OP1	4
T411A	9/02/2012	785047	7415790	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1 (B33)	5
W086	9/02/2012	790448	7413044	50K	Acarina	Pezidae	Peza sp. OB	1
W088	9/02/2012	788362	7410086	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
W099	9/02/2012	789791	7411751	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
W179	9/02/2012	782933	7405726	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2
HEOP0425 (W115)	10/02/12	792269	7417283	50K	Nematoda		Nematoda indet.	1
HEOP0425 (W115)	10/02/12	792269	7417283	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	10/02/12	792911	7417363	50K	Oligochaeta	Naididae	Pristina sp. OB	3



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425 (W115)	10/02/12	792911	7417363	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	88
HEOP0425 (W115)	10/02/12	805054	7412794	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	10
NODDY	10/02/12	805054	7412794	50K	Copepoda: Cyclopoida	Cyclopidae	Microcyclops varicans	1
W078 / HEOP0387	10/02/12	791748	7417311	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	1
W105 / HEOP0401	10/02/12	792911	7417363	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	200
W105 / HEOP0403	10/02/12	792911	7417363	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	8
W105 / HEOP0404	10/02/12	792911	7417363	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	990
W105 / HEOP0405	10/02/12	792911	7417363	50K	Copepoda: Cyclopoida	Cyclopidae	Orbuscyclops westaustraliensis	10
W105 / HEOP0406	10/02/12	792911	7417363	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
W228	10/02/12	797354	7429821	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
HEOP0425 (W115)	11/02/2012	203820	7379107	50K	Ostracoda	Cypridae	Cypridae indet.	3
HEOP0425 (W115)	11/02/2012	791605	7418527	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	2
HEOP0425 (W115)	11/02/2012	791702	7418654	50K	Ostracoda	Candonidae	Ostracoda indet.	1
P20S / HEA0134	11/02/2012	791605	7418527	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	14
P20S / HEA0134	11/02/2012	791605	7418527	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
WP14S / HEA0126	11/02/2012	791702	7418654	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	3
WP23-12i	11/02/2012	791351	7418337	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	30
HEOP0425 (W115)	11/04/2012	792677	7419694	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	2
HEOP0425 (W115)	11/04/2012	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona ?temporaria	1
HEOP0425 (W115)	11/04/2012	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona colonia	7
HEOP0425 (W115)	11/04/2012	792677	7419694	50K	Platyhelminthes		Platyhelminthes indet.	2
HEOP0425 (W115)	11/04/2012	792845	7420504	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	10
HEOP0425 (W115)	11/04/2012	792845	7420504	50K	Oligochaeta	Naididae	Pristina sp.OB	5
HEOP0425 (W115)	11/04/2012	793447	7422107	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
HEOP0425 (W115)	11/04/2012	793447	7422107	50K	Ostracoda	Candonidae	Origocandona ?inanitas	2
HEOP0425 (W115)	11/04/2012	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona ?temporaria	2
HEOP0425 (W115)	11/04/2012	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	3
HEOP0425 (W115)	11/04/2012	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	5
HEOP0425 (W115)	11/04/2012	793447	7422107	50K	Oligochaeta	Naididae	Pristina sp.OB	1
HEOP0425 (W115)	11/04/2012	793447	7422107	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
HEOP0425 (W115)	11/04/2012	795188	7424048	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	6
HEOP0425 (W115)	11/04/2012	797472	7426205	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	7
HEOP0425 (W115)	11/04/2012	797472	7426205	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	6
HEOP0425 (W115)	11/04/2012	797472	7426205	50K	Platyhelminthes		Platyhelminthes indet.	20
T399	11/04/2012	793447	7422107	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
T399	11/04/2012	793447	7422107	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	7
T399	11/04/2012	793447	7422107	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	14
T399	11/04/2012	793447	7422107	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
T401	11/04/2012	792845	7420504	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	7
W116	11/04/2012	797472	7426205	50K	Aphanoneura	Aeolosomatidae	Aeolosoma indet.	1
W116	11/04/2012	797472	7426205	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
W116	11/04/2012	797472	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	200
W116	11/04/2012	797472	7426205	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	22
W116	11/04/2012	797472	7426205	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	2
W116	11/04/2012	797472	7426205	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	1
W152	11/04/2012	795188	7424048	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
W152	11/04/2012	795188	7424048	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	100
W152	11/04/2012	795188	7424048	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	400
W152	11/04/2012	795188	7424048	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	5
W262	11/04/2012	792677	7419694	50K	Bathynellacea	Bathynellidae	Bathynellidae sp. OB2	14
W262	11/04/2012	792677	7419694	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	20
W262	11/04/2012	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	85
W262	11/04/2012	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	65
W262	11/04/2012	792677	7419694	50K	Copepoda: Harpacticoida		Harpacticoida indet.	1
W262	11/04/2012	792677	7419694	50K	Amphipoda	Paramelitidae	Maarrka etheli	2
W262	11/04/2012	792677	7419694	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	4
W262	11/04/2012	792677	7419694	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	9
EEX917	12/04/12	793530	7417045	50K	Amphipoda	Paramelitidae	Chydaekata indet.	2
EEX917	12/04/12	793530	7417045	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	150
EEX917	12/04/2012	793530	7417045	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	300
EEX931	12/04/2012	793528	7417045	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
EEX931	12/04/2012	793528	7417045	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	150
HEOP0425 (W115)	12/04/2012	782300	7416227	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB3	1
HEOP0425 (W115)	12/04/2012	783760	7406443	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. OB3	55
HEOP0425 (W115)	12/04/2012	783763	7406531	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. OP1	40
HEOP0425 (W115)	12/04/2012	785756	7409060	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	12/04/2012	790927	7417327	50K	Ostracoda	Candonidae	Candoninae indet.	4
HEOP0425 (W115)	12/04/2012	790927	7417327	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	1
HEOP0425 (W115)	12/04/2012	790927	7417327	50K	Ostracoda	Candonidae	Origocandona ?inaitas	1
HEOP0425 (W115)	12/04/2012	790927	7417327	50K	Ostracoda	Candonidae	Ostracoda indet.	4



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425 (W115)	12/04/2012	790927	7417327	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. OP1	5
HEOP0425 (W115)	12/04/2012	790927	7417327	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	4
HEOP0425 (W115)	12/04/2012	790927	7417327	50K	Oligochaeta	Naididae	Pristina sp.OB	1
HEOP0425 (W115)	12/04/2012	790927	7417327	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	3
HEOP0425 (W115)	12/04/2012	791423	7417419	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB4	1
HEOP0425 (W115)	12/04/2012	791423	7417419	50K	Oligochaeta	Naididae	Pristina sp.OB	7
HEOP0425 (W115)	12/04/2012	792588	7419470	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
HEOP0425 (W115)	12/04/2012	792588	7419470	50K	Ostracoda	Candonidae	Origocandona ?inanitas	2
HEOP0425 (W115)	12/04/2012	793530	7417045	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB2	1
HEOP0425 (W115)	12/04/2012	793530	7417045	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	1
HEOP0425 (W115)	12/04/2012	793687	7417497	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. OB2	3
HEOP0425 (W115)	12/04/2012	793687	7417497	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	16
HEOP0425 (W115)	12/04/2012	793687	7417497	50K	Oligochaeta	Naididae	Pristina sp.OB	2
OB23REG1	12/04/2012	791423	7417419	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	80
Unknown 3	12/04/2012	783763	7406531	50K	Amphipoda	Paramelitidae	Chydaekata indet.	1
Unknown 3	12/04/2012	783763	7406531	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	2
UNKNOWN2	12/04/2012	783760	7406443	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
UNKNOWN2	12/04/2012	783760	7406443	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	20
W013	12/04/2012	782300	7416227	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
W013	12/04/2012	782300	7416227	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	200
W013	12/04/2012	782300	7416227	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	2
W028	12/04/2012	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata sp. OB1	10
W028	12/04/2012	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	200
W028	12/04/2012	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	8
W028	12/04/2012	785756	7409060	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
W056	12/04/2012	792588	7419470	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	3
W056	12/04/2012	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	60
W056	12/04/2012	792588	7419470	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	1
W056	12/04/2012	792588	7419470	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	5
W056	12/04/12	792588	7419470	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	2
W056	12/04/12	792588	7419470	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB2	2
W088	12/04/2012	788362	7410086	50K	Bathynellacea	Bathynellidae	Bathynellidae sp. OB3	27
W088	12/04/2012	788362	7410086	50K	Copepoda: Cyclopoida	Cyclopidae	Cyclopoida indet.	1
W099	12/04/2012	789791	7411751	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	2
W115 / HEOP0425	12/04/2012	793687	7417497	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	17

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W115 / HEOP0425	12/04/2012	793687	7417497	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	2
W115 / HEOP0425	12/04/2012	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	200
W179	12/04/2012	782933	7405726	50K	Acarina	Pezidae	Peza sp. OB	2
W179	12/04/2012	782933	7405726	50K	Isopoda	Stenoniscidae	Stenoniscidae? sp. OB	1
W247 / HEOP0559	12/04/2012	795402	7416424	50K	Isopoda	Microcerberidae	Coxicerberus sp. OB1	2
W247 / HEOP0559	12/04/2012	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	150
W247 / HEOP0559	12/04/2012	795402	7416424	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	13
W79D	12/04/2012	790927	7417327	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
W79D	12/04/2012	790927	7417327	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
W79D	12/04/2012	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	50
W79D	12/04/2012	790927	7417327	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	4
W79D	12/04/2012	790927	7417327	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	3
W79D	12/04/2012	790927	7417327	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
HEOP0425 (W115)	13/04/2012	774588	7420829	50K	Ostracoda	Candonidae	Candonopsis tenuis	1
HEOP0425 (W115)	13/04/2012	785047	7415790	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. ?OP1	2
HEOP0425 (W115)	13/04/2012	790297	7409115	50K	Ostracoda	Candonidae	Notocandona gratia	1
HEOP0425 (W115)	13/04/2012	790297	7409115	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. OP1	2
HEOP0425 (W115)	13/04/2012	790448	7413044	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. ?OP1	11
HEOP0425 (W115)	13/04/2012	791748	7417311	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	20
HEOP0425 (W115)	13/04/2012	791748	7417311	50K	Oligochaeta	Naididae	Pristina sp.OB	4
HEOP0425 (W115)	13/04/2012	792911	7417363	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	2
HEOP0425 (W115)	13/04/2012	792911	7417363	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	100
HEOP0425 (W115)	13/04/2012	805054	7412794	50K	Ostracoda	Cyprididae	Cyprididae indet.	4
HEOP0425 (W115)	13/04/2012	805054	7412794	50K	Oligochaeta	Enchytraeidae	Enchytraeidae sp. OB_MC	47
HEOP0425 (W115)	13/04/2012	805054	7412794	50K	Nematoda		Nematoda indet.	2
NODDY	13/04/2012	805054	7412794	50K	Aphanoneura	Aeolosomatidae	Aeolosoma indet.	29
NODDY	13/04/2012	805054	7412794	50K	Copepoda: Cyclopoida	Cyclopidae	Cyclopoida indet.	2
NODDY	13/04/2012	805054	7412794	50K	Copepoda: Cyclopoida	Cyclopidae	Mesocyclops brooksi	1
NODDY	13/04/2012	805054	7412794	50K	Copepoda: Cyclopoida	Cyclopidae	Microcyclops varicans	3
T411A	13/04/2012	785047	7415790	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
T411A	13/04/2012	785047	7415790	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1 (B33)	6
W078 / HEOP0387	13/04/2012	791748	7417311	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	22
W078 / HEOP0387	13/04/2012	791748	7417311	50K	Amphipoda	Paramelitidae	Maarrka etheli	1
W105 / HEOP0408	13/04/2012	792911	7417363	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	70
W105 / HEOP0409	13/04/2012	792911	7417363	50K	Amphipoda	Paramelitidae	Maarrka etheli	5



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W105 / HEOP0411	13/04/2012	792911	7417363	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	13
W105 / HEOP0412	13/04/2012	792911	7417363	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	17
W105 / HEOP0413	13/04/2012	792911	7417363	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1000
HEOP0425 (W115)	14/04/2012	793400	7430867	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
HEOP0425 (W115)	14/04/2012	797328	7429823	50K	Ostracoda	Candonidae	Notocandona gratia	1
HEOP0425 (W115)	15/04/2012	791351	7418337	50K	Nematoda		Nematoda indet.	2
HEOP0425 (W115)	15/04/2012	791605	7418527	50K	Nematoda		Nematoda indet.	1
HEOP0425 (W115)	15/04/2012	791605	7418527	50K	Ostracoda	Candonidae	Ostracoda indet.	1
HEOP0425 (W115)	15/04/2012	791702	7418654	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	2
HEOP0425 (W115)	15/04/2012	791702	7418654	50K	Nematoda		Nematoda indet.	1
P20S / HEA0134	15/04/2012	791605	7418527	50K	Copepoda: Cyclopoida	Cyclopidae	Cyclopoida indet.	1
WP14S / HEA0126	15/04/2012	791702	7418654	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
WP14S / HEA0126	15/04/2012	791702	7418654	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	9
WP23-11i / HEA0119	15/04/2012	791504	7418473	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	1
WP23-12i	15/04/2012	791351	7418337	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	16
HEOP0425 (W115)	5/04/2013	782150	7421164	50K	Oligochaeta	Enchytraeidae	Enchytraeus sp. Ench6 (=OB_MC)	5
HEOP0425 (W115)	7/04/2013	782049	7420020	50K	Oligochaeta	Enchytraeidae	Enchytraeus sp. Ench1	4
HEOP0425 (W115)	7/04/2013	782349	7419331	50K	Ostracoda		Ostracoda indet.	1
HEOP0425 (W115)	7/04/2013	782350	7420168	50K	Oligochaeta	Enchytraeidae	Enchytraeus sp. Ench1	30
HEOP0425 (W115)	7/04/2013	782647	7419322	50K	Oligochaeta	Enchytraeidae	Enchytraeus indet.	6
HEOP0425 (W115)	7/04/2013	782946	7419360	50K	Oligochaeta	Enchytraeidae	Enchytraeus indet.	1
HHS0019M	7/04/2013	780296	7420383	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1 (B33)	2
HST0130R	7/04/2013	781757	7420371	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
HST0133R	7/04/2013	781447	7420223	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1 (B33)	1
HST0186R	7/04/2013	782349	7419331	50K	Bathynellacea	Bathynellidae	Bathynella sp. B11	4
HST0186R	7/04/2013	782349	7419331	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	4
EEX0560	8/04/2013	777322	7420891	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1 (B33)	28
EMP0054	8/04/2013	779123	7420941	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
EMP0139	8/04/2013	779113	7420541	50K	Bathynellacea	Bathynellidae	Bathynella sp. B11	3
EMP0139	8/04/2013	779113	7420541	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	15
EMP0139	8/04/2013	779113	7420541	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	25
EMP0139	8/04/2013	779113	7420541	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1 (B33)	4
HEOP0425 (W115)	8/04/2013	779113	7420541	50K	Oligochaeta	Enchytraeidae	Enchytraeus indet.	1
HEOP0425 (W115)	8/04/2013	779697	7420025	50K	Oligochaeta	Enchytraeidae	Enchytraeus indet.	2
HEOP0425 (W115)	8/04/2013	779699	7420129	50K	Oligochaeta	Enchytraeidae	Enchytraeus sp. Ench1	38

