RICHMOND QUARRY

Annual Review 2018
Calendar Year

IMS-COMP-G-0875-RQ

RICHMOND QUARRY

CONTENTS

DEFINITIONS

ANZECC	Australian and New Zealand Environment and Conservation Council
CCC	Community Consultative Committee
CEA	Central Extraction Area
DP&E	NSW Department of Planning and Environment.
DPI Water	Division of Water within the NSW Department of Primary Industries.
DRE	Division of Resources & Energy within the NSW Department of Industry.
EAL	Environmental Analysis Laboratory
EPA	Environment Protection Authority.
EPL	Environment Protection Licence
Extraction Area	The Central and Southern Extraction Areas, shown on Figure 9 in Appendix 6 of the Project Approval
EA	Richmond Quarry Expansion, Environmental Assessment Report prepared by ERM Pty Limited and dated February 2010
EA (MOD 1)	Modification Application MP 09_0080 MOD 1 dated April 2013
EA (MOD 2)	Modification Application MP 09_0080 MOD 2 dated February 2016, the accompanying annexures A and B and the response to submissions dated April 2016
EA (MOD 3)	Modification Application MP 09_0080 MOD 3 dated February 2017, titled Annexure A – Application pursuant to Section 75W of the Environmental Planning and Assessment Act 1979, and the response to submissions dated July 2017
DECC	Department of Environment & Climate Change
DRG	Department of Resources & Geoscience
IEA	Independent Environmental Audit
LCC	Lismore City Council
LMP	Landscape Management Plan
MP	Monitoring Point
Project Approval	Project Approval issued by Planning and Assessment Commission of New South Wales containing the CoA dated 30 August 2012 as amended from time to time
NAL	Noise Assessment Location
NATA	National Association of Testing Authorities
NHMRC	National Health and Medical Research Council
OEH	Office of Environmental Heritage
SEA	Southern Extraction Area
Reporting period	The 2018 calendar year

1.0 TITLE BLOCK

Name of operation	Richmond Quarry
Name of operator	GSQ Holdings Pty Ltd
Development consent / project approval #	Part 3A Project Approval 09_0080
Name of holder of development consent / project approval	Richmond Quarry
Mining lease #	NA
Name of holder of mining lease	NA
Water licence #	NA
Name of holder of water licence	NA
MOP/RMP start date	NA
MOP/RMP end date	NA
Annual Review start date	1 January 2018
Annual Review end date	31 December 2018

I, Michael Barnes, certify that this audit report is a true and an accurate record of the compliance status of Richmond Quarry for the period 1 January to 31 December 2018 and that I am authorised to make this statement on behalf of Richmond Quarry.

Note.

a) The Annual Review is an 'environmental audit' for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, $1 million and for an individual, $250,000.

b) The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or $22,000, or both).

Name of authorised reporting officer	Michael Barnes
Title of authorised reporting officer	Commercial Manager
Signature of authorised reporting officer	
Date	28/03/2019

2.0 INTRODUCTION

2.1 SCOPE

This Annual Review has been prepared in accordance with Condition 4, Schedule 5 (Condition 4(5)) of Project Approval (MP 09_000) for Richmond Quarry. This review covers the calendar year reporting period from 1 January 2018 to 31 December 2018.

Condition 4(5) and all other relevant conditions required as part of the Annual Review are outlined in Table 1 with reference to the section of this report where each has been addressed.

Table 1: Relevant Conditions of Approval

Condition of Approval	Condition Requirements	Section Addressed in Report
Condition 4(5)	By the end of March each year, the Proponent must submit a report to the Department reviewing the environmental performance of the project to the satisfaction of the Secretary. This review must: (a) describe the development (including rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;	3.1, 3.2, 3.3 4.0, 5.0, 7.0
	(b) include a comprehensive review of the monitoring results and complaints records of the project over the previous calendar year, which includes a comparison of these results against: • the relevant statutory requirements, limits or performance measures/criteria; • the monitoring results of previous years; and • the relevant predictions in the documents listed in condition 2(a) of Schedule 2;	5.1, 5.2, 5.3 5.4, 8.2, Appendix E
	(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;	11.0
	(d) identify any trends in the monitoring data over the life of the project;	5.1, 5.2. 5.3 and 5.4
	(e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and	5.1, 5.2, 5.3 and 5.4
	(f) describe what measures will be implemented over the current calendar year to improve the environmental performance of the project.	4.0, 5.0
Condition 19(2)	The Proponent must: (a) provide annual quarry production data to DRG using the standard form for that purpose; and (b) include a copy of this data in the Annual Review (see condition 4 of schedule 5).	3.1, Appendix B
Condition 30A(2)	The Proponent must make, and retain for at least 3 years, records of the time of dispatch, weight of load and vehicle identification for each laden truck dispatched from the project. These records must be made available to the Department on request and a summary included in the Annual Review.	Appendix D

2.2 BACKGROUND

Richmond Quarry is a sandstone quarry located at 1668 Wyrallah Road, Tuckurimba NSW 2480 with the site's regional context shown in Figure 1 in Appendix A. The quarry has been in small scale operation on the site since 1959, and then commencing to operate under Lismore City Council's Development Consent (DA 2005/999).

In 2011, following extensive geological testing the Quarry was recognised as State Significant resource. In 2012 a Part 3A expansion to 250,000 tonnes per annum extraction was approved by the NSW State government. In 2014 this approval was implemented after extensive environmental controls were put in place.

Richmond Quarry is predominantly surrounded by agricultural grazing land.

2.3 APPROVALS

A summary of all the approvals relevant to the Richmond Quarry site is provided in Table 2. Modification 3 of Project Approval 09_0080 was approved in August 2017 for the operation of a sand washing plant on-site.

No water extraction licence is required for operations.

Table 2: Summary of Approvals

Approval Type	Approval Number	Date Granted	Changes made to approval
Project Approval	09_0080	30 August 2012	Modification 3 granted on 9 August 2017.
Environmental Protection Licence	20562	10 April 2015	None

2.4 OPERATION MAPS

2.4.1 REGIONAL CONTEXT MAP

The regional location of the Richmond Quarry is detailed in Figure 1 of Appendix A.

2.4.2 PROJECT LAYOUT AND BIODIVERSITY OFFSET MAP

The project layout, showing the following is provided as Figure 2 of Appendix A. The project layout includes:

- Approved operational boundary.
- Approved extraction extent.
- Biodiversity Offset Areas.
- Protected Revegetation Area.

2.4.3 OPERATIONAL DISTURBANCE FOOTPRINT MAP

The current Quarry disturbance footprint is identified in Figure 3 of Appendix A.

2.4.4 ENVIRONMENTAL MONITORING LOCATIONS MAP

The environmental monitoring program for the site includes surface water, groundwater and dust monitoring as detailed in Figure 4 of Appendix A.

The noise monitoring locations at sensitive receivers is provided in the Noise Management Plan (v2.1) and Figure 3 of Project Approval 09_0080.

2.4.5 SITE PHOTOS

Site photographs of bunds and screening are detailed in Appendix F. All photographs apart from Bund A, Bund B and the Koala Planting Photo were taken in March 2019.

2.5 KEY ENVIRONMENTAL PERSONNEL CONTACT DETAILS

The contact details of key employees at Richmond Quarry are provided in Table 3 below.

Table 3: Environmental Personnel

Name	Position	Phone
Matt Duff	Quarry Manager	02 6622 0886
Steve Scifleet	QSE Manager	02 6674 7656
Russell Currie	Environment & Quality Coordinator	02 6674 7656

3.0 OPERATIONS SUMMARY

3.1 PRODUCTION SUMMARY

Table 4 and 5 describe the tonnes of product sold onsite during the year.

Table 4: Production Summary

Material	Approved limit (specify source)	Previous reporting period (2017 actual)	This reporting period (2018 actual)	Next reporting period (forecast)
Saleable Product	250,000 t (MP 09_0080)	42,285.84 t	29,823.73 t	55,000t

Table 5: Tonnes Sold Monthly

Month	Tonnes Sold
January 2018	2,239.02
February 2018	4,245.73
March 2018	509.70
April 2018	416.89
May 2018	317.87
June 2018	1,147.11
July 2018	1,412.40
August 2018	1,895.23
September 2018	2,694.47
October 2018	2,798.75

Month	Tonnes Sold
November 2018	9,779.34
December 2018	2,367.22
Annual Total	**29,823.73**

Annual production data for each financial year is reported to the Department of Planning and Environment's (DP&E) Division of Resources and Geosciences (DRE). A copy of the form submitted to the DRE for the 2017/2018 financial year is provided in Appendix B. It should be noted that all other data reported within this Annual Review is presented on a calendar year basis in accordance with the requirements of the Project Approval 09_0080.

3.2 OPERATIONS CARRIED OUT DURING 2018

3.2.1 OPERATIONAL EXTENT

Over the course of the 2018 calendar year quarry operations continued to predominantly occur within Progression 1 of the Southern Extraction Area. The Central Extraction Area is used as a sale and stockpile area for product loading prior to transport. The operational boundaries and disturbance footprint is shown in Appendix A, Figure 3.

3.2.2 OPERATIONS COMPLETED

A storage, maintenance and equipment shed was constructed on-site for the storage of bunded chemicals in accordance with AS1940-2004 in 2018. A self bunded fuel tank was installed on-site for refuelling onsite.

3.2.3 SAND WASHING PLANT

The Sand Washing Plant in the northern quadrant of the southern extraction area was finalised and is now operational following Modification 3 in August 2017.

Prior to the operation of the sand washing plant, the following occurred (and approved by the Department of Planning and Environment) in 2018:

- Condition 18(3) Bund E was grassed and planted with native endemic shrubs and trees.
- Condition 14A(3) The construction of a 1 megalitre (ML) sedimentation pond prior to the operation of the sand washing plant. For operational reasons, it is planned that two sedimentation ponds were constructed on-site in 2018 prior to the operation of the sand washing plant.

3.2.4 HOURS OF OPERATION

In accordance with Condition 6(3) of Project Approval 09_0080, quarry operating hours are detailed in Table 6. The quarry does not operate on Sundays or public holidays.

Table 6: Operational Hours

Day	Quarry Operations including Construction Activities	Rock Hammer Operations
Monday to Friday	7 am to 6 pm	9 am to 12 pm and 2pm to 4pm
Saturday	8 am to 1 pm	None

Richmond Quarry will continue to operate within Progression 1 of the Southern Extraction Area throughout 2019, progressively moving into the Western Quadrant.