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HHS0035M	8/04/2013	779148	7421337	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1 (B33)	1
HHS0037M	8/04/2013	778555	7421570	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	25
EMP0070	9/04/2013	777925	7421025	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	7
EMP0070	9/04/2013	777925	7421025	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	9
EMP0070	9/04/2013	777925	7421025	50K	Acarina	Pezidae	Peza sp. OB	1
EMP0070	9/04/2013	777925	7421025	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	18
HEOP0425 (W115)	10/07/2013	782349	7419331	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. Phre1 (=OP1)	6
HEOP0425 (W115)	10/07/2013	782349	7419331	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	2
HEOP0425 (W115)	10/07/2013	782646	7419261	50K	Oligochaeta	Enchytraeidae	Enchytraeus indet.	1
HST0071R	10/07/2013	782646	7419261	50K	Bathynellacea	Bathynellidae	Bathynella sp. B11	1
HST0071R	10/07/2013	782646	7419261	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	12
HST0071R	10/07/2013	782646	7419261	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	1
HST0186R	10/07/2013	782349	7419331	50K	Bathynellacea	Bathynellidae	Bathynella sp. B11	28
HST0186R	10/07/2013	782349	7419331	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	4
HST0186R	10/07/2013	782349	7419331	50K	Amphipoda	Paramelitidae	Kruptus AMP004	2
EMP0070	11/07/2013	777925	7421025	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	14
EMP0070	11/07/2013	777925	7421025	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	10
EMP0070	11/07/2013	777925	7421025	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	6
EMP0070	11/07/2013	777925	7421025	50K	Acarina	Pezidae	Peza sp. OB	5
EMP0070	11/07/2013	777925	7421025	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	100
EMP0139	11/07/2013	779113	7420541	50K	Bathynellacea	Bathynellidae	Bathynella sp. B11	2
EMP0139	11/07/2013	779113	7420541	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	5
EMP0139	11/07/2013	779113	7420541	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	18
EMP0139	11/07/2013	779113	7420541	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1 (B33)	6
EMP0139	11/07/2013	779113	7420541	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	8
HEOP0425 (W115)	11/07/2013	777318	7420790	50K	Oligochaeta	Enchytraeidae	Enchytraeus indet.	1
HEOP0425 (W115)	11/07/2013	777318	7420790	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. Phre1 (=OP1)	1
HEOP0425 (W115)	11/07/2013	777925	7421025	50K	Ostracoda	Candonidae	Origocandona inanitas	5
HEOP0425 (W115)	11/07/2013	778530	7421164	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	11/07/2013	779113	7420541	50K	Ostracoda	Candonidae	Origocandona inanitas	10
HEOP0425 (W115)	11/07/2013	779699	7420129	50K	Oligochaeta	Enchytraeidae	Enchytraeus sp. Ench1	1
HEOP0425 (W115)	11/07/2013	780296	7420383	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	11/07/2013	780296	7420383	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	6
HHS0019M	11/07/2013	780296	7420383	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1 (B33)	6
HHS0032	11/07/2013	778530	7421164	50K	Bathynellacea	Bathynellidae	Bathynella sp. B12	4



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HHS0032	11/07/2013	778530	7421164	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	13
HHS0032	11/07/2013	778530	7421164	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	3
HST0130R	11/07/2013	781757	7420371	50K	Bathynellacea	Bathynellidae	Bathynella sp. B11	1
HEOP0425 (W115)	12/07/2013	782039	7419180	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
HEOP0425 (W115)	12/07/2013	782350	7420168	50K	Oligochaeta	Enchytraeidae	Enchytraeus sp. Ench1	2
HST0032	13/07/2013	782487	7420486	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	8
HST0032	13/07/2013	782487	7420486	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1 (B33)	1
HEOP0425 (W115)	10/12/2013	793447	7422107	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	4
HEOP0425 (W115)	10/12/2013	793447	7422107	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	10/12/2013	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	2
T399	10/12/2013	793447	7422107	50K	Amphipoda	Paramelitidae	Chydaekata indet. OB	5
T399	10/12/2013	793447	7422107	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	1
HEOP0425 (W115)	11/12/2013	774588	7420829	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	19
T411A	12/12/2013	785047	7415790	50K	Bathynellacea	Parabathynellidae	Billibathynella cassisdis	2
EEX917	13/12/2013	793530	7417045	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	200
EEX917	13/12/13	793530	7417045	50K	Amphipoda	Paramelitidae	Chydaekata indet. OB	1
EEX917	13/12/2013	793530	7417045	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	50
EEX931	13/12/2013	793528	7417045	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
EEX931	13/12/2013	793528	7417045	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	8
HEOP0425 (W115)	13/12/2013	790927	7417327	50K	Ostracoda	Candonidae	Candoninae indet.	23
HEOP0425 (W115)	13/12/2013	790927	7417327	50K	Oligochaeta	Naididae	Naididae indet.	1
HEOP0425 (W115)	13/12/2013	790927	7417327	50K	Ostracoda	Candonidae	Origocandona inanitas	2
HEOP0425 (W115)	13/12/2013	790927	7417327	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	2
HEOP0425 (W115)	13/12/2013	790927	7417327	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	3
HEOP0425 (W115)	13/12/2013	790927	7417327	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	6
HEOP0425 (W115)	13/12/2013	791423	7417419	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	3
HEOP0425 (W115)	13/12/2013	791423	7417419	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	2
HEOP0425 (W115)	13/12/2013	791423	7417419	50K	Nematoda		Nematoda indet.	1
HEOP0425 (W115)	13/12/2013	791748	7417311	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
HEOP0425 (W115)	13/12/2013	791748	7417311	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	19
HEOP0425 (W115)	13/12/2013	792269	7417283	50K	Ostracoda	Candonidae	Candonopsis tenuis	1
HEOP0425 (W115)	13/12/2013	792588	7419470	50K	Ostracoda	Candonidae	Pilbaracandona colonia	5
HEOP0425 (W115)	13/12/2013	792677	7419694	50K	Ostracoda	Candonidae	Candoninae indet.	1
HEOP0425 (W115)	13/12/2013	792677	7419694	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
HEOP0425 (W115)	13/12/2013	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona colonia	15



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425 (W115)	13/12/2013	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	2
HEOP0425 (W115)	13/12/2013	792845	7420504	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
HEOP0425 (W115)	13/12/2013	792845	7420504	50K	Oligochaeta	Naididae	Naididae indet.	3
HEOP0425 (W115)	13/12/2013	792845	7420504	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	1
HEOP0425 (W115)	13/12/2013	793528	7417045	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	13/12/2013	793530	7417045	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	6
HEOP0425 (W115)	13/12/2013	793687	7417497	50K	Ostracoda	Candonidae	Candoninae indet.	1
HEOP0425 (W115)	13/12/2013	793687	7417497	50K	Ostracoda	Candonidae	Notacandona gratia	11
HEOP0425 (W115)	13/12/2013	793687	7417497	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	2
HEOP0425 (W115)	13/12/2013	794519	7416613	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	60
HEOP0425 (W115)	13/12/2013	795188	7424048	50K	Ostracoda	Candonidae	Candoninae indet.	3
HEOP0425 (W115)	13/12/2013	795188	7424048	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	13/12/2013	795188	7424048	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	4
HEOP0425 (W115)	13/12/2013	795188	7424048	50K	Isopoda	Tainisopidae	Pygobolis humphreysi	1
HEOP0425 (W115)	13/12/2013	797472	7426205	50K	Ostracoda	Candonidae	Candonidae indet.	12
HEOP0425 (W115)	13/12/2013	797472	7426205	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	13/12/2013	797472	7426205	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	8
HEOP0425 (W115)	13/12/2013	805054	7412794	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	2
Monit Point	13/12/2013	794519	7416613	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	2
Monit Point	13/12/2013	794519	7416613	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	1
NODDY	13/12/2013	805054	7412794	50K	Aphanoneura	Aeolosomatidae	Aeolosoma sp. OB	2
NODDY	13/12/2013	805054	7412794	50K	Copepoda: Cyclopoida	Cyclopidae	Cyclopoida indet.	4
OB23REG1	13/12/2013	791423	7417419	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	4
T401	13/12/2013	792845	7420504	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
W056	13/12/2013	792588	7419470	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	30
W056	13/12/2013	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Cyclopoida indet.	2
W056	13/12/2013	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	4
W056	13/12/2013	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1
W056	13/12/2013	792588	7419470	50K	Amphipoda	Paramelitidae	Maarka sp. OB3 AMP003	1
W056	13/12/2013	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	nr. Pilbaracyclops sp. OB	1
W056	13/12/2013	792588	7419470	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1-OB2	1
W078 / HEOP0387	13/12/2013	791748	7417311	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	9
W078 / HEOP0387	13/12/2013	791748	7417311	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
W078 / HEOP0387	13/12/2013	791748	7417311	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	7
W107 / HEOP0417	13/12/2013	792269	7417283	50K	Amphipoda	Paramelitidae	Chydaekata indet. OB	1



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W107 / HEOP0417	13/12/2013	792269	7417283	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	4
W115 / HEOP0425	13/12/2013	793687	7417497	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	950
W115 / HEOP0425	13/12/2013	793687	7417497	50K	Amphipoda	Paramelitidae	Chydaekata indet. OB	2
W115 / HEOP0425	13/12/2013	793687	7417497	50K	Isopoda	Microcerberidae	Coxicerberus sp. OB2	1
W115 / HEOP0425	13/12/2013	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Cyclopoida indet.	100
W115 / HEOP0425	13/12/2013	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	800
W115 / HEOP0425	13/12/2013	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	50
W115 / HEOP0425	13/12/2013	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Orbuscyclops westaustraliensis	50
W115 / HEOP0425	13/12/2013	793687	7417497	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1-OB2	1
W115 / HEOP0425	13/12/2013	793687	7417497	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	20
W115 / HEOP0425	13/12/2013	793687	7417497	50K	Acarina	Pezidae	Peza sp. OB	7
W116	13/12/2013	797472	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	200
W116	13/12/2013	797472	7426205	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	1
W116	13/12/2013	797472	7426205	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	2
W152	13/12/2013	795188	7424048	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	4
W152	13/12/2013	795188	7424048	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	12
W152	13/12/2013	795188	7424048	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	200
W152	13/12/2013	795188	7424048	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	21
W152	13/12/2013	795188	7424048	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
W152	13/12/2013	795188	7424048	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	5
W247 / HEOP0559	13/12/2013	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Cyclopoida indet.	5
W247 / HEOP0559	13/12/2013	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	19
W247 / HEOP0559	13/12/2013	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	3
W247 / HEOP0559	13/12/2013	795402	7416424	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	4
W247 / HEOP0559	13/12/2013	795402	7416424	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
W262	13/12/2013	792677	7419694	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	20
W262	13/12/2013	792677	7419694	50K	Bathynellacea	Parabathynellidae	Brevisomabathynella indet.	1
W262	13/12/2013	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Cyclopoida indet.	25
W262	13/12/2013	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cockingi	15
W262	13/12/2013	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	60
W262	13/12/2013	792677	7419694	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	3
W262	13/12/2013	792677	7419694	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1-OB2	3
W79D	13/12/2013	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	34
W79D	13/12/2013	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	3
W79D	13/12/2013	790927	7417327	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	16

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W79D	13/12/2013	790927	7417327	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	3
W79D	13/12/2013	790927	7417327	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	1
W79D	13/12/2013	790927	7417327	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
W79D	13/12/2013	790927	7417327	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	1
W79D	13/12/2013	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	3
HEC0303	14/12/2013	788952	7417003	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
HEOP0425 (W115)	14/12/2013	782300	7416227	50K	Ostracoda	Candonidae	Candoninae indet.	1
HEOP0425 (W115)	14/12/2013	785756	7409060	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	2
HEOP0425 (W115)	14/12/2013	791421	7418598	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	14/12/2013	791605	7418527	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	2
HEOP0425 (W115)	14/12/2013	797328	7429823	50K	Ostracoda	Candonidae	Notacandona gratia	2
P20S / HEA0134	14/12/2013	791605	7418527	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	6
W013	14/12/2013	782300	7416227	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	2
W013	14/12/2013	782300	7416227	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	6
W013	14/12/2013	782300	7416227	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	2
W028	14/12/2013	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata indet. OB	1
W028	14/12/2013	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	50
W028	14/12/2013	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
WP14S / HEA0126	14/12/2013	791702	7418654	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
WP14S / HEA0126	14/12/2013	791702	7418654	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	2
WP23-12i	14/12/2013	791351	7418337	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	70
F3NR	15/12/2013	790090	7415143	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	3
F3NR	15/12/2013	790090	7415143	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
F3NR	15/12/2013	790090	7415143	50K	Bathynellacea	Parabathynellidae	Billibathynella cassidis	1
F3NR	15/12/2013	790090	7415143	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
F3NR	15/12/2013	790090	7415143	50K	Copepoda: Cyclopoida	Cyclopidae	Microcyclops varicans	16
F3NR	15/12/2013	790090	7415143	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	2
F3NR	15/12/2013	790090	7415143	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	27
HEOP0425 (W115)	15/12/2013	783763	7406531	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	10
HEOP0425 (W115)	15/12/2013	790297	7409115	50K	Ostracoda	Candonidae	Notacandona gratia	2
HEOP0425 (W115)	15/12/2013	790448	7413044	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	2
HEOP0425 (W115)	15/12/2013	794712	7423019	50K	Ostracoda	Candonidae	Candoninae indet.	4
HEOP0425 (W115)	15/12/2013	794712	7423019	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	15/12/2013	794712	7423019	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	17
HEOP0425 (W115)	15/12/2013	794712	7423019	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	2



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425 (W115)	15/12/2013	794712	7423019	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
Unknown 3	15/12/2013	783763	7406531	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1-OB2	3
Unknown 3	15/12/2013	783763	7406531	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	1
W088	15/12/2013	788362	7410086	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	7
W088	15/12/2013	788362	7410086	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cf. sobeprolatus	1
W196	15/12/2013	790297	7409115	50K	Copepoda: Cyclopoida	Cyclopidae	Orbuscyclops westaustraliensis	1
W251	15/12/2013	794712	7423019	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	150
W251	15/12/2013	794712	7423019	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W251	15/12/2013	794712	7423019	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cockingi	2
W251	15/12/2013	794712	7423019	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	5
W251	15/12/2013	794712	7423019	50K	Amphipoda	Paramelitidae	Maarra sp. OB3 AMP003	4
HEOP0425 (W115)	14/03/2014	793447	7422107	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	14/03/2014	793447	7422107	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	14/03/2014	795188	7424048	50K	Ostracoda	Candonidae	Pilbaracandona colonia	1
HEOP0425 (W115)	14/03/2014	795188	7424048	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	13
HEOP0425 (W115)	14/03/2014	795188	7424048	50K	Ostracoda	Candonidae	Pilbaracandona indet.	5
HEOP0425 (W115)	14/03/2014	795188	7424048	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	14/03/2014	795188	7424048	50K	Platyhelminthes		Turbellaria indet.	2
HEOP0425 (W115)	14/03/2014	797328	7429823	50K	Ostracoda	Candonidae	Notacandona gratia	2
HEOP0425 (W115)	14/03/2014	797328	7429823	50K	Platyhelminthes		Turbellaria indet.	10
HEOP0425 (W115)	14/03/2014	797472	7426205	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	14/03/2014	797472	7426205	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	10
HEOP0425 (W115)	14/03/2014	797472	7426205	50K	Ostracoda	Candonidae	Pilbaracandona indet.	8
HEOP0425 (W115)	14/03/2014	797472	7426205	50K	Platyhelminthes		Turbellaria indet.	1
T399	14/03/2014	793447	7422107	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	2
T399	14/03/2014	793447	7422107	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
T399	14/03/2014	793447	7422107	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	600
W116	14/03/2014	797472	7426205	50K	Aphanoneura	Aeolosomatidae	Aeolosoma sp. OB	1
W116	14/03/2014	797472	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	35
W116	14/03/2014	797472	7426205	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	4
W116	14/03/2014	797472	7426205	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	5
W116	14/03/2014	797472	7426205	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	3
W152	14/03/2014	795188	7424048	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
W152	14/03/2014	795188	7424048	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	200
W152	14/03/2014	795188	7424048	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	37

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W152	14/03/2014	795188	7424048	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	7
W152	14/03/2014	795188	7424048	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	42
W229 / HEOP0468	14/03/2014	793400	7430867	50K	Copepoda: Cyclopoida	Cyclopidae	Cyclopoida indet.	1
W231	14/03/2014	797328	7429823	50K	Bathynellacea	Parabathynellidae	Brevisomabathynella indet.	1
HEOP0425 (W115)	15/03/2014	785756	7409060	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	15/03/2014	790927	7417327	50K	Ostracoda	Candonidae	Candonopsis tenuis	4
HEOP0425 (W115)	15/03/2014	790927	7417327	50K	Oligochaeta	Naididae	Naididae indet.	1
HEOP0425 (W115)	15/03/2014	790927	7417327	50K	Ostracoda	Candonidae	Origocandona inanitas	11
HEOP0425 (W115)	15/03/2014	790927	7417327	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	40
HEOP0425 (W115)	15/03/2014	790927	7417327	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
HEOP0425 (W115)	15/03/2014	791423	7417419	50K	Ostracoda	Candonidae	Candoninae indet.	1
HEOP0425 (W115)	15/03/2014	791423	7417419	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	5
HEOP0425 (W115)	15/03/2014	791423	7417419	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	3
HEOP0425 (W115)	15/03/2014	791748	7417311	50K	Ostracoda	Candonidae	Candoninae indet.	1
HEOP0425 (W115)	15/03/2014	791748	7417311	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	5
HEOP0425 (W115)	15/03/2014	791748	7417311	50K	Oligochaeta	Naididae	Naididae indet.	1
HEOP0425 (W115)	15/03/2014	791748	7417311	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	30
HEOP0425 (W115)	15/03/2014	792588	7419470	50K	Ostracoda	Candonidae	Candoninae indet.	1
HEOP0425 (W115)	15/03/2014	792588	7419470	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	1
HEOP0425 (W115)	15/03/2014	792588	7419470	50K	Platyhelminthes		Turbellaria indet.	1
HEOP0425 (W115)	15/03/2014	792677	7419694	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	5
HEOP0425 (W115)	15/03/2014	792677	7419694	50K	Nematoda		Nematoda indet.	2
HEOP0425 (W115)	15/03/2014	792677	7419694	50K	Ostracoda	Candonidae	Origocandona inanitas	3
HEOP0425 (W115)	15/03/2014	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona colonia	14
HEOP0425 (W115)	15/03/2014	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	8
HEOP0425 (W115)	15/03/2014	792677	7419694	50K	Platyhelminthes		Turbellaria indet.	6
HEOP0425 (W115)	15/03/2014	792845	7420504	50K	Oligochaeta	Naididae	Naididae indet.	7
HEOP0425 (W115)	15/03/2014	792845	7420504	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	2
HEOP0425 (W115)	15/03/2014	792845	7420504	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	15/03/2014	794712	7423019	50K	Ostracoda	Candonidae	Candoninae indet.	10
HEOP0425 (W115)	15/03/2014	794712	7423019	50K	Oligochaeta	Naididae	Naididae indet.	1
HEOP0425 (W115)	15/03/2014	794712	7423019	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	3
HEOP0425 (W115)	15/03/2014	794712	7423019	50K	Ostracoda	Candonidae	Pilbaracandona colonia	2
HEOP0425 (W115)	15/03/2014	794712	7423019	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	50
HEOP0425 (W115)	15/03/2014	794712	7423019	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	14



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425 (W115)	15/03/2014	794712	7423019	50K	Isopoda	Tainisopidae	Pygoblabis humphreysi	21
OB23REG1	15/03/2014	791423	7417419	50K	Copepoda: Cyclopoida	Cyclopidae	Anzycyclops sp. OB	1
OB23REG1	15/03/2014	791423	7417419	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
OB23REG1	15/03/2014	791423	7417419	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
T401	15/03/2014	792845	7420504	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	20
T401	15/03/2014	792845	7420504	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	4
T401	15/03/2014	792845	7420504	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1-OB2	1
T401	15/03/2014	792845	7420504	50K	Copepoda: Cyclopoida	Cyclopidae	Pescecyclops pilbaricus	1
T401	15/03/2014	792845	7420504	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	2
W028	15/03/2014	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata indet. OB	4
W028	15/03/2014	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	150
W028	15/03/2014	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	50
W028	15/03/2014	785756	7409060	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
W056	15/03/2014	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	3
W056	15/03/2014	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1
W056	15/03/2014	792588	7419470	50K	Amphipoda	Paramelitidae	Maarra sp. OB3 AMP003	1
W078 / HEOP0387	15/03/2014	791748	7417311	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	50
W078 / HEOP0387	15/03/2014	791748	7417311	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	2
W078 / HEOP0387	15/03/2014	791748	7417311	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	16
W078 / HEOP0387	15/03/2014	791748	7417311	50K	Amphipoda	Paramelitidae	Maarra etheli	2
W078 / HEOP0387	15/03/2014	791748	7417311	50K	Amphipoda	Paramelitidae	Maarra sp. OB3 AMP003	5
W078 / HEOP0387	15/03/2014	791748	7417311	50K	Copepoda: Cyclopoida	Cyclopidae	nr. Pilbaracyclops sp. OB	1
W078 / HEOP0387	15/03/2014	791748	7417311	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	1
W251	15/03/2014	794712	7423019	50K	Aphanoneura	Aeolosomatidae	Aeolosoma sp. OB	2
W251	15/03/2014	794712	7423019	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	250
W251	15/03/2014	794712	7423019	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	8
W251	15/03/2014	794712	7423019	50K	Amphipoda	Paramelitidae	Chydaekata indet. OB	24
W251	15/03/2014	794712	7423019	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cockingi	10
W251	15/03/2014	794712	7423019	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	50
W251	15/03/2014	794712	7423019	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops indet.	10
W251	15/03/2014	794712	7423019	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	30
W251	15/03/2014	794712	7423019	50K	Amphipoda	Paramelitidae	Maarra sp. OB3 AMP003	11
W262	15/03/2014	792677	7419694	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
W262	15/03/2014	792677	7419694	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	8
W262	15/03/2014	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Cyclopoida indet.	70

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W262	15/03/2014	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	60
W262	15/03/2014	792677	7419694	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	22
W262	15/03/2014	792677	7419694	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1-OB2	18
W262	15/03/2014	792677	7419694	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	1
W262	15/03/2014	792677	7419694	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris jane	1
W262	15/03/2014	792677	7419694	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	1
W262	15/03/2014	792677	7419694	50K	Acarina	Pezidae	Peza sp. OB	1
W262	15/03/2014	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	20
W79D	15/03/2014	790927	7417327	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
W79D	15/03/2014	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Cyclopoida indet.	1
W79D	15/03/2014	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	4
W79D	15/03/2014	790927	7417327	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	14
W79D	15/03/2014	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Microcyclops varicans	1
W79D	15/03/2014	790927	7417327	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1-OB2	1
W79D	15/03/2014	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Pescecyclops pilbaricus	3
W79D	15/03/2014	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	4
EEX917	16/03/2014	793530	7417045	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	200
EEX917	16/03/14	793530	7417045	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	4
EEX917	16/03/14	793530	7417045	50K	Amphipoda	Paramelitidae	Chydaekata indet. OB	20
EEX917	16/03/2014	793530	7417045	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	100
EEX917	16/03/2014	793530	7417045	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
EEX931	16/03/2014	793528	7417045	50K	Aphanoneura	Aeolosomatidae	Aeolosoma sp. OB	3
EEX931	16/03/2014	793528	7417045	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	6
HEOP0425 (W115)	16/03/2014	782300	7416227	50K	Ostracoda	Candonidae	Candoninae indet.	1
HEOP0425 (W115)	16/03/2014	782300	7416227	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	16/03/2014	793528	7417045	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	3
HEOP0425 (W115)	16/03/2014	793528	7417045	50K	Oligochaeta	Naididae	Naididae indet.	2
HEOP0425 (W115)	16/03/2014	793528	7417045	50K	Platyhelminthes		Turbellaria indet.	1
HEOP0425 (W115)	16/03/2014	793530	7417045	50K	Ostracoda	Candonidae	Pilbaracandona colonia	2
HEOP0425 (W115)	16/03/2014	793530	7417045	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	10
HEOP0425 (W115)	16/03/2014	793530	7417045	50K	Ostracoda	Candonidae	Pilbaracandona sp. OB2	2
HEOP0425 (W115)	16/03/2014	793687	7417497	50K	Oligochaeta	Naididae	Naididae indet.	1
HEOP0425 (W115)	16/03/2014	793687	7417497	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	2
HEOP0425 (W115)	16/03/2014	793687	7417497	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	3
HEOP0425 (W115)	16/03/2014	794519	7416613	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	100



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W013	16/03/2014	782300	7416227	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	2
W013	16/03/2014	782300	7416227	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
W013	16/03/2014	782300	7416227	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops indet.	2
W013	16/03/2014	782300	7416227	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	3
W013	16/03/2014	782300	7416227	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	1
W013	16/03/2014	782300	7416227	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris sp. OB1 (B02)	1
W013	16/03/2014	782300	7416227	50K	Acarina	Pezidae	Peza sp. OB	1
W115 / HEOP0425	16/03/2014	793687	7417497	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	15
W115 / HEOP0425	16/03/2014	793687	7417497	50K	Amphipoda	Paramelitidae	Chydaekata indet. OB	1
W115 / HEOP0425	16/03/2014	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	30
W115 / HEOP0425	16/03/2014	793687	7417497	50K	Acarina	Pezidae	Peza sp. OB	8
HEC0303	17/03/2014	788952	7417003	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
HEC0303	17/03/2014	788952	7417003	50K	Copepoda: Cyclopoida	Cyclopidae	Microcyclops varicans	7
HEC0303	17/03/2014	788952	7417003	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella karanovici (B08)	1
HEOP0425 (W115)	17/03/2014	791351	7418337	50K	Oligochaeta	Naididae	Naididae indet.	1
HEOP0425 (W115)	17/03/2014	791504	7418473	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	17/03/2014	791605	7418527	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	3
HEOP0425 (W115)	17/03/2014	791702	7418654	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	100
HEOP0425 (W115)	17/03/2014	791702	7418654	50K	Oligochaeta	Naididae	Naididae indet.	2
HEOP0425 (W115)	17/03/2014	791702	7418654	50K	Ostracoda	Candonidae	Pilbaracandona colonia	5
P20S / HEA0134	17/03/2014	791605	7418527	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
P20S / HEA0134	17/03/2014	791605	7418527	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	5
P20S / HEA0134	17/03/2014	791605	7418527	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB1-OB2	1
WP23-12i	17/03/2014	791351	7418337	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	40
WP23-12i	17/03/2014	791351	7418337	50K	Copepoda: Harpacticoida	Parastenocaridae	Parastenocaris indet.	4
HEOP0425 (W115)	18/03/2014	781976	7404206	50K	Ostracoda	Candonidae	Notacandona gratia	1
HEOP0425 (W115)	18/03/2014	783763	7406531	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	3
HEOP0425 (W115)	18/03/2014	790297	7409115	50K	Ostracoda	Candonidae	Notacandona gratia	1
HEOP0425 (W115)	18/03/2014	790297	7409115	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
HEOP0425 (W115)	18/03/2014	790448	7413044	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	3
Unknown 3	18/03/2014	783763	7406531	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	2
W088	18/03/2014	788362	7410086	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	16
W088	18/03/2014	788362	7410086	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	8
W196	18/03/2014	790297	7409115	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
HEOP0425 (W115)	11/12/2014	783763	7406531	50K	Oligochaeta	Phreodrilidae	Phreodrilidae-indet.	10

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425 (W115)	11/12/2014	791748	7417311	50K	Oligochaeta: Haplotaxida	Phreodrilidae	Phreodrilidae-sp.OP1	10
Unknown 3	11/12/2014	783763	7406531	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	2
UNKNOWN3	11/12/2014	783763	7406531	50K	Amphipoda	Paramelitidae	Paramelitidae-sp.OB2 (AMP002)	2
EEX917	12/12/2014	793530	7417045	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
EEX917	12/12/2014	793530	7417045	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
EX895	12/12/2014	793633	7416841	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	4
EX895	12/12/2014	793633	7416841	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	4
EX895	12/12/2014	793633	7416841	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
EX895	12/12/2014	793633	7416841	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	6
EX895	12/12/2014	793633	7416841	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi_humphreysi	6
EX895	12/12/2014	793633	7416841	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1
EX895	12/12/2014	793633	7416841	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1
EX895	12/12/2014	793633	7416841	50K	Amphipoda	Paramelitidae	Paramelitidae-sp.OB2 (AMP002)	1
HEOP0425 (W115)	12/12/2014	791748	7417311	50K	Oligochaeta: Haplotaxida	Enchytraeidae	Enchytraeidae-indet.	2
HEOP0425 (W115)	12/12/2014	791748	7417311	50K	Oligochaeta: Haplotaxida	Enchytraeidae	Enchytraeidae-indet.	1
HEOP0425 (W115)	12/12/2014	793633	7416841	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	2
HEOP0425 (W115)	12/12/2014	793687	7417497	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
P20S	12/12/2014	791605	7418527	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
P20S / HEA0133	12/12/2014	791605	7418527	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W115	12/12/2014	793687	7417497	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	5
W115	12/12/2014	793687	7417497	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W115	12/12/2014	793687	7417497	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	2
W115	12/12/2014	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi_humphreysi	6
W115 / HEOP0421	12/12/2014	793687	7417497	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W115 / HEOP0422	12/12/2014	793687	7417497	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	2
W115 / HEOP0423	12/12/2014	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	6
W115 / HEOP0424	12/12/2014	793687	7417497	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	5
W247	12/12/2014	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi_humphreysi	5
W247 / HEOP0559	12/12/2014	795402	7416424	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	5
HEOP0425 (W115)	13/12/2014	791748	7417311	50K	Ostracoda: Podocopida	Candonidae	Pilbaracandona colonia	6
HEOP0425 (W115)	13/12/2014	791748	7417311	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	5
HEOP0425 (W115)	13/12/2014	791748	7417311	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	5
HEOP0425 (W115)	13/12/2014	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona colonia	6
HEOP0425 (W115)	13/12/2014	792885	7417378	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	5
HEOP0425 (W115)	13/12/2014	792885	7417378	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	5