3.2.5 TRUCK MOVEMENTS

A register of truck movements is maintained on-site. A total of 1,153 truck dispatches from the site were recorded during the reporting period. Further discussion on truck movements is detailed within Section 10.0.

3.3 OPERATIONS TO BE CARRIED OUT DURING 2019

Richmond Quarry will continue to operate within Progression 1 of the Southern Extraction Area throughout 2019, progressively moving into the Western Quadrant.

Bund F shown in Figure 4 of Project Approval (MP 09_0080) may be constructed, vegetated and planted with native endemic shrubs and trees during 2019 in accordance with the Landscape Management Plan.

4.0 ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEW

All quarry personnel and Contractors are accountable through conditions of employment.

Table 7: Annual Review Actions

Action required from previous Annual Review	Requested by	Where discussed in Annual Review
In future reports the title block should include details for sign off by an authorised reporting officer as shown at page 5 of the Departments Annual Review Guideline.	DP&E	Title block now includes sign off by authorised reporting officer.

5.0 ENVIRONMENTAL PERFORMANCE

5.1 NOISE

During 2018, Richmond Quarry operated in accordance with the Site's Noise Management Plan V2.1. Noise monitoring is performed on a quarterly basis to ensure the below approved criteria from the Project Approval 09_0080 and EPL 20562 are met.

Table 8: Noise Criteria for Richmond Quarry

Receiver	LA eq (15 min) dB(A)	Relevant Conditions
NAL 4 and NAL 5	38	Condition 5, Schedule 3 of PA 09_0080. Condition L4.1 of EPL 20562.
NAL2, NAL2A, NAL 3 and privately owned land along the southern end of Hazlemount Lane	37	
NAL 1 and other receivers	35	

Noise results for 2018 are provided in Table 9 and available on the Richmond Quarry website.

All noise monitoring is performed by a suitably qualified consultant to ensure operational noise is correctly recorded. In the event of any noise exceedance, follow up noise monitoring will be conducted when required and affected landowners will be notified. Exceedances in the noise criteria will be appropriately addressed by quarry management through the implementation of mitigation measures including changes to quarry operations or the implementation of noise reducing equipment.

Project Approval 09_0080 requires annual sound power testing of site equipment. This was performed once in 2018. Noise monitoring will continue to be monitored by an external consultant in 2019 to ensure the reliability of the data obtained and validate the noise status of operations. The sand washing plant was commissioned in 2018, no noise complaints have been received in relation to the operation of the sand washing plant.

On Saturday the 10th of November 2018 there was a tyre blowout on an onsite loader that resulted in two noise complaints from surrounding residents. A letter was written to the complainants and surrounding residents (2km radius of the site) explaining the noise source and showing a picture of the tyre blowout. The two complaints were logged in the sites complaints register.

Table 9: Noise Monitoring Results for Richmond Quarry

Date	Location	Type of Noise Monitoring	Relevant Criteria	Result	Compliant/ Non-Compliant	Noise Monitoring Conducted By
29/03/2018	NAL 2	Routine Quarterly	37	<30	Compliant	Consultant
29/03/2018	NAL 3	Routine Quarterly	37	<30	Compliant	Consultant
25/06/2018	NAL 2	Routine Quarterly	37	36.0	Compliant	Consultant
25/06/2018	NAL 3	Routine Quarterly	37	36.0	Compliant	Consultant
13/09/2018	NAL 2A (3)	Routine Quarterly	37	35.0	Compliant	Consultant
13/09/2018	NAL 3	Routine Quarterly	37	34.0	Compliant	Consultant
12/12/2018	NAL 1	Routine Annually	35	Not Available	Not Available	Consultant
12/12/2018	NAL 2	Routine Annually	37	Not Available	Not Available	Consultant
12/12/2018	NAL 2A (3)	Routine Annually	37	<30	Compliant	Consultant
12/12/2018	NAL 3	Routine Annually	37	<30	Compliant	Consultant
12/12/2018	NAL 4	Routine Annually	38	<38	Compliant	Consultant
12/12/2018	NAL 5	Routine Annually	38	<38	Compliant	Consultant

Date	Location	Type of Noise Monitoring	Relevant Criteria	Result	Compliant/ Non-Compliant	Noise Monitoring Conducted By
13/09/2018 to 07/11/2018	Sound Power Level (SPL) On-site Plant and Equipment	Mobile Screening Plant - Strike	SPL	102.7	SPL	Consultant
		Mobile Screening Plant - McCloskey	SPL	108.8	SPL	Consultant
		Dump Truck - Komatsu	SPL	105.3	SPL	Consultant
		Water Truck - Isuzu	SPL	104.4	SPL	Consultant
		Ford Louisville Tip Truck	SPL	103.7	SPL	Consultant
		Excavator - Komatsu PC300LC-8	SPL	102.4	SPL	Consultant
		Excavator - Kobelco SK350LC-8	SPL	101.8	SPL	Consultant
		Excavator - Kobelco SK350LC-8 Exentric Ripper Breaking Rocks	SPL	123.7	SPL	Consultant
		Excavator - Kobelco SK350LC-8 Exentric Ripper Working Rock Face	SPL	113.90	SPL	Consultant
		Front End Loader - Hyundai HL-770-7A	SPL	104.2	SPL	Consultant
		Front End Loader - Hyundai HL-770-7	SPL	105.6	SPL	Consultant
		Front End Loader - Komatsu WA500-3	SPL	108.3	SPL	Consultant
		Front End Loader - Hyundai HL-780-9	SPL	106.4	SPL	Consultant

Date	Location	Type of Noise Monitoring	Relevant Criteria	Result	Compliant/ Non-Compliant	Noise Monitoring Conducted By
		Commander 1400 Control Side	SPL	106.5	SPL	Consultant
		Sandwash Generator	SPL	88.3	SPL	Consultant
		Dewaterer West Side	SPL	96.8	SPL	Consultant
		Complete Sandwash System Exhaust Side	SPL	111.2	SPL	Consultant
		Site Generator	SPL	84.3	SPL	Consultant

5.2 AIR QUALITY

Site dust monitoring is performed on a monthly basis at the north east corner of the site that is nearest residential receiver (Receiver 2) the location of the dust monitoring location is shown in Appendix 1, Figure 4 Environmental Monitoring Locations. The location of the dust bottle was moved in 2018 due to the previous location being not on quarry land. Table 10 provides the dust monitoring results from 2018. The dust results showed no exceedances in the trigger values recorded.

Table 10: Monthly Dust Monitoring Results for Richmond Quarry

Month	Sampling Days (30 days +/- 2)	Sample Comments	Sample Volume (L)	Deposit Rate of Insoluble Solids Total Suspended Solids		Deposit Rate of Ash (g/m^2 /mth)	Deposit Rate of Combustible Matter (g/m^2 /mth)
				(g/m^2 / mth)	(mg/m^2 /day)		
Trigger Values				**>4**	**-**	**2**	**-**
Jan 18	33	Insect / Organic Matter	1.3L	0.4	14	0	0.4
Feb 18	27	Fine Organic Matter	2.57L	1.2	39	0.4	0.8
Mar 18	30	Organic Matter	2.42L	0.7	24	0	0.7
Apr 18	33	Clear/small Organic Matter	0.84L	0.7	2F4	0.1	0.6
May 18	29	Organic Matter	0.43L	1.0	33	0.4	0.6
Jun 18	28	Cloudy Organic Matter	1.17L	1.0	34	0.2	0.9
Jul 18	34	Cloudy Organic Matter	0.1L	0.8	28	0.1	0.8
Aug 18	28	-	1.4L	1.2	41	1.1	0.2
Sept 18	28	-	0.11L	0.7	24	0.4	0.3
Oct 18	31	-	4.22L	0.4	12	0.2	0.1
Nov 18	32	Insects	0.64L	1.6	53	1	0.6
Dec 18	32	Organic Matter	0.2L	1	33	0.7	0.3

5.3 HERITAGE (ABORIGINAL AND NON-ABORIGINAL)

Heritage management conditions are covered under Conditions 34, 35 and 36 of Project Approval 09_0080. Throughout 2018, site activities operated within the operational footprint shown in Figure 2 in Appendix A. No Aboriginal or non-aboriginal heritage items were detected throughout site operations in 2018. Previous cultural heritage investigations on-site have not detected any Aboriginal or non-aboriginals heritage items in the area.

Table 11: Summary of Heritage Conditions

Project Approval Condition #	Details	Implementation
Condition 34, Schedule 3	This approval does not allow the Proponent to disturb any human remains found on site.	No human remains found on-site. This requirement is covered off with all employees during the site induction.
Condition 35, Schedule 3	Prior to causing any surface disturbance of the land in the sites for the: (a) Water Supply Dam; (b) Water Reuse Dam; and (c) Southern Extraction Area the Proponent must undertake targeted sub-surface archaeological investigations, in consultation with OEH and Aboriginal stakeholders, to the satisfaction of the Secretary.	Sub-surface investigations carried out on 29 November 2013.
Condition 36, Schedule 3	The Proponent must prepare a Heritage Management Plan for the project to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with OEH and Aboriginal stakeholders; (b) be submitted to the Secretary for approval prior to carrying out any development on site (other than the construction of bunds and vegetative screening) under this approval; (c) include a detailed program for proposed targeted sub-surface archaeological investigations, including a strategic sampling methodology; and (d) describe the measures that would be implemented for: • monitoring all new surface disturbance on site for unidentified Aboriginal objects; • managing the discovery of any human remains or previously unidentified Aboriginal objects on site; and • ensuring ongoing consultation with Aboriginal stakeholders in the conservation and management of any Aboriginal cultural heritage values on site. The Proponent must implement the approved management plan as approved from time to time by the Secretary.	During 2018, the site operated under the Heritage Management Plan (Versions 2.0 and 2.1).

5.4 WATER MANAGEMENT

5.4.1 WATER LICENCES

Richmond Quarry does not hold a water licence for site operations. The water reuse dam on-site is used for operational water requirements.

5.4.2 WATER DISCHARGES

No data is available that shows that any discharges occurred during the calendar year.

5.4.3 SITE WATER BALANCE

During 2018, operational water was used on-site for dust suppression and truck washing. This water was sourced from the site's Water Reuse Dam that has a 40 ML capacity which is significantly greater than the sites current water requirements. No specific records were kept in relation to the use of water onsite, the demand was managed on a weekly basis to ensure the water level in the water reuse dam did not exceed freeboard.

Employees use potable water delivered to a tank located beside the lunch room building. Employees utilise a portable toilet that is serviced regularly by a licenced operator.

The sand washing plant was commissioned during 2018. The processing of sand utilises water from the water reuse pond. All process water is returned to the water reuse pond following the reduction of the sediment load in the 1ml processing ponds.

In addition, the operation of the sand washing plant and ancillary activities has increased the surface disturbance area of the site by approximately one hectare (Figure 3 Appendix A). As per the Water Management Plan, the existing Water Reuse Dam has the capacity to adequately accommodate this increase in the site's disturbance footprint.

5.4.4 WATER MANAGEMENT

The sites water management practises are described in the approved Water Management Plan (v2.1). This plan details how the site approaches the management of surface and groundwater onsite.

The site is currently collecting baseline data for all surface water and groundwater monitoring points to establish statistically derived site specific trigger levels. In the interim, monitoring results are compared against the following guidelines:

- Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000) (ANZECC Guidelines) – criteria for surface water and groundwater monitoring.
- National Health and Medical Research Council (2004) Australian Drinking Water Guidelines (NHMRC Guidelines) – criteria for groundwater monitoring.

5.4.5 SURFACE WATER MONITORING

The Water Management Plan for the site describes the surface water management measures that are to be implemented by site operations. To measure the effectiveness of these measures the Water Management Plan prescribes a surface water monitoring program. A description of this program is provided in Table 12 below, with the monitoring point locations identified on Figure 4, Appendix A. A summary of the results from the surface water monitoring conducted in 2018 is detailed in Table 14 and the detailed results are located in Appendix E Table 1 and 2. Graphs of the monitoring results are shown in Appendix G.

5.4.6 CHANGES TO SURFACE WATER MONITORING LOCATIONS

Unfortunately Richmond Quarry no longer has access to Monitoring Points MP3 and MP4 as detailed in Table 13 below. The landowner where MP3 and MP4 are located has denied access to these points in writing. Richmond Quarry has made changes to the existing environmental monitoring program to ensure that any impacts from quarry operations to the environment on-site and the surrounding areas is still captured on an ongoing basis within areas that can be accessed. The changes are detailed below in Table 13 and can be viewed on Figure 4, Appendix A.

Table 12: Overview of Surface Water Monitoring Locations and Frequency

Monitoring Point	Type of Monitoring Point	Monitoring Frequency
MP1	Surface water monitoring – upstream on Tucki Tucki Creek – 1.5 km from site.	Quarterly
MP2	Surface water monitoring – downstream – 1.5 km from site.	Quarterly
~~MP3~~	~~Surface water monitoring – on-site watercourse. Removed.~~	~~Quarterly (when water levels permit)~~
MP4	Surface water monitoring – downstream of operational quarry.	Quarterly (when water levels permit)
MP5	Water Reuse Dam – near discharge point on the north-western corner.	Quarterly
MP6	Discharge Quality of stormwater overflow on the Water Reuse Dam - near discharge point on the north-western corner.	Prior to being discharged to receiving watercourses and daily while discharging
MP7	Water Reuse Dam (pH only) - near discharge point on the north-western corner.	Weekly

Table 13: Changes to Surface Water Monitoring Locations

Monitoring Point	Description	Action	Reasoning
MP3	Tucki Tucki swamp downstream of MP4 and quarry operations	Remove monitoring point	MP3 is located downstream of MP4. Any surface water contamination issues arising from quarry operations will be picked up upstream at MP4. The removal of MP3 as a downstream monitoring point should not detract from the overall surface water monitoring program of the site. In case of a significant contamination event, MP2 is used to monitor further downstream of MP3. It is also noted that MP3 is regularly dry, with only 2 samples of monitoring data able to be obtained since monitoring began in 2014.
MP4	Adjacent to quarry land within Lot 2 DP1191905	Adjacent to previous monitoring point – moved to within Lot 5 DP1191905	MP4 has been relocated a short distance upstream of the current monitoring point onto Lot 5 DP1191905. The change of location should result in negligible change to the monitoring data obtained by the existing monitoring point. The upstream change should assist in reducing contamination from cow manure in the stream at the existing downstream location.

Table 14: Surface Water Quality Parameters and Assessment Criteria

Parameters Analysed	Unit	ANZECC 2000 Trigger Values for Freshwater	Monitoring Points not meeting standards	Reasoning / Actions Taken
MONITORING POINTS 1-6 NOTE: • During 2018 MP3 and MP4 had insufficient water to take samples during the four monitoring periods. • During 2018 there were no recorded discharges off-site so MP6 was not required to be monitored.				
pH (units)	-	6.5-8.5	MP5	Historical pH levels have consistently been recorded as low within MP5. The washing of sand onsite reduced pH levels in the Reuse Pond to under 5. To address this drop in pH Agricultural Lime has been added to the pond to increase the ponds pH to above 6.5 to meet the sites trigger value. The establishment of site specific trigger levels will assist in defining pH levels more reflective of the local conditions. MP5 is the same location as MP7 within the site's Water Reuse Dam. The dam pH is routinely monitored on a weekly basis as MP7, with a discussion on the results provided further below.
Conductivity	(dS/m)	0.350	Meets standards	All surface water monitoring points were below the criteria for conductivity.
Nitrate (NO_3)	(mg/L)	0.7	Meets standards	All surface water monitoring points were below the criteria for nitrate.
Aluminium (Al)	(mg/L)	0.055	MP1, MP2 and MP5	During 2018 MP1, MP2 and MP5 experienced Aluminium levels that were above the ANZECC Guidelines. MP1 is an upstream monitoring point, with no impact from quarry operations. The high levels in MP2 is consistent with the data collected in the previous years and with baseline data collected from 2008 and Environmental Assessment predictions. Historical observations of Aluminium in MP5 have shown levels that are above the ANZECC Guidelines. Following the addition of Agricultural Lime to the Reuse Pond in Quarter 4 2018, the Aluminium levels dropped to a four year low of below 0.25mg/L. The Aluminium levels will be continued to be monitored and further investigations will be initiated in the event that the aluminium levels rise significantly above previous observed levels.
Total Arsenic (As)	(mg/L)	0.024	Meets standards	All surface water monitoring points were below the criteria for Arsenic.

Parameters Analysed	Unit	ANZECC 2000 Trigger Values for Freshwater	Monitoring Points not meeting standards	Reasoning / Actions Taken
Cadmium (Cd)	(mg/L)	0.0002	Analysis to three decimal places not four - MP5	Richmond Quarry uses Environmental Analysis Laboratory (EAL) to analyse the routine surface water samples. EAL is a NATA accredited laboratory, however the analysis sensitivity for cadmium is routinely set to three decimal places rather than the four decimal places required for ANZECC Guidelines. As a consequence, the fourth monitoring rounds in 2018 provided results of <0.001 for MP5. It is believed that this is a sensitivity error and not an exceedance in the criteria. All other cadmium monitoring performed to the required accuracy at the monitoring points have been below the ANZECC Guidelines.
Total Chromium (Cr)	(mg/L)	Not Specified[1]	Meets standards	All recorded levels are negligible across the sites surface water monitoring locations.
Copper (Cu)	(mg/L)	0.0014	MP1, MP5	During Quarter 3 and 4 2018 MP5 experienced Copper levels that were above the ANZECC Guidelines. The high level at MP5 may be related to the testing and operation of the Sand Washing Plant onsite. Following the addition of Agricultural Lime and the continued addition of lime to manage pH, it is hoped that the levels of Copper will fall under the nominated criteria. The Copper levels will be continued to be monitored and further investigations will be initiated in the event that the Copper levels continue to rise above previous observed levels. MP1 experienced a level above the ANZECC Guidelines in Quarter 3 only. The high level experienced at MP1 is not related to the quarry as the sample location is up stream from the quarry.
Mercury (Hg)	(mg/L)	0.0006	Meets standards	All surface water monitoring points were below the criteria for mercury.
Nickel (Ni)	(mg/L)	0.011	Meets standards	All surface water monitoring points were below the criteria for nickel.
Lead (Pb)	(mg/L)	0.0034	Meets standards	All surface water monitoring points were below the criteria for lead.

Parameters Analysed	Unit	ANZECC 2000 Trigger Values for Freshwater	Monitoring Points not meeting standards	Reasoning / Actions Taken
Zinc (Zn)	(mg/L)	0.008	MP5	During Quarter 4 2018 MP5 experienced Zinc levels that were above the ANZECC Guidelines. The high level at MP5 may be related to the testing and operation of the Sand Washing Plant onsite. Following the addition of Agricultural Lime and the continued addition of lime to manage pH, it is hoped that the levels of Zinc will fall under the nominated criteria. The Zinc levels will be continued to be monitored and further investigations will be initiated in the event that the Zinc levels continue to rise above previous observed levels. MP1 experienced a level above the ANZECC Guidelines in Quarter 3 only.
ADDITIONAL ITEM AT MONITORING POINT 6				
Turbidity	NTU	10-20	No water to sample.	During 2018 there were no recorded discharges off-site so MP6 was not required to be monitored.
MONITORING POINT 7				
pH (units)	-	6.5-8.5 (EPL 20562 and Water Management Plan)	MP7	MP7 is tested weekly for pH with results ranging from 4.73-7.23 during 2018. Historical pH levels have consistently been recorded as low within MP7. The washing of sand onsite may have influenced the pH levels in the Reuse Pond to make the pH under 5. To address this drop in pH Agricultural Lime has been added to the pond to increase the ponds pH to above 6.5 to meet the sites trigger value. Addressing the pH in the pond may also assist in dropping metals out of the pond water.
EPL 20562 – Water Reuse Dam Discharge Point				
Total Suspended Solids (TSS)	(mg/L)	EPL 20562 – 50	MP5	In the event of a discharge off-site from the Water Reuse Dam, MP5 is required to be monitored for TSS. While there was no off-site discharge from the Water Reuse Dam during 2018, TSS is routinely monitored. In quarter 1 and 2 MP5 exceeded the TSS criteria. This is consistent with historical levels, with the Water Reuse Dam receiving the site's rainfall run-off from disturbed operational areas. A 6 ML freeboard is maintained within the Water Reuse Dam to capture large rain events and prevent uncontrolled overflow off-site. No discharge from the site has been recorded in 2018. The Water Management Plan is currently being reviewed in relation to sediment and erosion control measures. The revised management plan and associated improvements should result in an improvement of TSS in 2019.