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W116	13/12/2014	797472	7426205	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
W116	13/12/2014	797472	7426205	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
W116	13/12/2014	797472	7426205	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
W116	13/12/2014	797472	7426205	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
W117	13/12/2014	797090	7426353	50K	Bathynellacea	Parabathynellidae	Brevisomabathynella pilbaraensis	1
W117	13/12/2014	797090	7426353	50K	Bathynellacea	Parabathynellidae	Brevisomabathynella pilbaraensis	1
W117	13/12/2014	797090	7426353	50K	Bathynellacea	Parabathynellidae	Brevisomabathynella pilbaraensis	1
W117	13/12/2014	797090	7426353	50K	Bathynellacea	Parabathynellidae	Brevisomabathynella pilbaraensis	1
W117	13/12/2014	797090	7426353	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	2
W117	13/12/2014	797090	7426353	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	2
W117	13/12/2014	797090	7426353	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
W117	13/12/2014	797090	7426353	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
W152	13/12/2014	795188	7424048	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
W152	13/12/2014	795188	7424048	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
W152	13/12/2014	795188	7424048	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	4
W152	13/12/2014	795188	7424048	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	4
W262	13/12/2014	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi_humphreysi	10
W262	13/12/2014	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1
W262	13/12/2014	792677	7419694	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W262	13/12/2014	792677	7419694	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W262	13/12/2014	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	10
W262	13/12/2014	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1
W028	14/12/2014	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata sp. OB1	1
W028	14/12/2014	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata sp. OB2	1
W028	14/12/2014	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	11
W028	14/12/2014	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	11
W028	14/12/2014	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	2
W028	14/12/2014	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	2
HEOP0425 (W115)	15/12/2014	791748	7417311	50K	Oligochaeta: Haplotaxida	Enchytraeidae	Enchytraeidae-indet.	1
HEOP0425 (W115)	15/12/2014	791748	7417311	50K	Oligochaeta: Haplotaxida	Naididae	Pristina sp.OB	4
HEOP0425 (W115)	15/12/2014	791748	7417311	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	7
HEOP0425 (W115)	15/12/2014	791748	7417311	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	7
HEOP0425 (W115)	15/12/2014	791748	7417311	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	7
HEOP0425 (W115)	15/12/2014	791748	7417311	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	7
HEOP0425 (W115)	15/12/2014	791748	7417311	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0425 (W115)	15/12/2014	792753	7420767	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	15/12/2014	792753	7420767	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
HEOP0425 (W115)	15/12/2014	792885	7417378	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	15/12/2014	793447	7422107	50K	Oligochaeta	Phreodrilidae	Phreodrilidae-indet.	4
HEOP0425 (W115)	15/12/2014	793447	7422107	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	15/12/2014	793447	7422107	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	15/12/2014	793447	7422107	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	15/12/2014	793447	7422107	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	15/12/2014	793528	7417045	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
T399	15/12/2014	793447	7422107	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	8
T399	15/12/2014	793447	7422107	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	8
T399	15/12/2014	793447	7422107	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	8
T399	15/12/2014	793447	7422107	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	8
T399	15/12/2014	793447	7422107	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
T399	15/12/2014	793447	7422107	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella 'ophthalmia' TK	1
T399	15/12/2014	793447	7422107	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	1
T399	15/12/2014	793447	7422107	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella 'ophthalmia' TK	1
W078 / HEOP0387	15/12/2014	791748	7417311	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	2
W078 / HEOP0387	15/12/2014	791748	7417311	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	2
W79D	15/12/2014	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi_humphreysi	2
W79D	15/12/2014	790927	7417327	50K	Amphipoda	Paramelitidae	Paramelitidae-sp.OB3 (AMP003)	1
W79D	15/12/2014	790927	7417327	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	1
W79D	15/12/2014	792753	7420767	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W79D	15/12/2014	792753	7420767	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W79D	15/12/2014	792753	7420767	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2
W79D	15/12/2014	792753	7420767	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
W79D	15/12/2014	792753	7420767	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	1
HEOP0425 (W115)	16/03/2015	782000	7404224	50K	Ostracoda		Ostracoda	1
HEOP0425 (W115)	16/03/2015	783763	7406531	50K	Oligochaeta	Phreodrilidae	Phreodrilidae-indet.	2
HEOP0425 (W115)	16/03/2015	790297	7409115	50K	Ostracoda		Ostracoda	1
HEOP0425 (W115)	16/03/2015	791748	7417311	50K	Ostracoda: Podocopida	Candonidae	Notacandona gratia	1
HEOP0425 (W115)	16/03/2015	791748	7417311	50K	Ostracoda: Podocopida	Candonidae	Notacandona gratia	1
HEOP0425 (W115)	16/03/2015	791748	7417311	50K	Oligochaeta: Haplotaxida	Phreodrilidae	Phreodrilidae-indet.	2
Unknown 3	16/03/2015	783763	7406531	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	2
UNKNOWN3	16/03/2015	783763	7406531	50K	Amphipoda	Paramelitidae	Paramelitidae-sp.OB2 (AMP002)	2



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W178	16/03/2015	782000	7404224	50K	Copepoda: Cyclopoida	Cyclopidae	Copepoda indet.	1
W196	16/03/2015	790297	7409115	50K	Copepoda: Cyclopoida	Cyclopidae	Orbuscyclops westaustraliensis	1
HEOP0425 (W115)	17/03/2015	791748	7417311	50K	Oligochaeta: Haplotaxida	Enchytraeidae	Enchytraeidae-indet.	2
HEOP0425 (W115)	17/03/2015	791748	7417311	50K	Ostracoda: Podocopida	Candonidae	Notacandona gratia	10
HEOP0425 (W115)	17/03/2015	791748	7417311	50K	Oligochaeta: Haplotaxida	Phreodrilidae	Phreodrilidae-indet.	1
HEOP0425 (W115)	17/03/2015	791748	7417311	50K	Ostracoda: Podocopida	Candonidae	Pilbaracandona colonia	5
HEOP0425 (W115)	17/03/2015	791748	7417311	50K	Ostracoda: Podocopida	Candonidae	Pilbaracandona eberhardi	5
HEOP0425 (W115)	17/03/2015	791748	7417311	50K	Platyhelminthes		Platyhelminthes indet	1
HEOP0425 (W115)	17/03/2015	792677	7419694	50K	Ostracoda		Ostracoda	5
HEOP0425 (W115)	17/03/2015	792677	7419694	50K	Platyhelminthes		Platyhelminthes indet	1
HEOP0425 (W115)	17/03/2015	792885	7417378	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
HEOP0425 (W115)	17/03/2015	792885	7417378	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
HEOP0425 (W115)	17/03/2015	793447	7422107	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	2
HEOP0425 (W115)	17/03/2015	797090	7426353	50K	Oligochaeta	Phreodrilidae	Phreodrilidae-indet.	1
HEOP0425 (W115)	17/03/2015	797090	7426353	50K	Ostracoda		Ostracoda	10
HEOP0425 (W115)	17/03/2015	797472	7426205	50K	Ostracoda		Ostracoda	5
T399	17/03/2015	793447	7422107	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	7
W056	17/03/2015	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Metacyclops pilbaricus	1
W056	17/03/2015	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	2
W116	17/03/2015	797472	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi_humphreysi	800
W116	17/03/2015	797472	7426205	50K	Bathynellacea	Parabathynellidae	Brevisomabathynella pilbaraensis	1
W116	17/03/2015	797472	7426205	50K	Bathynellacea	Parabathynellidae	Brevisomabathynella pilbaraensis	1
W116	17/03/2015	797472	7426205	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	7
W116	17/03/2015	797472	7426205	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	7
W117	17/03/2015	797090	7426353	50K	Bathynellacea	Parabathynellidae	Brevisomabathynella pilbaraensis	1
W117	17/03/2015	797090	7426353	50K	Bathynellacea	Parabathynellidae	Brevisomabathynella pilbaraensis	1
W117	17/03/2015	797090	7426353	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	2
W117	17/03/2015	797090	7426353	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	2
W117	17/03/2015	797090	7426353	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi_humphreysi	199
W117	17/03/2015	797090	7426353	50K	Copepoda: Harpacticoida		Harpacticoida	37
W117	17/03/2015	797090	7426353	50K	Copepoda: Harpacticoida		Harpacticoida	100
W117	17/03/2015	797090	7426353	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella 'ophthalmia' TK	102
W117	17/03/2015	797090	7426353	50K	Copepoda: Cyclopoida	Cyclopidae	Orbuscyclops westaustraliensis	1
W117	17/03/2015	797090	7426353	50K	Copepoda: Harpacticoida	Parastenocarididae	Parastenocaris cf. jane	37
W152	17/03/2015	795188	7424048	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi_humphreysi	300



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W152	17/03/2015	795188	7424048	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella 'ophthalmia' TK	2
W152	17/03/2015	795188	7424048	50K	Copepoda: Harpacticoida	Parastenocarididae	Parastenocaris cf. jane	21
W152	17/03/2015	795188	7424048	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	17
W152	17/03/2015	795188	7424048	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	17
W152	17/03/2015	795188	7424048	50K	Copepoda: Harpacticoida		Harpacticoida	21
W262	17/03/2015	792677	7419694	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	2
W262	17/03/2015	792677	7419694	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
W262	17/03/2015	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi_humphreysi	18
W262	17/03/2015	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1
W262	17/03/2015	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	6
W262	17/03/2015	792677	7419694	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	1
W262	17/03/2015	792677	7419694	50K	Copepoda: Harpacticoida		Harpacticoida	2
W262	17/03/2015	792677	7419694	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
W262	17/03/2015	792677	7419694	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
HEC0303	18/03/2015	788952	7417003	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	4
HEC0303	18/03/2015	788952	7417003	50K	Bathynellacea	Bathynellidae	Bathynellidae-WAMindet_1	4
HEOP0425 (W115)	18/03/2015	782300	7416227	50K	Ostracoda		Ostracoda	1
HEOP0425 (W115)	18/03/2015	791748	7417311	50K	Oligochaeta	Phreodrilidae	?Insulodrilus-indet.	2
HEOP0425 (W115)	18/03/2015	791748	7417311	50K	Ostracoda: Podocopida	Limnocytheridae	Gomphodella hirsuta	35
HEOP0425 (W115)	18/03/2015	791748	7417311	50K	Ostracoda		Ostracoda	35
HEOP0425 (W115)	18/03/2015	791748	7417311	50K	Ostracoda: Podocopida	Candonidae	Pilbaracandona ?OB2 (?OST002)	1
HEOP0425 (W115)	18/03/2015	791748	7417311	50K	Ostracoda: Podocopida	Candonidae	Pilbaracandona ?OB2 (?OST002)	1
HEOP0425 (W115)	18/03/2015	791748	7417311	50K	Ostracoda: Podocopida	Candonidae	Pilbaracandona OB2 (OST002)	2
HEOP0425 (W115)	18/03/2015	791748	7417311	50K	Oligochaeta: Haplotaxida	Naididae	Pristina sp.OB	2
HEOP0425 (W115)	18/03/2015	791748	7417311	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	17
HEOP0425 (W115)	18/03/2015	791748	7417311	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	17
HEOP0425 (W115)	18/03/2015	791748	7417311	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	7
HEOP0425 (W115)	18/03/2015	792269	7417283	50K	Ostracoda		Ostracoda	2
HEOP0425 (W115)	18/03/2015	792269	7417283	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	12
HEOP0425 (W115)	18/03/2015	792885	7417378	50K	Ostracoda		Ostracoda	1
HEOP0425 (W115)	18/03/2015	792885	7417378	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	7
HEOP0425 (W115)	18/03/2015	792885	7417378	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	12
T411A	18/03/2015	785047	7415790	50K	Bathynellacea	Parabathynellidae	Billibathynella cassidis	1
T411A	18/03/2015	785047	7415790	50K	Bathynellacea	Parabathynellidae	Billibathynella cassidis	1
W078 / HEOP0387	18/03/2015	791748	7417311	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	10



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W078 / HEOP0387	18/03/2015	791748	7417311	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	10
W078 / HEOP0387	18/03/2015	791748	7417311	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi_humphreysi	6
W105	18/03/2015	792885	7417378	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	10
W105	18/03/2015	792885	7417378	50K	Amphipoda	Paramelitidae	Maarrka etheli	1
W105	18/03/2015	792885	7417378	50K	Amphipoda	Paramelitidae	Paramelitidae-sp.OB3 (AMP003)	1
W105 / HEOP0392	18/03/2015	792885	7417378	50K	Copepoda: Harpacticoida		Harpacticoida	10
W105 / HEOP0392	18/03/2015	792885	7417378	50K	Amphipoda	Paramelitidae	Maarrka etheli	1
W105 / HEOP0392	18/03/2015	792885	7417378	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	1
W107	18/03/2015	792269	7417283	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
W107	18/03/2015	792269	7417283	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi_humphreysi	8
W107 / HEOP0417	18/03/2015	792269	7417283	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
HEOP0425 (W115)	19/03/2015	774588	7420829	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	75
HEOP0425 (W115)	19/03/2015	782348	7419260	50K	Oligochaeta	Phreodrilidae	Phreodrilidae-indet.	1
HEOP0425 (W115)	19/03/2015	785756	7409060	50K	Ostracoda		Ostracoda	1
HEOP0425 (W115)	19/03/2015	785756	7409060	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
HEOP0425 (W115)	19/03/2015	785756	7409060	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
HEOP0425 (W115)	19/03/2015	791423	7417419	50K	Nematoda		Nematoda indet.	1
HEOP0425 (W115)	19/03/2015	791748	7417311	50K	Oligochaeta: Haplotaxida	Enchytraeidae	Enchytraeidae-indet.	75
HEOP0425 (W115)	19/03/2015	791748	7417311	50K	Nematoda		Nematoda indet.	1
HEOP0425 (W115)	19/03/2015	791748	7417311	50K	Oligochaeta: Haplotaxida	Phreodrilidae	Phreodrilidae-WAMindet_1	1
HEOP0425 (W115)	19/03/2015	791748	7417311	50K	Ostracoda: Podocopida	Candonidae	Pilbaracandona OB1 (OST001)	1
HIST0723R	19/03/2015	782348	7419260	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	7
HIST0723R	19/03/2015	782348	7419260	50K	Bathynellacea	Bathynellidae	Bathynellidae-WAMindet_1	7
HIST0723R	19/03/2015	782348	7419260	50K	Copepoda: Harpacticoida		Harpacticoida	4
HIST0723R	19/03/2015	782348	7419260	50K	Copepoda: Cyclopoida	Cyclopidae	Metacyclops pilbaricus	1
HIST0723R	19/03/2015	782348	7419260	50K	Copepoda: Harpacticoida	Parastenocarididae	Parastenocaris 'hooki'	4
HST0907R	19/03/2015	782250	7419327	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	5
HST0907R	19/03/2015	782250	7419327	50K	Bathynellacea	Bathynellidae	Bathynellidae-WAMindet_2	5
HST0907R	19/03/2015	782250	7419327	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	8
HST0907R	19/03/2015	782250	7419327	50K	Amphipoda	Paramelitidae	Paramelitidae-sp.OB1 (AMP001)	8
OB23REG1	19/03/2015	791423	7417419	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	8
W028	19/03/2015	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata sp. OB1	5
W028	19/03/2015	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata sp. OB3	5
W028	19/03/2015	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	150
W028	19/03/2015	785756	7409060	50K	Copepoda: Harpacticoida		Harpacticoida	33

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W028	19/03/2015	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	30
W028	19/03/2015	785756	7409060	50K	Copepoda: Harpacticoida	Parastenocarididae	Parastenocaris cf. jane	3
W088	19/03/2015	788362	7410086	50K	Bathynellacea	Bathynellidae	Bathynellidae indet.	17
W088	19/03/2015	788362	7410086	50K	Bathynellacea	Bathynellidae	Bathynellidae sp. OB1	17
W088	19/03/2015	788362	7410086	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	4
HEOP0524 (UNKNOWN3)	29/02/2016	783762	7406531	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
HEOP0524 (UNKNOWN3)	29/02/2016	783762	7406531	50K	Copepoda: Harpacticoida	Parastenocarididae	Parastenocaris 'hooki'	8
HEOP0524 (UNKNOWN3)	29/02/2016	783762	7406531	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	1
W028	29/02/2016	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	ArchiNitocrella newmanensis	8
W028	29/02/2016	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata sp. OB1 AMP005	1
W028	29/02/2016	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	45
W028	29/02/2016	785756	7409060	50K	Copepoda: Harpacticoida	Parastenocarididae	Parastenocaris cf. jane	3
W028	29/02/2016	785756	7409060	50K	Ostracoda	Candonidae	Pilbaracandona ?OB1_?OST001	1
W028	29/02/2016	785756	7409060	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
EA0285R (W196)	1/03/2016	790298	7409116	50K	Ostracoda	Candonidae	Notacandona gratia	1
EMP0070	1/03/2016	777925	7421025	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	200
HEOP0398M (W088)	1/03/2016	788363	7410082	50K	Bathynellacea	Bathynellidae	Bathynellidae sp. OB1	1
HEOP0574M (W262)	1/03/2016	792677	7419694	50K	Bathynellacea	Bathynellidae	Bathynellidae sp. OB1	8
HEOP0574M (W262)	1/03/2016	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cockingi	4
HEOP0574M (W262)	1/03/2016	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	9
HEOP0574M (W262)	1/03/2016	792677	7419694	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	2
HEOP0574M (W262)	1/03/2016	792677	7419694	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	1
HEOP0574M (W262)	1/03/2016	792677	7419694	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	7
HEOP0574M (W262)	1/03/2016	792677	7419694	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
HEOP0574M (W262)	1/03/2016	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona colonia	15
HEOP0574M (W262)	1/03/2016	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	6
HEOP0574M (W262)	1/03/2016	792677	7419694	50K	Platyhelminthes		Platyhelminthes indet.	5
HEOP0574M (W262)	1/03/2016	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Thermocyclops decipiens	31
W056	1/03/2016	792588	7419470	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	2
HEOP0387 (W078)	2/03/2016	791947	7417303	50K	Copepoda: Harpacticoida	Ameiridae	ArchiNitocrella newmanensis	21
HEOP0387 (W078)	2/03/2016	791947	7417303	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	9
HEOP0387 (W078)	2/03/2016	791947	7417303	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	17
HEOP0387 (W078)	2/03/2016	791947	7417303	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	28
HEOP0387 (W078)	2/03/2016	791947	7417303	50K	Amphipoda	Paramelitidae	Maarrka etheli	4
HEOP0387 (W078)	2/03/2016	791947	7417303	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	1



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0387 (W078)	2/03/2016	791947	7417303	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	5
HEOP0415 (W105)	2/03/2016	792885	7417378	50K	Copepoda: Harpacticoida	Ameiridae	ArchiNitocrella newmanensis	31
HEOP0415 (W105)	2/03/2016	792885	7417378	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
HEOP0415 (W105)	2/03/2016	792885	7417378	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	200
HEOP0415 (W105)	2/03/2016	792885	7417378	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	2
HEOP0415 (W105)	2/03/2016	792885	7417378	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	3
HEOP0415 (W105)	2/03/2016	792885	7417378	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella 'ophthalmia'TK	3
HEOP0415 (W105)	2/03/2016	792885	7417378	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	4
HEOP0415 (W105)	2/03/2016	792885	7417378	50K	Ostracoda	Candonidae	Pilbaracandona ?OB2_?OST002	1
HEOP0415 (W105)	2/03/2016	792885	7417378	50K	Oligochaeta	Naididae	Pristina sp.OB	1
HEOP0415 (W105)	2/03/2016	792885	7417378	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	3
HEOP0425 (W115)	2/03/2016	793687	7417497	50K	Copepoda: Harpacticoida	Ameiridae	ArchiNitocrella newmanensis	6
HEOP0425 (W115)	2/03/2016	793687	7417497	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
HEOP0425 (W115)	2/03/2016	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	9
HEOP0425 (W115)	2/03/2016	793687	7417497	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella 'ophthalmia'TK	1
HEOP0425 (W115)	2/03/2016	793687	7417497	50K	Acarina	Pezidae	Peza ACA001	3
T399	2/03/2016	793447	7422107	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	12
T399	2/03/2016	793447	7422107	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	42
T399	2/03/2016	793447	7422107	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	2
T399	2/03/2016	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona ?OB2_?OST002	2
T399	2/03/2016	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	36
T399	2/03/2016	793447	7422107	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	4
T399	2/03/2016	793447	7422107	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	4
W116	2/03/2016	797472	7426205	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	23
W116	2/03/2016	797472	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	300
W116	2/03/2016	797472	7426205	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella 'ophthalmia'TK	1
W116	2/03/2016	797472	7426205	50K	Copepoda: Harpacticoida	Parastenocarididae	Parastenocaris cf. jane	7
W116	2/03/2016	797472	7426205	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	39
W116	2/03/2016	797472	7426205	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
W117	2/03/2016	797090	7426353	50K	Copepoda: Harpacticoida	Ameiridae	ArchiNitocrella newmanensis	3
W117	2/03/2016	797090	7426353	50K	Bathynellacea	Parabathynellidae	Brevisomabathynella pilbaraensis	1
W117	2/03/2016	797090	7426353	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	7
W117	2/03/2016	797090	7426353	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	300
W117	2/03/2016	797090	7426353	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	9
W117	2/03/2016	797090	7426353	50K	Copepoda: Harpacticoida	Ameiridae	Nitocrella 'ophthalmia'TK	22



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
W117	2/03/2016	797090	7426353	50K	Copepoda: Harpacticoida	Parastenocarididae	Parastenocaris cf. jane	200
W117	2/03/2016	797090	7426353	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	1
W152	2/03/2016	795332	7424199	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	12
W152	2/03/2016	795332	7424199	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	100
W152	2/03/2016	795332	7424199	50K	Copepoda: Harpacticoida	Parastenocarididae	Parastenocaris cf. jane	6
W152	2/03/2016	795332	7424199	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	1
W152	2/03/2016	795332	7424199	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2
W231	2/03/2016	797328	7429823	50K	Ostracoda	Candonidae	Notacandona gratia	2
EQ0125R	3/03/2016	787473	7415496	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
EQ0125R	3/03/2016	787473	7415496	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
EQ0212DM4	3/03/2016	787477	7415504	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
EQ0212DM4	3/03/2016	787477	7415504	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	11
EQ0212DM4	3/03/2016	787477	7415504	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1
EQ0212DM4	3/03/2016	787477	7415504	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	2
HEA0121 (WP23-12i)	3/03/2016	791352	7418337	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	30
HEA0126 (WP14S)	3/03/2016	791702	7418654	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
HEA0126 (WP14S)	3/03/2016	791702	7418654	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	80
HEA0133	3/03/2016	791605	7418527	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	2
HEA0133	3/03/2016	791605	7418527	50K	Ostracoda	Candonidae	Pilbaracandona colonia	5
HEOP0388	3/03/2016	790858	7417267	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
HEOP0388	3/03/2016	790858	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	7
HEOP0388	3/03/2016	790858	7417267	50K	Ostracoda	Candonidae	Origocandona cf. inanitas	2
HEOP0388	3/03/2016	790858	7417267	50K	Ostracoda	Candonidae	Pilbaracandona ?OB1_?OST001	5
HEOP0388	3/03/2016	790858	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	2
HEOP0388	3/03/2016	790858	7417267	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0417 (W107)	3/03/2016	792269	7417283	50K	Ostracoda	Candonidae	Candonidae indet.	1
HEOP0417 (W107)	3/03/2016	792269	7417283	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	2
HEOP0417 (W107)	3/03/2016	792269	7417283	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	23
OB23REG1	3/03/2016	788417	7416817	50K	Oligochaeta	Naididae	Pristina sp. OB	34
OB23REG1	3/03/2016	791423	7417419	50K	Bathynellacea	Bathynellidae	Bathynellidae sp. OB1	3
OB23REG1	3/03/2016	791423	7417419	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	16
OB23REG1	3/03/2016	791423	7417419	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	22
HEC0339	4/03/2016	788952	7417003	50K	Bathynellacea	Bathynellidae	Bathynellidae sp. OB1	3
HEC0339	4/03/2016	788952	7417003	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	6
HEC0339	4/03/2016	788952	7417003	50K	Amphipoda	Paramelitidae	Maarrka sp. OB3 AMP003	1



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HEC0339	4/03/2016	788952	7417003	50K	Amphipoda	Paramelitidae	Paramelitidae-indet.	7
HEC0339	4/03/2016	788952	7417003	50K	Amphipoda	Paramelitidae	Paramelitidae-sp.OB1_AMP001	23
HEC0339	4/03/2016	788952	7417003	50K	Oligochaeta	Phreodrilidae	Phreodrilidae indet.	20
HEOP0425 (W115)	18/04/2017	792677	7419694	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	4
HEOP0425 (W115)	18/04/2017	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona colonia	8
HEOP0425 (W115)	18/04/2017	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona kosmos	3
HEOP0425 (W115)	18/04/2017	792677	7419694	50K	Isopoda	Tainisopidae	Pygobasis humphreysi	1
HEOP0425 (W115)	18/04/2017	793121	7420458	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	44
HEOP0425 (W115)	18/04/2017	793121	7420458	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	1
HEOP0425 (W115)	18/04/2017	795333	7424198	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	10
HEOP0425 (W115)	18/04/2017	797472	7426205	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	4
HEOP0462M	18/04/2017	795333	7424198	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	37
HEOP0462M	18/04/2017	795333	7424198	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	11
HEOP0504	18/04/2017	793121	7420458	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1
HEOP0504	18/04/2017	793121	7420458	50K	Copepoda: Cyclopoida	Cyclopidae	Mesocyclops brooksi	12
HEOP0574M	18/04/2017	792677	7419694	50K	Amphipoda		Amphipoda indet.	2
HEOP0574M	18/04/2017	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cockingi	6
HEOP0574M	18/04/2017	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	1
HEOP0574M	18/04/2017	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Metacyclops pilbaricus	1
HEOP0574M	18/04/2017	792677	7419694	50K	Amphipoda	Paramelitidae	Paramelitidae sp.OB2 AMP002	1
HEOP0574M	18/04/2017	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Thermocyclops aberrans	2
W116	18/04/2017	797472	7426205	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	2
W116	18/04/2017	797472	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	1
W117	18/04/2017	797090	7426353	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	6
W117	18/04/2017	797090	7426353	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	6
HEOP0387	19/04/2017	791947	7417303	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	1
HEOP0387	19/04/2017	791947	7417303	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	5
HEOP0387	19/04/2017	791947	7417303	50K	Isopoda	Tainisopidae	Pygobasis humphreysi	1
HEOP0388	19/04/2017	790858	7417267	50K	Bathynellacea	Bathynellidae	Bathynellidae sp. OB1	1
HEOP0388	19/04/2017	790858	7417267	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
HEOP0388	19/04/2017	790858	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	30
HEOP0388	19/04/2017	790858	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1
HEOP0388	19/04/2017	790858	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	2
HEOP0417	19/04/2017	792269	7417283	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	3
HEOP0417	19/04/2017	792269	7417283	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1

Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0417	19/04/2017	792269	7417283	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	9
HEOP0425	19/04/2017	793687	7417497	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	2
HEOP0425	19/04/2017	793687	7417497	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
HEOP0425	19/04/2017	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	55
HEOP0425	19/04/2017	793687	7417497	50K	Acarina	Pezidae	Peza ACA001	1
HEOP0425 (W115)	19/04/2017	790858	7417267	50K	Ostracoda	Candonidae	Origocandona inanita	4
HEOP0425 (W115)	19/04/2017	790858	7417267	50K	Ostracoda	Candonidae	Pilbaracandona nr temporaria	3
HEOP0425 (W115)	19/04/2017	790858	7417267	50K	Oligochaeta	Naididae	Pristina sp.OB	2
HEOP0425 (W115)	19/04/2017	791423	7417419	50K	Oligochaeta	Enchytraeidae	Enchytraeidae indet.	1
HEOP0425 (W115)	19/04/2017	791423	7417419	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	49
HEOP0425 (W115)	19/04/2017	791947	7417303	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	4
HEOP0425 (W115)	19/04/2017	792269	7417283	50K	Ostracoda	Candonidae	Pilbaracandona colonia	2
HEOP0425 (W115)	19/04/2017	793687	7417497	50K	Oligochaeta	Phreodrilidae	Phreodrilidae sp. OB2	2
HEOP0425 (W115)	19/04/2017	793687	7417497	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	2
HEOP0425 (W115)	19/04/2017	793687	7417497	50K	Oligochaeta	Naididae	Pristina sp.OB	2
OB23REG1	19/04/2017	791423	7417419	50K	Bathynellacea	Bathynellidae	Bathynellidae sp. OB1	6
OB23REG1	19/04/2017	791423	7417419	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	40
OB23REG1	19/04/2017	791423	7417419	50K	Copepoda: Harpacticoida	Parastenocarididae	Parastenocaris jane	5
T399	19/04/2017	793447	7422107	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	20
T399	19/04/2017	793447	7422107	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	49
EA0285R	20/04/17	790298	7409116	50K	Amphipoda	Paramelitidae	Kruptus sp. JB1 (AMP004)	1
HEOP0398M	20/04/2017	788363	7410082	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	2
HEOP0425 (W115)	20/04/2017	783762	7406531	50K	Oligochaeta	Phreodrilidae	Phreodrilidae-sp. OP1	2
T411A	20/04/2017	785047	7415790	50K	Amphipoda	Paramelitidae	Paramelitidae sp.OB1 AMP001	3
W028	20/04/2017	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata sp. OB4	1
W028	20/04/2017	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	8
W028	20/04/2017	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	11
HEA0121	21/04/2017	791352	7418337	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi humphreysi	4
HEA0126	21/04/2017	791702	7418654	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	4
HEOP0425 (W115)	21/04/2017	791352	7418337	50K	Oligochaeta	Naididae	Pristina sp.OB	17
HEOP0425 (W115)	21/04/2017	791702	7418654	50K	Ostracoda	Limnocytheridae	Gomphodella hirsuta	12
HEOP0388	11/12/2019	790858	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2
HEOP0388	11/12/2019	790858	7417267	50K	Amphipoda	Paramelitidae	Maarrka etheli	1
HEOP0388	11/12/2019	790858	7417267	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	2
HEOP0388	11/12/2019	790858	7417267	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	2



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HEOP0425 (W115)	11/12/2019	793687	7417497	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	15
HEOP0425 (W115)	11/12/2019	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	9
HEOP0425 (W115)	11/12/2019	793687	7417497	50K	Podocopida	Candonidae	Pilbaracandona eberhardi	2
HEOP0425 (W115)	11/12/2019	793687	7417497	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0425 (W115)	11/12/2019	793687	7417497	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0524 (UNKNOWN3)	11/12/2019	783762	7406531	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB2 AMP002	1
HEOP0524 (UNKNOWN3)	11/12/2019	783762	7406531	50K	Haplotaxida	Naididae	Pristina sp.OB	1
HEOP0574M (W262)	11/12/2019	792677	7419694	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
HEOP0574M (W262)	11/12/2019	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sobeprolatus	1
HEOP0574M (W262)	11/12/2019	792677	7419694	50K	Podocopida	Candonidae	Origocandona inanitas	1
HEOP0574M (W262)	11/12/2019	792677	7419694	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	7
HEOP0574M (W262)	11/12/2019	792677	7419694	50K	Podocopida	Candonidae	Pilbaracandona colonia	3
OB23REG1	11/12/2019	791423	7417419	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	6
T399	11/12/2019	793447	7422107	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	1
W028	11/12/2019	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	2
W116	11/12/2019	797472	7426205	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W116	11/12/2019	797472	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2
W117	11/12/2019	797090	7426353	50K	Haplotaxida	Enchytraeidae	Enchytraeidae indet.	46
W117	11/12/2019	797090	7426353	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	6
W117	11/12/2019	797090	7426353	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	10
W152	11/12/2019	795332	7424199	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB2 AMP002	1
W152	11/12/2019	795332	7424199	50K	Haplotaxida	Phreodrilidae	Phreodrilidae_sp._1	1
W152	11/12/2019	795332	7424199	50K	Haplotaxida	Phreodrilidae	Phreodrilidae_sp._2	3
W152	11/12/2019	795332	7424199	50K	Podocopida	Candonidae	Pilbaracandona eberhardi	1
W152	11/12/2019	795332	7424199	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W152	11/12/2019	795332	7424199	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	8
W152	11/12/2019	795332	7424199	50K	Haplotaxida	Naididae	Pristina sp.OB	3
W029	17/03/2020	785784	7409064	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	5
W029	17/03/2020	785784	7409064	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0417 (W107)	18/03/2020	792269	7417283	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
HEOP0417 (W107)	18/03/2020	792269	7417283	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
HEOP0524 (UNKNOWN3)	18/03/2020	783762	7406531	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB2 AMP002	1
HEOP0574M (W262)	18/03/2020	792677	7419694	50K	Platyhelminthes		Turbellaria indet.	17
HEOP0574M (W262)	18/03/2020	792677	7419694	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB2 AMP002	8
T399	18/03/2020	793447	7422107	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1