Parameters Analysed	Unit	ANZECC 2000 Trigger Values for Freshwater	Monitoring Points not meeting standards	Reasoning / Actions Taken
Oil and Grease	(mg/L)	EPL 20562 – no visible sheen or detectable odour	Meets licence conditions	During 2018, the samples were visually inspected, with no visible oil or grease sheen or detectable odour present throughout the year.

ANZECC Guidelines do not specify a trigger value for total chromium (Cr) due to insufficient data. This will be established as part of the baseline criteria.

5.4.7 GROUNDWATER MONITORING

The Water Management Plan details a groundwater management plan for the site. The groundwater management plan describes the groundwater monitoring program for the site, with a summary provided below in Table 15 and the groundwater bore locations provided in Figure 4 of Appendix A.

Table 15: Overview of Groundwater Monitoring Locations and Frequency

Monitoring Point	Type of Monitoring Point	Monitoring Frequency
~~8~~	~~Groundwater level and quality monitoring – previously BH3~~	~~Quarterly~~
9	Groundwater level and quality monitoring – previously BH5	Quarterly
10	Groundwater level and quality monitoring – previously BH6	Quarterly
~~11~~	~~Groundwater level only – windmill/bore~~	~~Quarterly~~
12	Groundwater level and quality monitoring – previously BH7	Quarterly

Available Groundwater bores were sampled on a quarterly basis during 2018. MP8 and MP10 were not able to be sampled in Quarter 3 and 4 due to no access to the area. MP11 was not able to be sampled in Quarter 2, 3 and 4 due to no access to the area.

A summary of the results from the groundwater monitoring conducted in 2018 is detailed in Table 17 and the detailed results are located in Appendix E Table 3. Graphs of the monitoring results are shown in Appendix G.

Until site specific trigger values have been established for the groundwater monitoring bores, Richmond Quarry uses the ANZECC trigger values for freshwater and the NHMRC Drinking Water Guidelines as a baseline for monitoring data. During 2018, excluding pH, groundwater monitoring data met the criteria for the NHMRC Drinking Water Guidelines and only minor exceedances were recorded against the ANZECC trigger values. The pH for the surrounding areas surface and groundwater is well established to be slightly acidic. Groundwater monitoring data was lower than the criteria set by both of the guidelines.

5.4.8 CHANGES TO GROUND WATER MONITORING LOCATIONS

Unfortunately Richmond Quarry no longer has access to Monitoring Points MP11 and MP8 as detailed in Table 15 – Overview of Monitoring Locations and Frequency. The landowner where MP11 and MP8 are located has denied access to these points in writing. Richmond Quarry has made changes to the existing environmental monitoring program to ensure that any impacts from quarry operations to the environment on-site and the surrounding areas is still captured on an ongoing basis within areas that can be accessed. The changes are detailed below in Table 16 – Changes to Ground Water Monitoring Locations and Figure 4 of Appendix A - Proposed Changes to Environmental Monitoring Locations.

Table 16: Changes to Ground Water Monitoring Locations

Monitoring Point	Description	Action	Reasoning
MP11	Windmill within Lot 2 DP1191905	Remove monitoring point	MP11 is used to measure the groundwater height only and due to contamination issues is unsuitable to be used for groundwater quality monitoring. MP11 is now outside of the quarry land and is not permitted to be accessed by the land owner. In 2015 MP12 was added to the site's monitoring program to monitor the height and quality of downstream groundwater in lieu of – MP11. The addition of MP12 to the site's groundwater monitoring program removed the requirement for the height levels to be monitored at MP11.
MP8	East of quarry operations	Remove monitoring point	Access is no longer permitted on the surrounding quarry land, including Lots 2 and 3 of DP 1191905. As a result, Richmond Quarry staff no longer have access to MP8 for groundwater monitoring. MP10 is located south of MP8 and will continue to be monitored to assess the areas groundwater quality and level.

Table 17: Groundwater Quality Parameters and Assessment Criteria

Parameters Analysed	Unit	ANZECC 2000 Trigger Values for Freshwater	NHMRC Drinking Water Guidelines	Monitoring Points not meeting standards	Reasoning / Actions Taken
pH (units)	-	6.5-8.5	6.5-8.5	MP8, MP9, MP10, MP12	The pH at all groundwater bores has been consistently below the ANZECC Guidelines. The range in pH for each of the groundwater bores during 2018 has not changed significantly from previous years with result ranges provided below: • MP8: pH 4.47 • MP9: pH 5.26 – 5.45 • MP10: pH 4.39 – 4.46 • MP 12: pH 5.28 – 6.19 MP12 was established in 2015 and initially recorded pH levels within the ANZECC Guidelines, however these have since stabilised at a lower range of 5.28-6.19 during 2018, reflective of the lower groundwater pH recorded in the surrounding area. The Environmental Assessment noted that the pH of nearby soil and receiving waters are mildly acidic pH 4.5 – pH 5.3. The natural acidic soil conditions encountered at the Site and subsequent influence on groundwater may require that maintenance of ambient condition is the preferred water quality goal rather than the neutral conditions set out in the ANZECC Guidelines. The establishment of site specific trigger levels will assist in defining pH levels more reflective of the local conditions.
Conductivity	(dS/m)	0.350	n/s	MP8, MP12	The conductivity values for MP8 and MP12 have mostly remained over the ANZECC Guidelines for freshwater since sampling commenced. During quarter 4 2018, the conductivity of MP12 fell below the nominated criteria of 0.35 dS/m. MP9 has consistently remained below the nominated criteria however rose above the guideline value in the fourth quarter being recorded at 0.459 dS/m. These values will be continued to be monitored and further investigations will be initiated in the event that the conductivity levels continue to rise above previous observed levels.

Parameters Analysed	Unit	ANZECC 2000 Trigger Values for Freshwater	NHMRC Drinking Water Guidelines	Monitoring Points not meeting standards	Reasoning / Actions Taken
Nitrate (NO_3)	(mg/L)	0.7	50	Meets standards	All groundwater monitoring bores were below the criteria for Nitrate.
Aluminium (Al)	(mg/L)	0.055	0.2	MP8, MP9, MP10, MP12.	During 2018, the Aluminium levels in MP8, MP9, MP10 and MP12 met the greater NHMRC Drinking Water Guidelines however they exceeded the lower criteria for the ANZECC Guidelines, with the ranges provided below: • MP8: 0.071 mg/L • MP9: 0.007 – 0.149 mg/L (3 out of 4 samples exceeded ANZECC Guideline) • MP10: 0.127 – 0.174 mg/L • MP12: 0.035 – 0.105 mg/L The Aluminium levels recorded at the groundwater bores during 2018 are relatively consistent with previous historical monitoring data.
Total Arsenic (As)	(mg/L)	0.024	0.01	Meets standards	All groundwater monitoring bores were below the criteria for arsenic.
Cadmium (Cd)	(mg/L)	0.0002	0.002	Analysis to three decimal places not four – MP8, MP9, MP10, MP12	Richmond Quarry uses EAL to analyse the routine groundwater samples. EAL is a NATA accredited laboratory, however the analysis sensitivity for Cadmium is routinely set to three decimal places rather than the four decimal places required for ANZECC Guidelines. As a consequence, the first monitoring rounds in 2018 provided results of <0.001 for the groundwater monitoring bores. It is believed that this is a sensitivity error and not an exceedance in the criteria. All other Cadmium monitoring performed to the required accuracy at the monitoring points have been below the ANZECC Guidelines.
Total Chromium (Cr)	(mg/L)	Not Specified[1]	0.054	Meets standards	All groundwater monitoring bores were below the criteria for Chromium.
Copper (Cu)	(mg/L)	0.0014	2	MP8, MP9, MP10	During 2018, the Copper levels in MP8, MP9 and MP10 met the greater NHMRC Drinking Water Guidelines however they exceeded the lower criteria for the ANZECC Guidelines, with the ranges provided below:

Parameters Analysed	Unit	ANZECC 2000 Trigger Values for Freshwater	NHMRC Drinking Water Guidelines	Monitoring Points not meeting standards	Reasoning / Actions Taken
					• MP8: 0.03 mg/L • MP9: 0.012 – 0.054 mg/L (2 out of 4 samples exceeded ANZECC Guideline) • MP10: 0.012 – 0.018 mg/L The Copper levels recorded at the groundwater bores during 2018 represent minor exceedances and are relatively consistent with previous historical monitoring data.
Mercury (Hg)	(mg/L)	0.0006	0.001	Meets standards	All groundwater monitoring bores were below the criteria for Mercury.
Nickel (Ni)	(mg/L)	0.011	0.02	Meets standards	All groundwater monitoring bores were below the criteria for Nickel.
Lead (Pb)	(mg/L)	0.0034	0.01	Meets standards	All groundwater monitoring bores were below the criteria for Lead.
Zinc (Zn)	(mg/L)	0.008	3	MP8, MP9, MP10, MP12	During 2018, the Zinc levels in the groundwater bores met the greater NHMRC Drinking Water Guidelines however they exceeded the lower criteria for the ANZECC Guidelines, with the ranges provided below: • MP8: 0.005 mg/L • MP9: 0.000503 – 0.002 mg/L (3 out of 4 samples exceeded the ANZECC Guideline) • MP10: 0.02 mg/L • MP12: 0.00058 – 0.001 mg/L (3 out of 4 samples exceeded the ANZECC Guideline) The Zinc levels recorded at the groundwater bores during 2018 represent minor exceedances and are relatively consistent with previous historical monitoring data.

ANZECC Guidelines do not specify a trigger value for total chromium (Cr) due to insufficient data. This will be established as part of the baseline criteria.

6.0 REHABILITATION PERFORMANCE

The site's Landscape Management Plan (v 3.1) that details the approach for the management of site rehabilitation and biodiversity offsets throughout the sites life. The sites rehabilitation objectives are detailed in Table 18 below.

In December 2018 site rehabilitation began on a small area to the South East of Biodiversity Offset Area 1 as indicated in Appendix A Figure 5 Indicative Rehabilitation Area 2018-2019. This area is being rehabilitated as the disturbance is close to Biodiversity Offset Area 1 and the area in no longer required for access purposes. The ongoing rehabilitation strategy for the quarry is a progressive approach. Rehabilitation activities will commence in areas no longer required by the quarry, such as where excavation activities are complete and the area is not required for processing purposes. This approach will allow for rehabilitation to occur alongside excavation activities, resulting in vegetation being established in different areas (cells) of the site as areas become available following completion of excavation. It is anticipated that at any one time up to 2 x 3 hectare extraction cells will be operational plus the Central Extraction Area processing area. The overall objective of the rehabilitation plan is to develop a relatively weed free, functional ecosystem that provides ecological services to maintain and enhance fauna populations.