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T399	18/03/2020	793447	7422107	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	18
T399	18/03/2020	793447	7422107	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	3
W116	18/03/2020	797472	7426205	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB2 AMP002	1
W116	18/03/2020	797472	7426205	50K	Bathynellacea	Parabathynellidae	Brevisomabathynella pilbaraensis	1
W116	18/03/2020	797472	7426205	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W116	18/03/2020	797472	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	150
W117	18/03/2020	797090	7426353	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	5
W152	18/03/2020	795332	7424199	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W152	18/03/2020	795332	7424199	50K	Amphipoda	Paramelitidae	Paramelitidae sp. OB2 AMP002	1
W152	18/03/2020	795332	7424199	50K	Haplotaxida	Phreodrilidae	Phreodrilidae sp. 1	1
W152	18/03/2020	795332	7424199	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	100
HEOP0388	19/03/2020	790858	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Pilbaracyclops supersensus	2
HEOP0388	19/03/2020	790858	7417267	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
HEOP0388	19/03/2020	790858	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	9
HEOP0388	19/03/2020	790858	7417267	50K	Ostracoda		Ostracoda sp. Unidentified	1
HEOP0388	19/03/2020	790858	7417267	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
HEOP0425 (W115)	19/03/2020	793687	7417497	50K	Podocopida	Candonidae	Pilbaracandona eberhardi	1
HEOP0425 (W115)	19/03/2020	793687	7417497	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
HEOP0425 (W115)	19/03/2020	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	4
HEOP0425 (W115)	19/03/2020	793687	7417497	50K	Acarina	Pezidae	Peza ACA001	1
HEOP0425 (W115)	19/03/2020	793687	7417497	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	3
OB23REG1	19/03/2020	791423	7417419	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi	2
EEX931	13/05/2021	793528	7417045	50K	Copepoda: Cyclopoida	Cyclopidae	Dussartcyclops sp.	1
HEOP0425	13/05/2021	793687	7417497	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
HEOP0425	13/05/2021	793687	7417497	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi s.l.	2
HEOP0504M	13/05/2021	793121	7420458	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi s. l.	10
T399	13/05/2021	793447	7422107	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	2
T399	13/05/2021	793447	7422107	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
W152	13/05/2021	795332	7424199	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	17
W152	13/05/2021	795332	7424199	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W152	13/05/2021	795332	7424199	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi s.l.	15
W152	13/05/2021	795332	7424199	50K	Amphipoda		Paramelitidae indet.	4
W152	13/05/2021	795332	7424199	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0574M	14/05/2021	792677	7419694	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	9
HEOP0574M	14/05/2021	792677	7419694	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1



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HEOP0574M	14/05/2021	792677	7419694	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
HEOP0574M	14/05/2021	792677	7419694	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
HEOP0574M	14/05/2021	792677	7419694	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	10
HEOP0574M	14/05/2021	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops cockingi	2
HEOP0574M	14/05/2021	792677	7419694	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi s.l.	9
HEOP0574M	14/05/2021	792677	7419694	50K	Amphipoda	Paramelitidae	Maarrka etheli	2
HEOP0574M	14/05/2021	792677	7419694	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	16
HEOP0574M	14/05/2021	792677	7419694	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	1
HEOP0574M	14/05/2021	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona colonia	34
HEOP0574M	14/05/2021	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	1
W056	14/05/2021	792588	7419470		Copepoda: Harpacticoida	Ameiridae	Ameiridae sp.	1
W056	14/05/2021	792588	7419470		Amphipoda	Paramelitidae	Chydaekata acuminata	7
W056	14/05/2021	792588	7419470		Amphipoda		Amphipoda indet.	1
W056	14/05/2021	792588	7419470		Ostracoda	Candonidae	Pilbaracandona colonia	2
W116	5/10/2021	797472	7426205	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W116	5/10/2021	797472	7426205	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W116	5/10/2021	797472	7426205	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops hymphreysi s.l.	80
W116	5/10/2021	797472	7426205	50K	Amphipoda	Paramelitidae	Paramelitidae indet.	2
W116	5/10/2021	797472	7426205	50K	Ostracoda	Candonidae	Pilbaracandona eberhardi	14
W117	05/10/21	797090	7426353	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	26
W117	5/10/2021	797090	7426353	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi s. l.	1
HEOP0574M	11/10/21	792677	7419694	50K	Ostracoda	Candonidae	Pilbaracandona colonia	1
W117	11/10/21	797090	7426353	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
HEOP0398M	05/11/21	788363	7410082	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi s.l.	2
HEOP0398M	05/11/21	788363	7410082	50K	Bathynellacea	Bathynellidae	Pilbaranella ethelensis	20
W028	5/11/2021	785756	7409060	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	2
W028	5/11/2021	785756	7409060	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
W028	5/11/2021	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi s.l.	85
W028	5/11/2021	785756	7409060	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops sp.	2
W028	5/11/2021	785756	7409060	50K	Ostracoda	Candonidae	Origocandona 'BOS099'	2
W029	05/11/21	785784	7409064	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	6
W029	05/11/21	785784	7409064	50K	Amphipoda	Paramelitidae	Chydaekata sp. OB1_AMP005	1
W029	05/11/21	785784	7409064	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi s.l.	115
W029	05/11/21	785784	7409064	50K	Ostracoda	Candonidae	Origocandona 'BOS099'	3
HEA0121	05/12/21	791352	7418337	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi s.l.	3



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEA0126	05/12/21	791702	7418654	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi s.l.	5
HEA0126	05/12/21	791702	7418654	50K	Bathynellacea		Pilbaranella sp.	2
HEA0133	5/12/2021	791605	7418527	50K	Copepoda: Harpacticoida	Ameiridae	Archinitocrella newmanensis	4
HEA0133	5/12/2021	791605	7418527	50K	Amphipoda	Paramelitidae	Chydaekata acuminata	1
HEA0133	5/12/2021	791605	7418527	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi s.l.	16
HEOP0388	5/12/2021	790859	7417267	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops humphreysi s.l.	12
HEOP0388	5/12/2021	790859	7417267	50K	Isopoda	Tainisopidae	Pygolabis humphreysi	1
HEOP0417	05/12/21	792269	7417283	50K	Ostracoda		Origocandona `BOS099`	1
HEOP0417	05/12/21	792269	7417283	50K	Ostracoda	Candonidae	Pilbaracandona colonia	1
OB23REG1	05/12/21	791423	7417419	50K	Copepoda: Cyclopoida	Cyclopidae	Diacyclops hymphreysi s.l.	120
W116	6/12/2021	797472	7426205	50K	Amphipoda	Amphipoda	Chydaekata acuminata	1
W117	6/12/2021	797090	7426353	50K	Amphipoda	Amphipoda	Chydaekata acuminata	46
W117	6/12/2021	797090	7426353	50K	Copepoda	Copepoda	Diacyclops humphreysi s.l.	8
W117	6/12/2021	797090	7426353	50K	Isopoda	Isopoda	Isopoda sp.	2
W117	6/12/2021	797090	7426353	50K	Ostracoda	Ostracoda	Ostracoda sp. unident.	1
HEOP0417	7/12/2021	792267	7417283	50K	Isopoda	Isopoda	Pygolabis humphreysi	2
HEOP0425	7/12/2021	793687	7417497	50K	Copepoda	Copepoda	Diacyclops humphreysi s.l.	1
HEOP0425	7/12/2021	793687	7417497	50K	Isopoda	Isopoda	Pygolabis humphreysi	1
HEOP0574M	7/12/2021	792677	7419694	50K	Amphipoda	Amphipoda	Chydaekata acuminata	15
HEOP0574M	7/12/2021	792677	7419694	50K	Amphipoda	Amphipoda	Maarrka sp.nov.	1
HEOP0574M	7/12/2021	792677	7419694	50K	Amphipoda	Amphipoda	Chydaekata acuminata	1
HEOP0574M	7/12/2021	792677	7419694	50K	Amphipoda	Amphipoda	Maarrka sp.nov.	1
HEOP0574M	7/12/2021	792677	7419694	50K	Copepoda	Copepoda	Pilbaracyclops supersensus	1
HEOP0574M	7/12/2021	792677	7419694	50K	Ostracoda	Ostracoda	Gomphodella hirsuta	1
HEOP0574M	7/12/2021	792677	7419694	50K	Ostracoda	Ostracoda	Ostracoda sp. unident.	2
HEOP0574M	7/12/2021	792677	7419694	50K	Ostracoda	Ostracoda	Pilbaracandona colonia	12
HEOP0574M	7/12/2021	792677	7419694	50K	Ostracoda	Ostracoda	Pilbaracandona kosmos	1
T399	7/12/2021	793447	7422107	50K	Amphipoda	Amphipoda	Chydaekata acuminata	1
T399	7/12/2021	793447	7422107	50K	Copepoda	Copepoda	Diacyclops cockingi	3
W152	7/12/2021	795332	7424199	50K	Amphipoda	Amphipoda	Chydaekata acuminata	8
W152	7/12/2021	795332	7424199	50K	Amphipoda	Amphipoda	Paramelitidae sp.	1
W152	7/12/2021	795332	7424199	50K	Amphipoda	Amphipoda	Chydaekata acuminata	1
W152	7/12/2021	795332	7424199	50K	Copepoda	Copepoda	Diacyclops humphreysi s.l.	12
W152	7/12/2021	795332	7424199	50K	Oligochaeta	Oligochaeta	Phraeodrilidae sp.3 (OP1)	50
WP056	7/12/2021	792586	7419474	50K	Amphipoda	Amphipoda	Chydaekata acuminata	3



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
WP056	7/12/2021	792586	7419474	50K	Amphipoda	Amphipoda	Chydaekata acuminata	1
WP056	7/12/2021	792586	7419474	50K	Isopoda	Isopoda	Pygolabis humphreysi	1
HEOP0388	8/12/2021	790859	7417267	50K	Isopoda	Isopoda	Pygolabis humphreysi	1
HEOP0398M	8/12/2021	788365	7410086	50K	Copepoda	Copepoda	Diacyclops cockingi	2
OB23REG1	8/12/2021	791423	7417419	50K	Copepoda	Copepoda	Diacyclops humphreysi s.l.	15
OB23REG1	8/12/2021	791423	7417419	50K	Oligochaeta	Oligochaeta	Enchytraeidae	2
HEA0121	9/12/2021	791361	7418332	50K	Copepoda	Copepoda	Diacyclops humphreysi s.l.	2
HEA0126	9/12/2021	791702	7418654	50K	Amphipoda	Amphipoda	Chydaekata acuminata	3
HEA0133	9/12/2021	791605	7418527	50K	Amphipoda	Amphipoda	Chydaekata acuminata	2
HEA0133	9/12/2021	791605	7418527	50K	Copepoda	Copepoda	Archinitocrella newmanensis	1
HEA0133	9/12/2021	791605	7418527	50K	Copepoda	Copepoda	Diacyclops cockingi	4
HEOP0524-Unknown 3	9/12/2021	783762	7406531	50K	Oligochaeta	Oligochaeta	Phraeodrilidae sp.3 (OP1)	6
W028	9/12/2021	785756	7409060	50K	Amphipoda	Amphipoda	Chydaekata AMP005	4
W028	9/12/2021	785756	7409060	50K	Amphipoda	Amphipoda	Chydaekata AMP005	1
W028	9/12/2021	785756	7409060	50K	Copepoda	Copepoda	Diacyclops sp.	2
W028	9/12/2021	785756	7409060	50K	Isopoda	Isopoda	Isopoda sp.	1
W028	9/12/2021	785756	7409060	50K	Ostracoda	Ostracoda	Ostracoda sp. unident.	3
W029	9/12/2021	785784	7409064	50K	Amphipoda	Amphipoda	Chydaekata AMP005	4
W029	9/12/2021	785784	7409064	50K	Amphipoda	Amphipoda	Chydaekata AMP005	1
W029	9/12/2021	785784	7409064	50K	Copepoda	Copepoda	Diacyclops humphreysi s.l.	200
W029	9/12/2021	785784	7409064	50K	Isopoda	Isopoda	Pygolabis humphreysi	1
HEOP0504(WD193)	9/5/2022	793124	7420458	50K	Oligochaeta	Oligochaeta	Enchytraeidae	1
HEOP0524-NEW	9/5/2022	789970	7416277	50K	Copepoda	Copepoda	Diacyclops sp.	1
W116	9/5/2022	797472	7426205	50K	Copepoda	Copepoda	Harpacticoid	1
W116	9/5/2022	797472	7426205	50K	Copepoda	Copepoda	Diacyclops humphreysi s.l.	16
W116	9/5/2022	797472	7426205	50K	Ostracoda	Ostracoda	Pilbaracandona sp.	1
W117	9/5/2022	797090	7426353	50K	Amphipoda	Amphipoda	Chydaekata acuminata	3
W117	9/5/2022	797090	7426353	50K	Amphipoda	Amphipoda	Chydaekata acuminata	3
W117	9/5/2022	797090	7426353	50K	Copepoda	Copepoda	Diacyclops humphreysi s.l.	7
W117	9/5/2022	797090	7426353	50K	Syncarida	Syncarida	Brevisomabathynella pilbarensis	1
W152	9/5/2022	795332	7424199	50K	Amphipoda	Amphipoda	Parameletid OB2	1
W152	9/5/2022	795332	7424199	50K	Amphipoda	Amphipoda	Chydaekata acuminata	4
W152	9/5/2022	795332	7424199	50K	Copepoda	Copepoda	Diacyclops humphreysi s.l.	7
W152	9/5/2022	795332	7424199	50K	Oligochaeta	Oligochaeta	Phraeodrilidae sp.3 (OP1)	1
W152	9/5/2022	795332	7424199	50K	Oligochaeta	Oligochaeta	Phraeodrilidae sp.3 (OP1)	4



Bore Code	Sample Date	Easting	Northing	Map Zone	Group	Family	Taxon	Abundance
HEOP0524-Unknown 3	10/5/2022	783762	7406531	50K	Copepoda	Copepoda	Parastenocaris `COP001`	1
HEOP0524-Unknown 3	10/5/2022	783762	7406531	50K	Oligochaeta	Oligochaeta	Phraeodrilidae sp.3 (OP1)	50
HEOP0524-Unknown 3	10/5/2022	783762	7406531	50K	Oligochaeta	Oligochaeta	Phraeodrilidae sp.3 (OP1)	1
W028	10/5/2022	785756	7409060	50K	Copepoda	Copepoda	Diacyclops humphreysi s.l.	4
W029	10/5/2022	785784	7409064	50K	Copepoda	Copepoda	Diacyclops humphreysi s.l.	5
HEOP0388	11/5/2022	790859	7417267	50K	Copepoda	Copepoda	Diacyclops humphreysi s.l.	200
HEOP0388	11/5/2022	790859	7417267	50K	Copepoda	Copepoda	Pilbaracyclops sp.	1
HEOP0388	11/5/2022	790859	7417267	50K	Isopoda	Isopoda	Pygolabis humphreysi	5
HEOP0388	11/5/2022	790859	7417267	50K	Oligochaeta	Oligochaeta	Naididae, Pristina sp OB	1
HEOP0425	11/5/2022	793687	7417497	50K	Isopoda	Isopoda	Pygolabis humphreysi	1
OB23REG1	11/5/2022	791423	7417419	50K	Copepoda	Copepoda	Parastenocaris sp.	1
HEA0126	12/5/2022	791702	7418654	50K	Amphipoda	Amphipoda	Chydaekata acuminata	1
HEA0126	12/5/2022	791702	7418654	50K	Amphipoda	Amphipoda	Chydaekata acuminata	7
HEA0126	12/5/2022	791702	7418654	50K	Copepoda	Copepoda	Diacyclops humphreysi s.l.	21
HEA0133	12/5/2022	791605	7418527	50K	Copepoda	Copepoda	Diacyclops humphreysi s.l.	5
HEOP0574M	12/5/2022	792677	7419694	50K	Copepoda	Copepoda	Diacyclops humphreysi s.l.	2
HEOP0574M	12/5/2022	792677	7419694	50K	Ostracoda	Ostracoda	Pilbaracandona colonia	4
HEOP0574M	12/5/2022	792677	7419694	50K	Ostracoda	Ostracoda	Pilbaracandona eberhardi	1
T399	12/5/2022	793447	7422107	50K	Amphipoda	Amphipoda	Chydaekata acuminata	1
T399	12/5/2022	793447	7422107	50K	Amphipoda	Amphipoda	Chydaekata acuminata	1
T399	12/5/2022	793447	7422107	50K	Amphipoda	Amphipoda	Chydaekata acuminata	15
T399	12/5/2022	793447	7422107	50K	Amphipoda	Amphipoda	Chydaekata acuminata	7
WP056	12/5/2022	792586	7419474	50K	Copepoda	Copepoda	Archinitocrella newmanensis	1
WP056	12/5/2022	792586	7419474	50K	Copepoda	Copepoda	Diacyclops humphreysi s.l.	2



Appendix E Core Species

Group	Taxa included in species diversity analyses	
	Broader Ethel Gorge area	MZ 1
Amphipoda	Amphipoda sp. indet.	Amphipoda sp. indet.
	<i>Chydaekata acuminata</i>	<i>Chydaekata acuminata</i>
	<i>Chydaekata</i> indet.	<i>Chydaekata</i> indet.
	<i>Chydaekata</i> sp. OB1_AMP005	<i>Chydaekata</i> sp. OB1_AMP005
	<i>Kruptus</i> AMP004	
	<i>Maarrka</i> sp. OB3_AMP003	<i>Maarrka</i> sp. OB3_AMP003
	<i>Maarrka etheli</i>	<i>Maarrka etheli</i>
	<i>Maarrka</i> sp. nov.	<i>Maarrka</i> sp. nov.
	Paramelitidae indet.	Paramelitidae indet.
	Paramelitidae-sp. OB1_AMP001	
	Paramelitidae sp. OB1-OB2	Paramelitidae sp. OB1-OB2
	Paramelitidae-sp. OB2_AMP002	Paramelitidae-sp. OB2_AMP002
Bathynellacea	Bathynellidae indet.	Bathynellidae indet.
	Bathynellidae sp. OB1	Bathynellidae sp. OB1
	Bathynellidae sp. OB2	Bathynellidae sp. OB2
	Bathynellidae-WAMindet_1	
	Bathynellidae-WAMindet_2	
	<i>Billibathynella cassidis</i>	
	<i>Billibathynella</i> indet.	
	<i>Billibathynella</i> sp. OB1	<i>Billibathynella</i> sp. OB1
	<i>Brevisomabathynella</i> cf. <i>pilbaraensis</i>	<i>Brevisomabathynella</i> cf. <i>pilbaraensis</i>
	<i>Brevisomabathynella</i> indet.	<i>Brevisomabathynella</i> indet.
	<i>Brevisomabathynella pilbaraensis</i>	<i>Brevisomabathynella pilbaraensis</i>
	<i>Pilbaranella ethelensis</i>	<i>Pilbaranella ethelensis</i>
	<i>Pilbaranella</i> sp. B	<i>Pilbaranella</i> sp. B
	<i>Pilbaranella</i> sp.	
Copepoda: Cyclopoida	<i>Anzycyclops</i> sp. B06	<i>Anzycyclops</i> sp. B06
	nr. <i>Pilbaracyclops</i> sp. OB	nr. <i>Pilbaracyclops</i> sp. OB
	<i>Pilbaracyclops supersensus</i>	<i>Pilbaracyclops supersensus</i>
Copepoda: Harpacticoida	<i>Nitocrella karanovici</i>	<i>Nitocrella karanovici</i>
	<i>Parastenocaris</i> cf. <i>jane</i>	<i>Parastenocaris</i> cf. <i>jane</i>
	<i>Parastenocaris</i> sp. OB1	<i>Parastenocaris</i> sp. OB1
	<i>Parastenocaris</i> sp. OB2	<i>Parastenocaris</i> sp. OB2
Isopoda	Microcerberidae sp. OB	Microcerberidae sp. OB
	<i>Coxicerberus</i> sp. OB2	<i>Coxicerberus</i> sp. OB2
	<i>Pygolabis humphreysi</i>	<i>Pygolabis humphreysi</i>
Oligochaeta	<i>Pristina</i> sp. OB	<i>Pristina</i> sp. OB
	Phreodrilidae sp. OB2_sp. 4 (OP2)	Phreodrilidae sp. OB2_sp. 4 (OP2)
	Phreodrilidae sp. OP1	
	Phreodrilidae WAMindet_1	
Ostracoda	<i>Notacandona gratia</i>	<i>Notacandona gratia</i>
	<i>Origocandona</i> `BOS099`	<i>Origocandona</i> `BOS099`
	<i>Pilbaracandona eberhardi</i>	<i>Pilbaracandona eberhardi</i>
	<i>Pilbaracandona kosmos</i>	<i>Pilbaracandona kosmos</i>
	<i>Pilbaracandona</i> nr <i>temporaria</i>	<i>Pilbaracandona</i> nr <i>temporaria</i>
	<i>Pilbaracandona</i> OB1	<i>Pilbaracandona</i> OB1
	<i>Pilbaracandona</i> OB2	<i>Pilbaracandona</i> OB2



Appendix F Distribution of Stygofauna recorded from BHPIO surveys within the Newman region from 2003 to May 2022



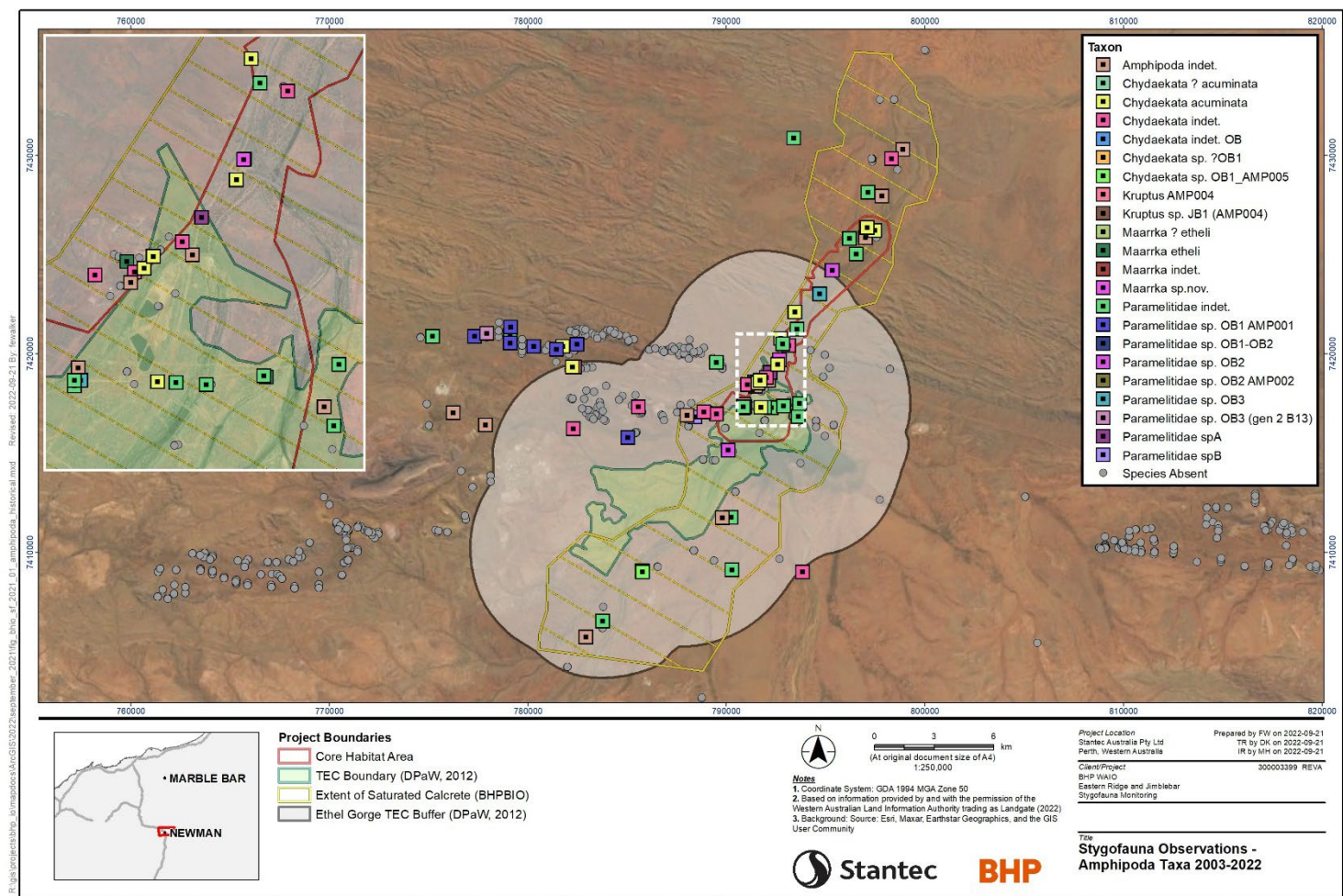


Figure H-1 Distribution of Amphipod species within the Project area between 2009 and May 2022

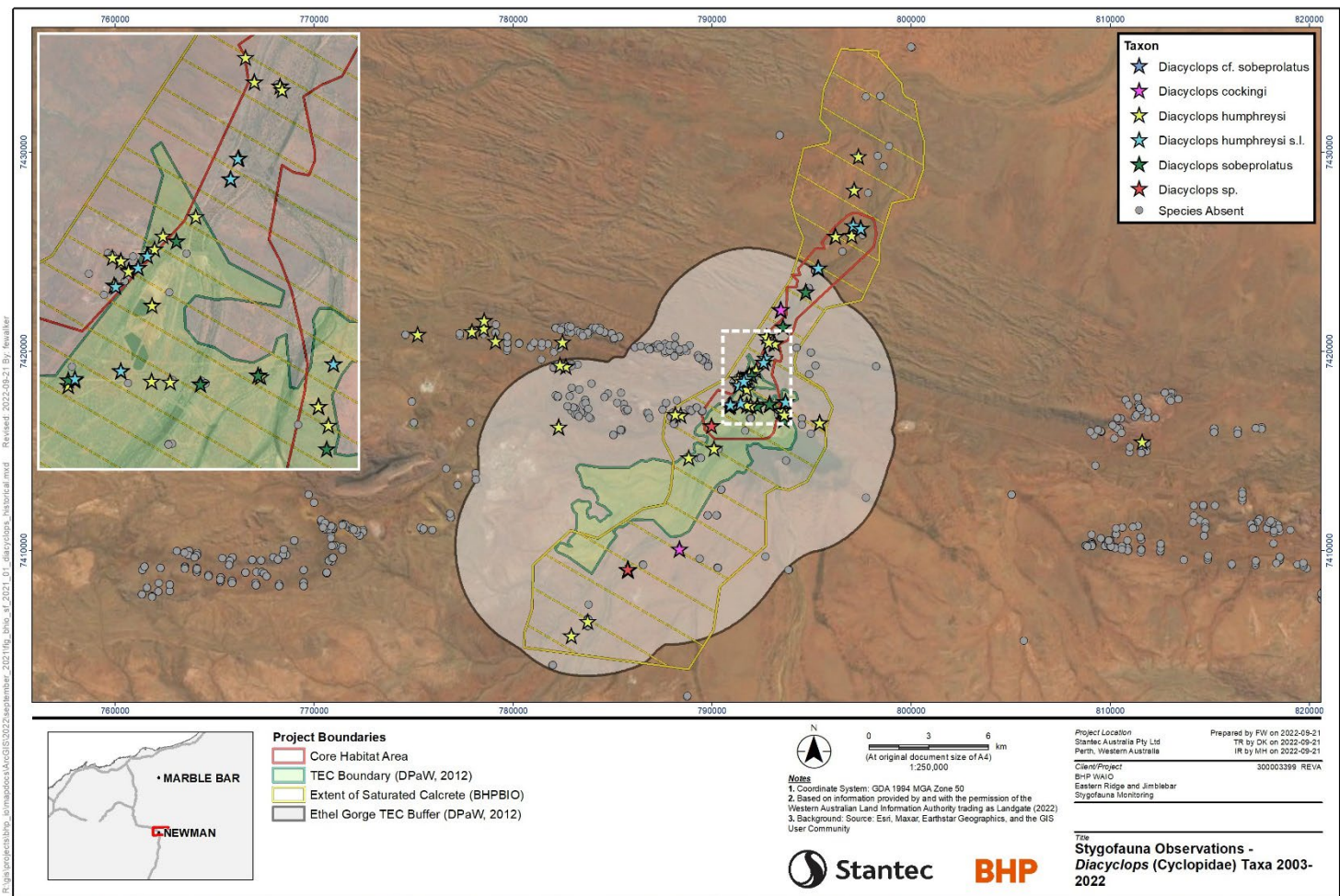


Figure H-2 Distribution of *Diacyclops* copepod species within the Project area between 2009 and May 2022



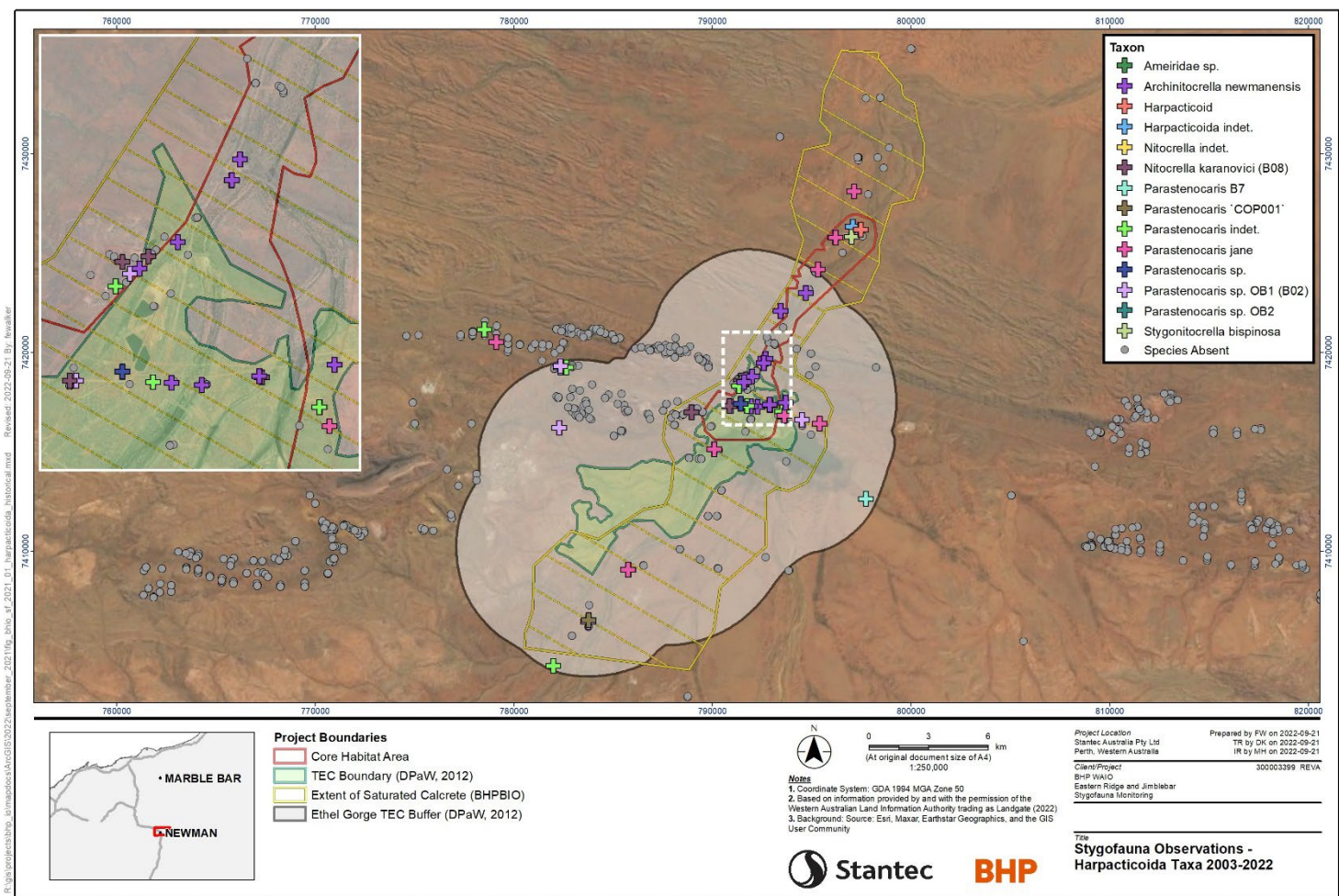


Figure H-3 Distribution of Cyclopoid copepod species other than *Diacyclops* within the Project area between 2009 and May 2022