Table 18: Rehabilitation Objectives

Feature	Objective
Site (as a whole)	Safe, stable and non-polluting
Surface Infrastructure	To be decommissioned and removed, unless the Secretary agrees otherwise
Benched Quarry Walls	Landscaped with native endemic flora species
Quarry Pit Floors	Suitable for grazing
Other land affected by the Project	Restore ecosystem function, including maintaining or establishing self-sustaining eco-systems comprised of: • native endemic species; and • a landform consistent with the surrounding environment

7.0 BIODIVERSITY

The Biodiversity Offsets requirements are detailed in the Landscape Management Plan, with the location of the offset areas provided in Figure 2, Appendix A.

In accordance with Condition 46(3), Richmond Quarry submitted a revised calculation and documentation for the Conservation and Rehabilitation Bond to the DP&E for approval on the 31st of August 2018. The Department of Planning and Environment reviewed the submission and was satisfied with submission approving the Conservation and Rehabilitation Bond. Final lodgement of the bond was made on the 16th of October 2018.

The planting of the Koala Habitat Planting Area required by Condition 19(3) was completed in September 2017. The site was planted with 3 rows of koala habitat trees/shrubs, with a photo of the area provided in Appendix F.

8.0 COMMUNITY

8.1 COMMUNITY CONSULTATIVE COMMITTEE

In accordance with Condition 6(5), Richmond Quarry maintains a Community Consultative Committee (CCC) to ensure open and effective communication with local community members. The CCC held a meeting on 24 September 2018 to discuss site operations, complaints and the transition from Champions Quarry to Richmond Quarry. A copy of the CCC 2018 meeting minutes is publicly available on the Richmond Quarry website. No community contributions were made during 2018.

8.2 COMPLAINTS REGISTER

Richmond Quarry maintains a complaints register that is publicly available on the Richmond Quarry website. During 2018, there was one 4 complaints made to the quarry.

- Complaint 1: First complaint was relating to a truck spilling rock onto Wyrallah Road, investigation determined that the truck did not originate from the Quarry.
- Complaint 2: A second complaint was received by the Department of Planning and Environment from an anonymous person. The issues raised were in relation to the previous operator of the Quarry.
- Complaints 3 and 4: The final two complaints related to a loader tyre blowout that occurred within the Quarry. Response letters were sent to the complainants explaining the noise and a photo was provided showing the tyre blowout.

9.0 INDEPENDENT ENVIRONMENTAL AUDIT

During the reporting period, the 2018 Independent Environmental Audit was conducted by GHD. As per the Project Approval 09_0080, an Independent Environmental Audit (IEA) is required to be completed every three years.

The *Independent Environmental Audit Report, December 2018* and *Response to Recommendations* are available on the Richmond Quarry website. Appendix C addresses progress of the Response to Audit Recommendations from the 2018 Audit.

10.0 STATEMENT OF COMPLIANCE

Table 19: Statement of Compliance

Were all conditions of the relevant approval complied with?	
Part 3A Project Approval 09_0080	No

11.0 NON COMPLIANCE

At the beginning of 2018 prior to the change of operator to Richmond Quarry, there were a number of instances where complete records were not maintained for the movement of material off site. As a result, the following additional measures were established:

- Additional employee training and toolbox talks relating to the Project Approval conditions surrounding product transport.

- Additional information provided to transport companies to ensure they are aware of the hourly and daily limits.
- Increased frequency in reviewing trends associated with product transport records.
- Preparation of a Modification application to the DP&E to increase daily and hourly truck limits.
- All transport companies are advised of this condition in tenders and prior to entering the site. Truck drivers are also made aware of this condition during the site induction.

A summary of the above described non compliances is provided in Table 20.

Table 20: Non Compliance Summary

Relevant Approval	Condition #	Condition Description (summary)	Compliance status	Comment	Where addressed in Annual Review
MP 09_0080	Condition 30A (3)	The Proponent must make and retain records of the time of dispatch, weight of load and vehicle identification for each laden truck dispatched from the project.	Non-compliant	3 instances where the time and truck registration was not recorded.	Section 11.3
MP 09_0080	Condition 30A (3)	The Proponent must make and retain records of the time of dispatch, weight of load and vehicle identification for each laden truck dispatched from the project.	Non-compliant	3 instances where the time of truck exiting the site was not recorded.	Section 11.3
MP 09_0080	Condition 30A (3)	The Proponent must make and retain records of the time of dispatch, weight of load and vehicle identification for each laden truck dispatched from the project.	Non-compliant	19 instances where no truck registration was recorded.	Section 11.3

Compliance status key for above table

Risk Level	Colour Code	Description
High	Non-compliant	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
Medium	Non-compliant	Non-compliance with: • potential for serious environmental consequences, but is unlikely to occur; or • potential for moderate environmental consequences, but is likely to occur
Low	Non-compliant	Non-compliance with: • potential for moderate environmental consequences, but is unlikely to occur; or • potential for low environmental consequences, but is likely to occur
Administrative non-compliance	Non-compliant	Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions)

11.1 TRUCK MOVEMENTS

Condition 9, Schedule 2 restricts the number of daily truck movements to 50 and only permits 5 truck movements to occur in any one hour.

Daily Truck Movements

During 2018 there were 0 instances when more than 50 trucks were dispatched in a day.

Hourly Truck Movements

In total there were 0 instances where there were more than 5 truck movements within 1 hour during the reporting period.

11.2 OPERATING HOURS

During the reporting period, there was no non-compliance in the permitted operating hours of the site. Saturday's reduced operating hours of 8 am to 1 pm along with the standard weekday operating hours of 7 am to 6 pm continue to be reinforced to employees through toolbox meetings.

11.3 TRANSPORT MONITORING

Condition 30A, Schedule 3 requires records to be maintained for the time of dispatch, weight of load and vehicle identification of each laden truck dispatched from the Quarry. A summary of the records of truck dispatches departing the site is available in Appendix D. Overall, there were 1,153 truck dispatches from the site during the reporting period.

A summary of the non-conformances identified during the 2018 reporting period is provided below:

- 0 instances where no records were maintained.
- 3 instances where the time and truck registration was not recorded.
- 19 instances where truck registration was not recorded.

Since this time, new record management systems have been put in place and operators records of truck movements are checked on a daily basis to ensure all the required details are captured for each truck movement.

Table 21: Incomplete Truck Dispatch Records

Date	Time	Registration	Weight (tonnes)	Comment
8/01/2018	10:32	-	32.67	Registration not recorded
11/01/2018	12:47	-	32.1	Registration not recorded
17/01/2018	7:42	-	9.75	Registration not recorded
17/01/2018	9:29	-	10.35	Registration not recorded
17/01/2018	11:44	-	10.2	Registration not recorded
17/01/2018	13:05	-	10.2	Registration not recorded
19/01/2018	-	-	0.8	Time and Registration not recorded
23/01/2018	16:05	-	4	Registration not recorded
24/01/2018	9:26	-	3.74	Registration not recorded
24/01/2018	10:16	-	3.82	Registration not recorded
24/01/2018	10:18	-	4.07	Registration not recorded
24/01/2018	10:41	-	3.37	Registration not recorded
24/01/2018	11:24	-	3.91	Registration not recorded
24/01/2018	11:25	-	4.1	Registration not recorded
24/01/2018	11:49	-	4.24	Registration not recorded
24/01/2018	12:12	-	4.1	Registration not recorded
25/01/2018	14:02	-	31.91	Registration not recorded
12/02/2018	-	-	1	Time and registration not recorded
19/02/2018	-	-	10.65	Time and registration not recorded
20/02/2018	12:40	-	12.1	Registration not recorded
15/03/2018	8:35	-	5.5	Registration not recorded
16/04/2018	10:18	-	1.25	Registration not recorded

APPENDIX A

Figure 1: Richmond Quarry – Regional Location

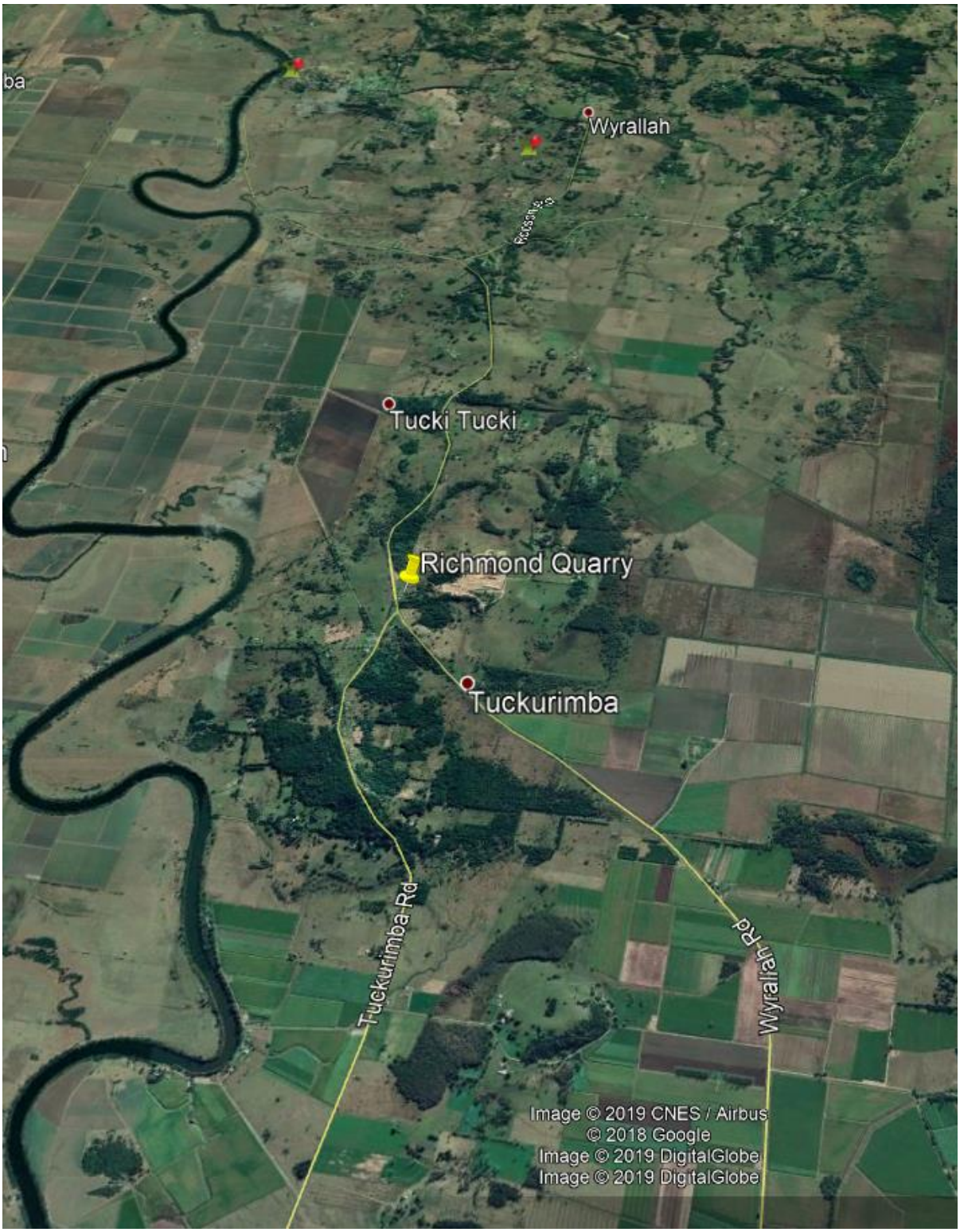

Figure 2: Project Layout (extract from Appendix 6 of Project Approval 09_0080)