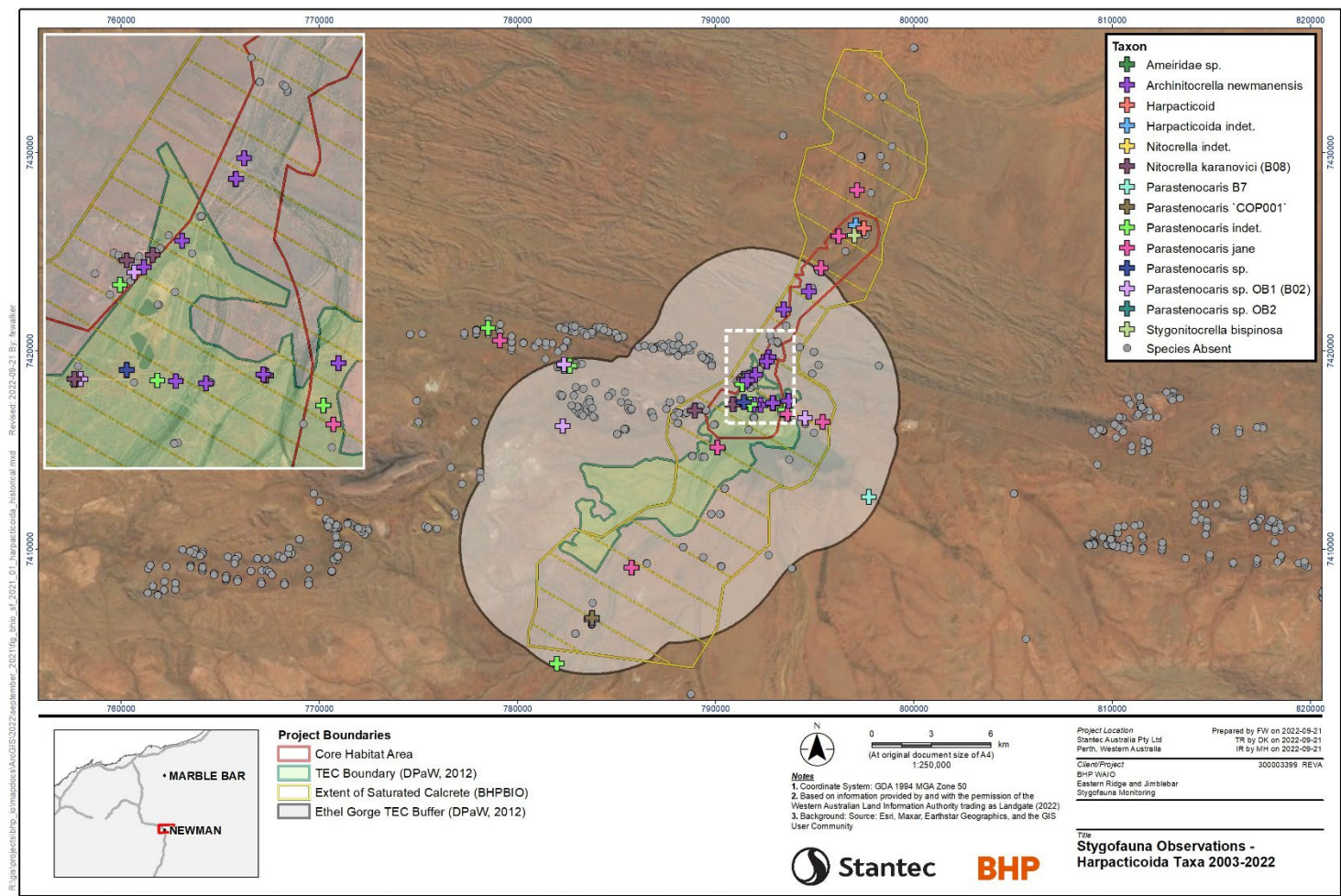


Figure H-4 Distribution of Harpacticoid copepod species within the Project area between 2009 and May 2022



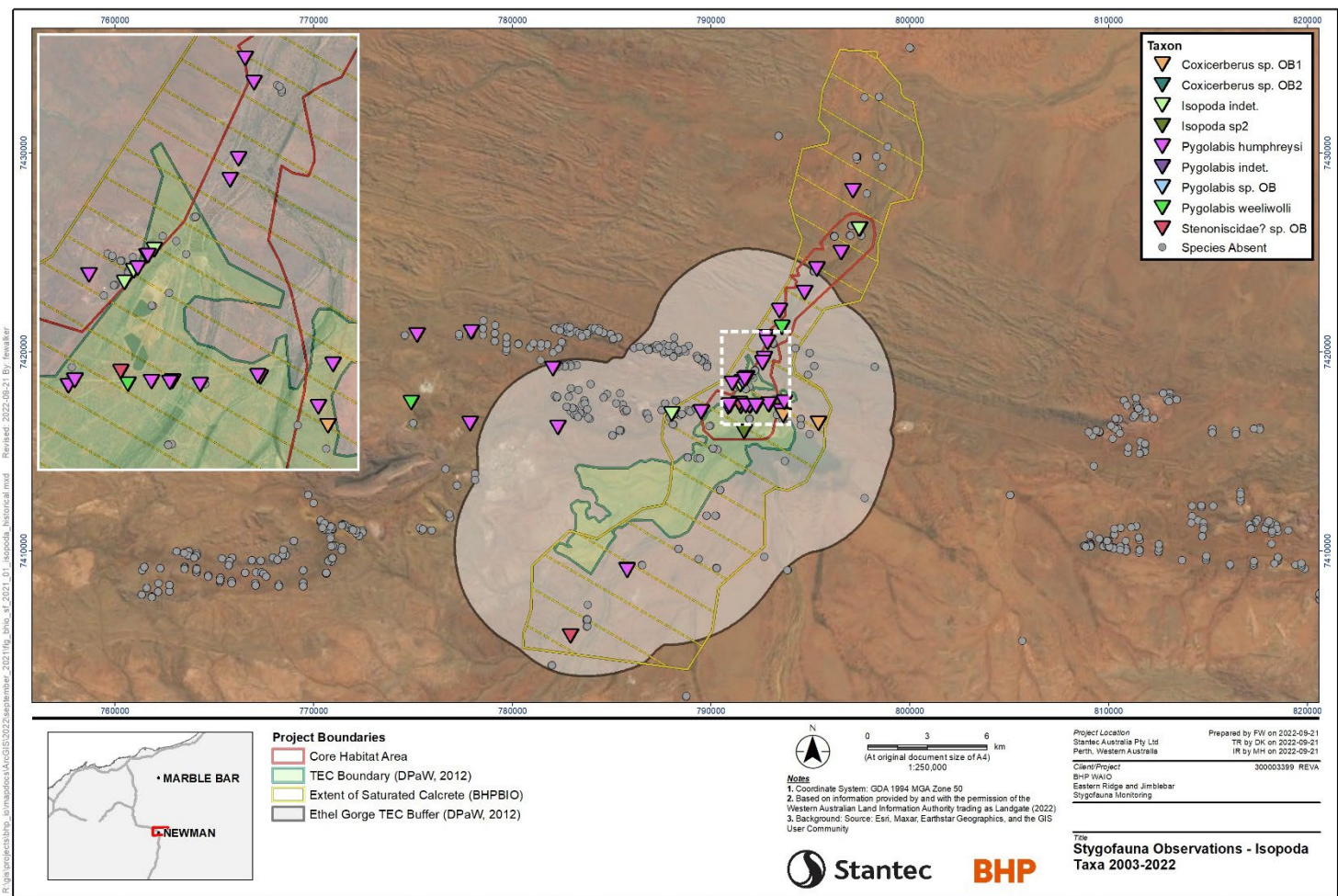


Figure H-5 Distribution of Isopod species within the Project area between 2009 and May 2022

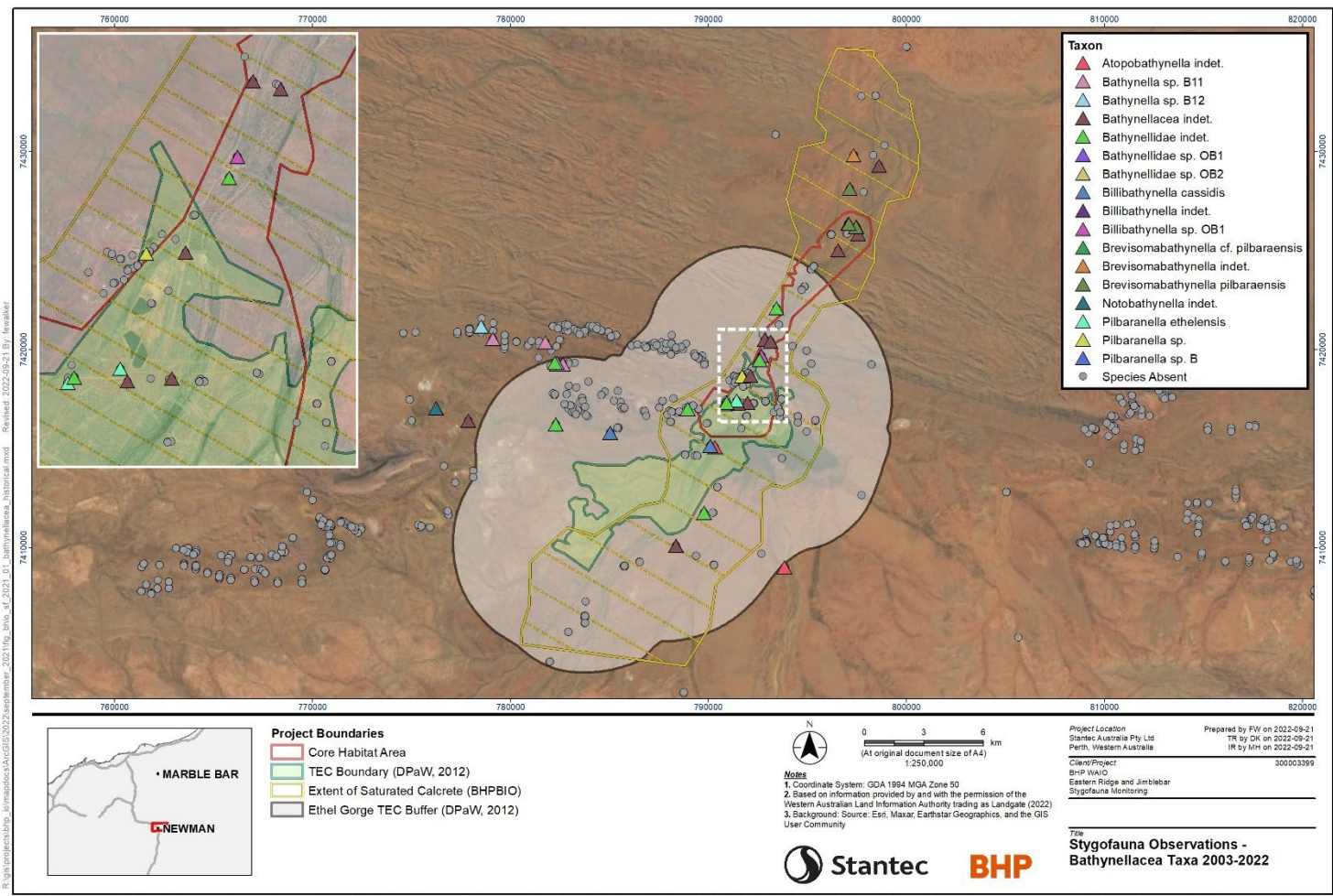


Figure H-6 Distribution of Bathynellacea species within the Project area between 2009 and May 2022



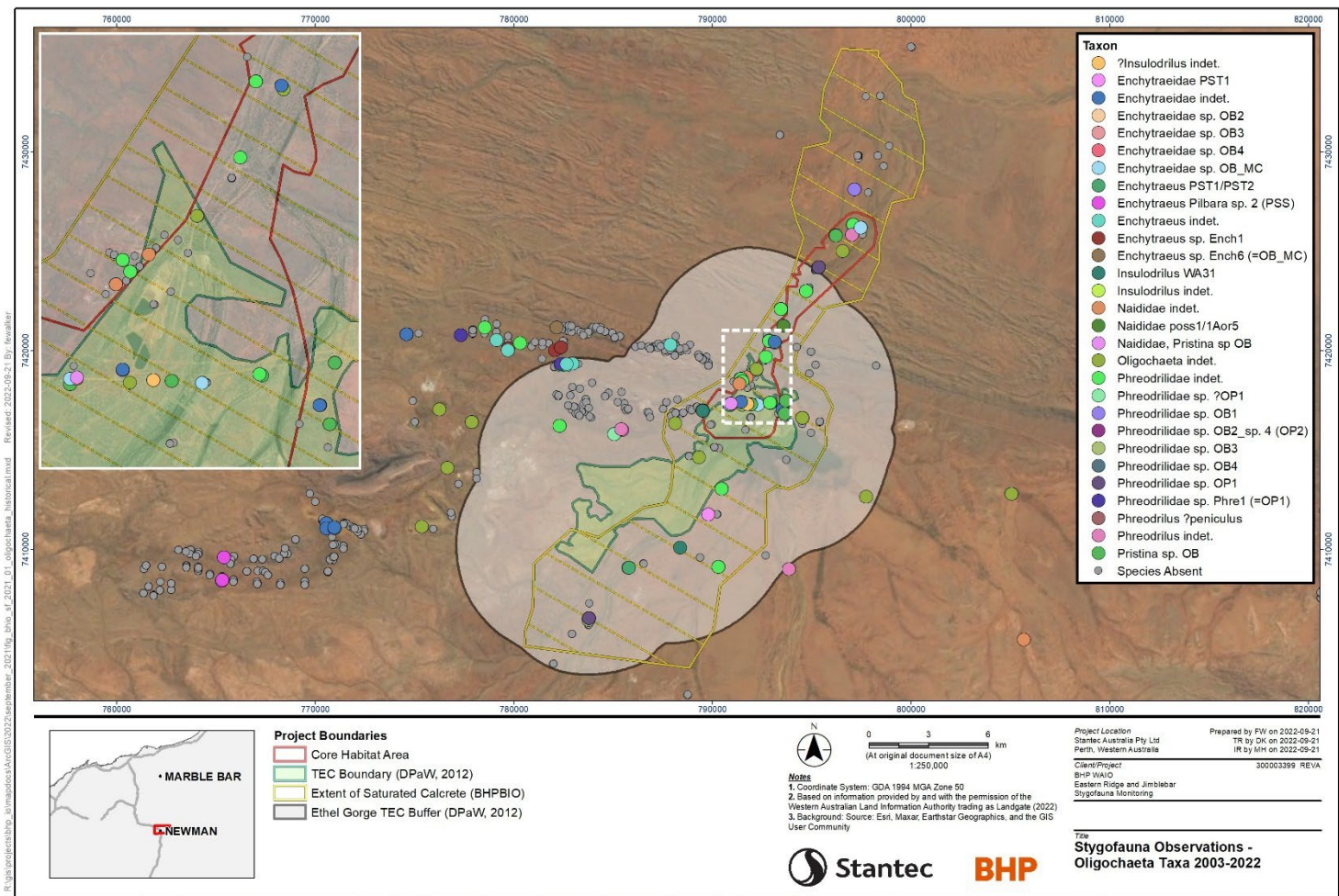


Figure H-8 Distribution of Oligochaete species within the Project area between 2009 and May 2022



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