Figure 3: Disturbance Footprint 2018

Figure 4: Environmental Monitoring Locations

Figure 5: Indicative Rehabilitation Area 2018/2019

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APPENDIX B

Production Data for the 2017/2018 Financial Year

Form S 1

NSW GOVERNMENT Planning & Environment
Resources & Geoscience

RETURN FOR EXTRACTIVE MATERIALS: YEAR ENDED 30 JUNE 2018

Quote RIMS ID in all correspondence

Quarry Id:	Rims ID: 400494
Operators Name: Address:	GSQ HOLDINGS PTY LTD PO BOX 642 LISMORE NSW 2480
Email:	compliance@solo.com.au
Quarry Name: Quarry Address: 2480	RICHMOND QUARRY 1586 WYRALLAH RD, TUCKURIMBA NSW

Inquiries please telephone:
(02) 4063 6713

Completed or Nil Returns
Email –
mineral.royalty@planning.nsw.gov.au
Postal Address (see below)

Please amend name, postal address and location of mine or quarry if incorrect or incomplete.

2017-2018

The return should be completed and forwarded to the **MANAGER, ASSESSMENT COORDINATION, RESOURCE OPERATIONS, NSW DEPARTMENT OF PLANNING & ENVIRONMENT, PO BOX 344 HUNTER REGION MAIL CENTRE NSW 2310 on or before 30 November 2018**. If completion of the return is unavoidably delayed, an application for extension of time should be requested **before** the due date. If no work was done during the year, a **NIL** return must be forwarded.

The return should relate to the **above quarrying establishment**, and should cover the operations of quarrying and treatment (such as crushing, screening, washing etc.) carried out at or near the quarry. A return is required even if the operations are solely of a developmental nature, and whether the area being worked is held under a mining title or otherwise.

Director, Title Assessments

Please complete all of the following information to assist in identifying the location of the Quarry

Typical Geology	Sandstone
Nearest Town to Quarry	Lismore
Local Council Name	Lismore City Council
Email Address of Operator	compliance@solo.com.au; info@richmondquarry.com.au
Name of Owner or Licensee	GSQ HOLDINGS PTY LTD
Postal Address of Licensee	PO Box 642 Lismore NSW 2480

Licence/Lease Number/s (if any)

From Mineral Resources NSW (Industry & Investment NSW)	N/A
From Department of Lands or other Department	N/A

If any output was obtained from land NOT held under licence from the above Departments, state the Name/s and Address/es of the Owners of the land _____

- To the best of my knowledge, the particulars which have been entered in this return are correct and no blank spaces have been left where figures should have been inserted.
- **SIGNATURE of PROPRIETOR or MANAGER** _____ **DATE** 15.11.18
- **CONTACT PERSON for this return** MR MICHAEL BARNES
- **NAME** (Block letters) MR MICHAEL BARNES **Telephone** (02) 6621 7431

SALES During 2017-2018

Production information may be published in aggregated form for statistical reporting. However, production data for individual operations is kept strictly confidential.

Product	Description	Quantity Tonnes
Virgin Materials		
• **Crushed Coarse Aggregates**		
Over 75mm	Sandstone	534.95
Over 30mm to 75mm	Sandstone	38352.71
5mm to 30mm	Sandstone	9970.55
Under 5mm		
Natural Sand		
Manufactured Sand		
Prepared Road Base & Sub Base		
Other Unprocessed Materials		
Recycled Materials		
• **Crushed Coarse Aggregates**		
Over 75mm		
Over 30mm to 75mm		
5mm to 30mm		
Under 5mm		
Natural Sand		
Manufactured Sand		
Prepared Road Base & Sub Base		
Other Unprocessed Materials		
• **River Gravel**		
Over 30mm		
5mm to 30mm		
Under 5mm		
• **Construction Sand**	Excluding Industrial	
• **Industrial Sand**		
Foundry, Moulding		
Glass		
Other (Specify)		
• **Dimension Stone**	Building, Ornamental, Monumental	
Quarried in Blocks		
Quarried in Slabs		
• **Decorative Aggregate**	Including Terrazzo	
• **Loam**	Soil for Topdressing, Garden soil, Horticultural purposes)	
• **TOTAL SITE PRODUCTION**		48858.21
• **Gross Value ($) of all Sales**		+/- $650,000.00
• **Type of Material**	Sandstone	
• Number of Full-Time Equivalent (FTE) Employees	Employees: 5	Contractors: 0

Please Note: A return for clay based products can be obtained by contacting the inquiry number.

APPENDIX C

Response to 2015 Independent Environmental Audit Recommendations

Table A: Corrective Actions

#	Condition	Corrective Action	Response	Timeframe	Progress	Completion
CAR 1	Project Approval, Condition 14, Schedule 2	Confirm the demountable building and shed have been constructed in accordance with the BCA and obtain construction and occupation certificates	Richmond Quarry has engaged a building certifier to obtain the necessary approvals to comply with the Building Code of Australia.	Initial: 31 March 2019	Building certifier engaged to manage building approvals. Initial inspection of buildings complete.	
CAR 2	Project Approval, Condition 2, Schedule 3	Install boundary pegs that are clear and permanent, so limits of extraction areas are easy to identify	Surveyor to checked and replace any missing pegs in the Southern and Central Extraction Areas onsite. Site to install coloured PVC Pipes to enable easy identification and protect the locations of survey pegs onsite.	Initial 31 December 2018 Revised: 31 March 2019	Surveyor has checked and replaced missing pegs in Southern and Central Extraction Areas onsite. Coloured PVC pipes in process of being installed.	
CAR 3	Project Approval, Condition 6, Schedule 3	Reinforce operating hours to employees	Toolbox Meeting to be held to reinforce operating hours to site employees.	29 November 2018	Completed.	Completed
CAR 4	Project Approval, Condition 16, Schedule 3	Store chemicals in accordance with Condition 16, Schedule 3	• Chemicals and Petroleum to be stored in accordance with Australian Standard AS1940-2004, The Storage and Handling of Flammable and Combustible Liquids. • Additional bunds to be obtained to ensure all liquids are bunded and to prevent crowding. • Obtain a large bund adequate to store the waste oil IBC. • Ensure Chemicals and Petroleum storage have the required signage / placarding in place. • Obtain a designated spill kit for the chemical storage area.	Initial: 31 January 2019 Revised: 30 April 2019.	Matt Duff has implemented changes to bunding and storage onsite. Correct segregation and signage / placarding currently in progress.	
CAR 5	Project Approval, Condition 19, Schedule 3	Obtain confirmation from the Secretary that they are satisfied with the works required by Condition 19, Schedule 3	• Current Quarry works completed by Richmond Quarry are currently restricted to the Progression 1 Area as defined in the Project Approval. • • Obtain confirmation from the Secretary that DP&E are satisfied with the construction of Bunds A – D.	30 June 2019	• Russell Currie to obtain a plan of bunds in approval versus constructed onsite. • Matt Duff to address the requirement that the bunds are established and vegetated (with	

#	Condition	Corrective Action	Response	Timeframe	Progress	Completion
					grasses, native endemic shrubs and trees) and provide evidence. • Matt Duff to address the establishment of vegetated screening of planted trees to the north of the access road and provide evidence. • • Russell Currie to write to DP&E following collation of above evidence from Matt Duff.	
CAR 6	Project Approval, Condition 1, Schedule 4	Notify the affected landowners when exceedances of monitoring criteria occur	No Noise / Dust Exceedances have occurred since the change of ownership from Champions Quarry to Richmond Quarry. Per the Noise and Air Quality Management Plans any exceedances will be notified to the affected landholders in writing.	Completed	Completed	Completed
CAR 7	Project Approval, Condition 1A, Schedule 5	Where required by the conditions, provide evidence of consultation with public authorities, any comments and how the comments have been addressed, as per Condition 1A, Schedule 5	Provide evidence to the DP&E showing consultation with public authorities, specifically where required by site consent / licence requirements.	28 February 2019	Russell Currie to write to DP&E and provide evidence of consultation with public authorities.	Completed
CAR 8	Project Approval, Condition 2, Schedule 5	Notify the Secretary when exceedances of monitoring criteria occur	No Noise / Dust Exceedances have occurred since the change of ownership from Champions Quarry to Richmond Quarry. Per the Noise and Air Quality Management Plans any exceedances will be reported to the secretary.	Completed	Completed	Completed
CAR 9	Project Approval, Condition 4, Schedule 5	Submit the Annual Review by the end of March each year and include all of the requirements of Condition 4, Schedule 5.	2018 Annual Review will be submitted by 31 March 2019 for the 2018 year. Annual review will be in accordance with Condition 4, Schedule 5 of the Project Approval.	31 March 2019	Annual Review report submitted to DP&E by 31 March 2019	Completed.
CAR 10	Project Approval, Condition 5, Schedule 5	Review management plans as required by Condition 5, Schedule 5 and submit to the Secretary within the specified timeframes	No Management Plan reviews have been required prior to the audit since the change of ownership from Champions Quarry to Richmond Quarry. Management plan reviews will be undertaken in accordance with Condition 5 of Schedule 5 of the Project Approval. Any Management Plan reviews that can not be achieved within the 3 month period will	Completed	Completed	Completed

#	Condition	Corrective Action	Response	Timeframe	Progress	Completion
			require a request for extension to be submitted to the Secretary for approval.			
CAR 11	Project Approval, Condition 7, Schedule 5	Report incidents to the Secretary and other relevant agencies within seven days of the incident	No Noise / Dust Exceedances have occurred since the change of ownership from Champions Quarry to Richmond Quarry. Per the Noise and Air Quality Management Plans any exceedances will be reported to the secretary.	Completed	Completed	Completed

Table B: Recommended Actions

#	Condition	Recommendation	Response	Timeframe	Progress	Completion
REC 1	Air Quality Management Plan	Revise the Air Quality Management Plan to include the new dust monitoring location. It is also recommended to include a figure showing the monitoring location.	The Air Quality Management Plan is to be reviewed and updated to include the revised dust monitoring location. A figure showing the new location to be provided in the plan.	31 July 2019	Air Quality Management Plan revised to include the new dust monitoring location and a figure showing the monitoring location.	Complete
REC 2	Landscape Management Plan	Update the Landscape Management Plan to clarify what is required in regards to rehabilitation	Review and update the Landscape Management Plan to define the rehabilitation to be undertaken in relation to the updated site progression plans.	30 September 2019		
REC 3	Landscape Management Plan	Undertake the monitoring and reporting outlined in the Landscape Management Plan to monitor the success of the rehabilitation and identify where remedial action is necessary	Review and update the Landscape Management Plan to accurately define the rehabilitation reporting and monitoring requirements for the site. Develop and implement monitoring and reporting forms.	30 September 2019		
REC 4	Landscape Management Plan	Engage a surveyor to re-establish/re-mark the pegs delineating the rehabilitation areas	Surveyor to check and replace any missing pegs in the Biodiversity Offset Areas and the Protected Revegetation Area onsite. Site to install coloured PVC Pipes to enable easy identification and protect the locations of survey pegs onsite.	Initial 31 December 2018 Revised: 31 March 2019	Surveyor has re-established /re-marked the pegs delineating the rehabilitation areas onsite. Placement of PVC pipes currently in progress.	
REC 5	Noise Management Plan	Revise the Noise Management Plan to include the new noise monitoring location. It is also recommended to include a figure showing the monitoring location	Review and update the Noise Management Plan to include any updated noise management locations. Figure showing the monitoring locations to be included in the plan.	30 September 2019		

#	Condition	Recommendation	Response	Timeframe	Progress	Completion
REC 6	Transport Management Plan	Consult with RMS during the review of the Transport Management Plan	RMS to be consulted during the review / update of the transport management plan.	30 September 2019		
REC 7	Transport Management Plan	Maintain the new truck monitoring system to ensure it captures all the information required and prevents further incidents in regards to truck movements	Transport Management Plan to be updated to include the revised truck monitoring system.	30 September 2019		
REC 8	Waste Management Plan	Introduce a system to encourage recycling of waste products	A domestic recycling service is to be implemented to the site starting the 17th of December. Used oil filters will also be collected and recycled.	17 December 2018	Completed	Completed
REC 9	Water Management Plan	Review the Water Management Plan sediment basin calculations to ensure they are in accordance with Managing Urban Stormwater Soils and Construction – Volume 2e Mines and quarries (DECC, 2008) and EPL. It is also recommended the calculations be done for individual stages	Review the Water Management Plan sediment basin calculations to ensure are designed, installed and maintained in accordance with Managing Urban Stormwater Soils and Construction – Volume 2e Mines and quarries (DECC, 2008) and EPL. Calculations to take into account progression plans for the site.	31 October 2019		
REC 10	Water Management Plan	Develop and implement a procedure to record that sediment basins are monitored and maintained appropriately	Weekly Surface Water Field Sheet IMS-ENVM-F-3746-RQ updated to monitor the condition of the surface water ponds onsite.	21 December 2018	Completed	Completed
REC 11	Water Management Plan	Review erosion and sediment controls across the site to ensure that they provide adequate protection and are installed and maintained in accordance with DECC 2008	Review the Water Management Plan sediment and erosion controls, ensure are installed and maintained in accordance with Managing Urban Stormwater Soils and Construction – Volume 2e Mines and quarries (DECC, 2008) and EPL.	31 October 2019		
REC 12	Project Approval, Condition 7, Schedule 2	Survey and peg the boundary of all approved Extraction Areas and the quarry floor on a periodic basis to demonstrate compliance with Condition 7, Schedule 2	Surveyor to checked and replace any missing pegs on the boundary of the approved extraction areas. Pegs to be placed near operational areas to mark the maximum extraction depth in the extraction areas.	Initial 31 January 2019 Revised 31 March 2019	Surveyors engaged to mark the extraction design and maximum extraction depth.	
REC 13	Project Approval, Condition 13, Schedule 3	Revise the Water Management Plan to update the water budget with consideration that the proposed Water Supply Dam is no longer an option.	Water Management Plan to be reviewed / updated to consider the onsite water balance.	31 October 2019		
REC 14	Project Approval Condition 38, Schedule 3	Implement and record the routine inspections of Tuckean Swamp and Tucki Tucki Creek	Add inspection / observation of Tuckean Swamp and Tucki Tucki Creek onto Quarterly Surface Monitoring Checklist and undertake observation at planned February monitoring.	28 February 2019	Inspection of Tuckean Swamp and Tucki Tucki Creek incorporated into Quarterly Monitoring Checklist.	Complete

#	Condition	Recommendation	Response	Timeframe	Progress	Completion
REC 15	Project Approval Condition 42, Schedule 3	Obtain from DPE confirmation the Offset Strategy and Conservation and Rehabilitation Bond is the long term security required by Condition 42, Schedule 3	Request sent to DP&E confirming if the Offset Strategy and Conservation and Rehabilitation Bond is the long term security required by Condition 42, Schedule 3	Initial 31 January 2019 Revised 31 March 2019	Email request sent to DP&E. Request under review by DP&E..	

APPENDIX D

Summary of Product Transport Monitoring Data – based off records available at the time.

Date	Time	Rego	Weight (tonnes)
8/01/2018	10:32	-	32.67
9/01/2018	7:12	CO99DW	38.4
9/01/2018	7:12	CI97ZL	38.95
9/01/2018	7:29	CJ81QI	39.5
9/01/2018	7:36	AJ610	37.55
9/01/2018	7:45	AM31JF	30.05
9/01/2018	8	BU50DX	38.3
9/01/2018	8:02	CG12LG	38.55
9/01/2018	8:36	CO99DW	38.8
9/01/2018	9:02	CJ81QI	39.55
9/01/2018	9:08	AJ610	37.4
9/01/2018	9:13	AM31JF	30.05
9/01/2018	9:30	BU50DX	38.5
9/01/2018	9:39	CG12LG	38.55
9/01/2018	10:00	CO99DW	38.85
9/01/2018	10:06	CI97ZL	38.8
9/01/2018	10:24	CJ81QI	39.4
9/01/2018	10:40	AJ610	37.45
9/01/2018	10:50	AM31JF	31.35
9/01/2018	11:10	BU50DX	38.85
9/01/2018	11:20	CG12LG	38.65
9/01/2018	11:25	CO99DW	38.95
9/01/2018	11:40	CI97ZL	38.45
9/01/2018	11:51	CJ81QI	39.35
9/01/2018	12:00	AJ610	37.45
9/01/2018	12:08	AM31JF	30.15
9/01/2018	12:24	BU50DX	38.3
9/01/2018	12:46	CG12LG	38.3
9/01/2018	12:59	CO99DW	38.95
9/01/2018	13:06	CI97ZL	38.7
9/01/2018	13:13	CJ81QI	39.4
9/01/2018	13:21	AJ610	37.4
9/01/2018	13:28	AM31JF	30.1
9/01/2018	13:52	BU50DX	39
9/01/2018	14:11	CG12LG	38.4
9/01/2018	14:20	CO99DW	38.8
9/01/2018	14:26	CI97ZL	38.8
9/01/2018	14:35	CJ81QI	39.45
9/01/2018	14:43	AJ610	37.3

Date	Time	Rego	Weight (tonnes)
9/01/2018	15:00	AM31JF	30.15
9/01/2018	15:12	BU50DX	39
9/01/2018	15:40	CG12LG	38.45
9/01/2018	15:45	CO99DW	38.94
9/01/2018	16:08	CI97ZL	36.54
9/01/2018	16:19	CJ81QI	39.43
9/01/2018	16:28	AJ610	37.33
9/01/2018	16:38	AM31JF	30.05
11/01/2018	12:47	-	32.1
17/01/2018	7:42	-	9.75
17/01/2018	9:29	-	10.35
17/01/2018	11:44	-	10.2
17/01/2018	13:05	-	10.2
18/01/2018	10:53	CN93ZT	31.95
18/01/2018	12:08	CN93ZT	32.05
18/01/2018	13:19	CN93ZT	32.5
18/01/2018	14:12	CN93ZT	32
18/01/2018	15:08	CN93ZT	31.95
18/01/2018	15:32	CN93ZT	32.05
19/01/2018	7:37	CC70ZR	10.35
19/01/2018	-	-	0.8
22/01/2018	7:16	BV35VT	20.05
22/01/2018	8:48	CL40HT	38.9
22/01/2018	10:06	BU35VT	38.55
23/01/2018	16:05	-	4
24/01/2018	9:26	-	3.74
24/01/2018	10:16	-	3.82
24/01/2018	10:18	-	4.07
24/01/2018	10:41	-	3.37
24/01/2018	11:24	-	3.91
24/01/2018	11:25	-	4.1
24/01/2018	11:49	-	4.24
24/01/2018	12:12	-	4.1
25/01/2018	14:02	-	31.91
29/01/2018	11:05	CC70ZR	11.9
31/01/2018	8:50	CI97ZL	38.8
6/02/2018	7:41	CC90FS	12.5
6/02/2018	7:41	CC90FS	20
7/02/2018	13:41	CC90FS	32.05

Date	Time	Rego	Weight (tonnes)
12/02/2018	7:12	CJ81QI	39.2
12/02/2018	7:44	CU99DW	39.35
12/02/2018	7:52	CI97ZL	39.05
12/02/2018	8:00	AV60FK	31.9
12/02/2018	8:21	CI73AC	38.16
12/02/2018	8:33	CG12LG	38.75
12/02/2018	8:46	DFI20D	32.48
12/02/2018	9:03	CJ81QI	38.98
12/02/2018	9:22	CU99DW	39.39
12/02/2018	9:29	CI97ZL	39.24
12/02/2018	9:37	AV60FK	31.97
12/02/2018	9:47	CI73AC	38.93
12/02/2018	10:06	CG12LG	38.94
12/02/2018	10:25	DFI20D	31.65
12/02/2018	10:35	CJ81QI	38.21
12/02/2018	10:55	CU99DW	39.46
12/02/2018	11:05	CI97ZL	39.12
12/02/2018	11:14	AV60FK	31.87
12/02/2018	11:32	CI73AC	39.04
12/02/2018	11:46	CG12LG	38.65
12/02/2018	11:53	DFI20D	32.49
12/02/2018	12:06	CJ81QI	39.31
12/02/2018	12:17	CU99DW	39.37
12/02/2018	12:27	CI97ZL	38.73
12/02/2018	12:40	AV60FK	31.74
12/02/2018	13:02	CI73AC	38.83
12/02/2018	13:09	CG12LG	38.91
12/02/2018	13:46	DFI20D	32.09
12/02/2018	13:39	CJ81QI	39.2
12/02/2018	13:57	CU99DW	39.16
12/02/2018	14:04	CI97ZL	39.02
12/02/2018	14:11	AV60FK	31.57
12/02/2018	14:34	CI73AC	38.43
12/02/2018	14:44	CG12LG	39
12/02/2018	15:06	CJ81QI	39.31
12/02/2018	15:15	DFI20D	32.51
12/02/2018	15:22	CU99DW	39.35
12/02/2018	15:31	CJ97ZL	39.36
12/02/2018	15:40	AV60FK	31.93
12/02/2018	16:00	CI73AC	38.77
12/02/2018	-	-	1
14/02/2018	7:09	CJ81QF	39.45

Date	Time	Rego	Weight (tonnes)
14/02/2018	7:15	AJ610	37.65
14/02/2018	7:22	AND098	39
14/02/2018	7:30	DFJ20D	32.1
14/02/2018	7:37	BZ27UD	32.35
14/02/2018	9:00	CJ81QI	39.45
14/02/2018	9:06	AJ610	37.45
14/02/2018	9:12	AND098	39.1
14/02/2018	9:18	DFI20D	31.7
14/02/2018	9:23	BZ27UD	32.2
14/02/2018	10:06	CO99DW	39.45
14/02/2018	10:15	CI97ZL	39
14/02/2018	10:25	CJ81QF	39.55
14/02/2018	10:34	AJ610	37.6
14/02/2018	10:41	AND098	39.15
14/02/2018	11:00	DFI20D	31.9
14/02/2018	11:06	BZ27UD	31.8
14/02/2018	11:33	CO99DW	39.4
14/02/2018	11:41	CI97ZL	39.55
14/02/2018	11:51	CJ81QF	39.4
14/02/2018	12:00	AJ610	37.8
14/02/2018	12:06	AND098	39.35
14/02/2018	12:22	DFI20D	32
14/02/2018	12:37	BZ27UD	32.5
14/02/2018	12:56	CO99DW	39.3
14/02/2018	13:06	CI97ZL	39.1
14/02/2018	13:18	CJ81QI	39.2
14/02/2018	13:25	AJ610	37.65
14/02/2018	13:33	AND098	38.95
14/02/2018	13:59	BZ27UD	31.15
14/02/2018	14:16	DFI20D	32.4
14/02/2018	14:29	CO99DW	38.95
14/02/2018	14:35	CI97ZL	39.05
14/02/2018	14:49	CJ81QI	39.55
14/02/2018	14:57	AJ610	37.2
14/02/2018	15:03	AND098	38.95
14/02/2018	15:34	BZ27UD	32.55
14/02/2018	15:51	CO99DW	39.1
14/02/2018	15:59	CI97ZL	38.8
14/02/2018	16:10	CI23AU	33.5
14/02/2018	16:15	DFI20D	31.85
14/02/2018	16:21	AJ610	37.6
14/02/2018	16:27	CJ81QI	39.45

Date	Time	Rego	Weight (tonnes)
14/02/2018	16:34	AND098	39
15/02/2018	7:15	BZ27UD	32.35
15/02/2018	7:21	DFI20D	32.5
15/02/2018	8:44	BZ27UD	32.35
15/02/2018	8:54	DFI20D	32.5
15/02/2018	9:21	CO99DW	39.3
15/02/2018	10:11	BZ27UD	32
15/02/2018	10:20	DFI20D	32.5
15/02/2018	10:56	CO99DW	39.4
15/02/2018	11:37	BZ27UD	31.65
15/02/2018	11:47	DFI20D	32.3
19/02/2018	-	-	10.65
20/02/2018	12:40	-	12.1
20/02/2018	13:41	YLW213	12.1
20/02/2018	14:59	CM17GJ	32.4
20/02/2018	16:43	CC97ME	27.5
22/02/2018	14:16	BR16RT	32.8
22/02/2018	15:30	BR16RT	33
22/02/2018	7:16	CM07AL	38.85
22/02/2018	7:27	AJ610	38.35
22/02/2018	7:35	CJ18QI	39.15
22/02/2018	7:44	CO99DW	38.95
22/02/2018	7:53	CI97ZL	39.45
22/02/2018	8:02	AM31JF	30.2
22/02/2018	8:12	BS27QQ	32.25
22/02/2018	8:19	DFI20D	32.2
22/02/2018	8:33	BR16RT	32.2
22/02/2018	9:09	CM07AL	38.5
22/02/2018	9:26	AJ610	39.2
22/02/2018	9:51	CJ81QI	39.15
22/02/2018	9:58	CO99DW	39.25
22/02/2018	10:08	CI97ZL	39.45
26/02/2018	11:10	YXV342	3.25
26/02/2018	14:01	CC03HV	27.6
26/02/2018	14:08	CC52MD	29.16
1/03/2018	12:33	XDY-070	12.3
1/03/2018	13:20	XDY-070	12.55
1/03/2018	13:36	XDY-070	12.65
1/03/2018	13:40	XDY-070	12.1
1/03/2018	13:54	XDY-070	12.85
1/03/2018	14:13	XDY070	12.4
2/03/2018	8:42	CO99DW	39.15
2/03/2018	10:15	CO99DW	38.7
2/03/2018	11:54	CO99DW	39.15
2/03/2018	13:26	CO99DW	39.15
5/03/2018	10:21	CN93ZT	12.1
5/03/2018	12:12	CL40HT	19.5
5/03/2018	15:07	CL40HT	39
5/03/2018	11:55	XDY070	12.85
5/03/2018	12:19	XDY050	12.55
15/03/2018	8:35	-	5.5
15/03/2018	13:35	Own	11.3
15/03/2018	14:33	Own	11.45
16/03/2018	12:49	Own	11.3
19/03/2018	11:55	Own	11.8
20/03/2018	13:20	Own	11.2
21/03/2018	7:05	BL35JA	12
21/03/2018	7:39	BL35JA	11.98
21/03/2018	8:16	BL35JA	12.03
21/03/2018	8:50	BL35JA	12.01
21/03/2018	9:19	BL35JA	11.94
21/03/2018	10:17	BL35JA	11.92
21/03/2018	10:52	BL35JA	12.11
21/03/2018	11:16	BL35JA	12.07
21/03/2018	11:53	BL35JA	12.12
21/03/2018	12:10	BL35JA	11.97
4/04/2018	13:09	CN43WA	5.04
5/04/2018	11:29	AZ70WD	1.15
6/04/2018	11:38	CB51NF	2.3
9/04/2018	11:19	YRQ163	14.78
9/04/2018	12:21	YRQ163	14.84
9/04/2018	13:26	YRQ163	15.05
9/04/2018	14:33	YRQ163	14.95
9/04/2018	15:33	YRQ163	14.93
9/04/2018	16:27	YRQ163	14.99
10/04/2018	15:21	YRQ163	15.2
10/04/2018	13:45	CL40HT	38.95
11/04/2018	11:45	YRQ163	14.9
12/04/2018	10:38	YRQ163	14.95
12/04/2018	11:45	YRQ163	14.75
12/04/2018	13:11	CN93ZT	20.1
12/04/2018	13:37	YRQ163	14.95
16/04/2018	10:18	-	1.25
17/04/2018	11:23	YKQ162	14.93

Date	Time	Rego	Weight (tonnes)
17/04/2018	12:25	YKQ162	14.94
19/04/2018	9:26	AZ70WD	1
23/04/2018	14:08	BY68YC	32.17
23/04/2018	14:18	YRQ163	3.93
23/04/2018	14:32	XB89227	31.72
24/04/2018	10:51	YXR163	3.97
24/04/2018	12:50	CL40HT	38.85
27/04/2018	8:44	YXR163	14.1
27/04/2018	9:39	YXR163	14.2
27/04/2018	10:46	YXR163	14
3/05/2018	08:44	CA33VD	4.45
4/05/2018	12:03	YQR163	12.15
7/05/2018	09:09	CM36DT	3.7
9/05/2018	09:40	CC90FS	31.75
9/05/2018	11:27	AK62VN	6.05
9/05/2018	11:33	CC90FS	31.9
9/05/2018	13:21	CC90FS	32.1
10/05/2018	13:00	YQR163	4.15
10/05/2018	13:12	BM70VW	12.35
17/05/2018	13:11	BM70VW	32.15
17/05/2018	14:48	YRQ163	12.52
22/05/2018	12:32	CP60LI	24
25/05/2018	07:37	CP60LI	10.45
30/05/2018	11:16	CI73FC	3.95
30/05/2018	11:32	BY80LZ	31.75
30/05/2018	11:46	CN7089	32.6
30/05/2018	13:25	BY80LZ	31.85
01/06/2018	12:48	CC90F3	12.25
01/06/2018	12:14	CC90F3	12.25
01/06/2018	11:28	CC90F3	12.30
01/06/2018	10:49	CC90F3	12.35
01/06/2018	10:02	CC90F3	12.35
01/06/2018	10:27	CM36DI	3.80
01/06/2018	09:14	CI73FC	4.05
04/06/2018	10:20	AK62VN	12.40
04/06/2018	09:29	AK62VN	12.40
04/06/2018	08:00	CN93ZT	38.50
04/06/2018	12:51	BY80C2	31.55
04/06/2018	11:40	BY80C2	31.75
04/06/2018	10:34	BY80C2	31.80
04/06/2018	11:57	CI73FC	4.05
05/06/2018	11:51	CA33UD	3.15
05/06/2018	13:59	CL73FC	4.05
06/06/2018	12:21	CL73FC	4.10
12/06/2018	07:47	CF72RB	11.95
12/06/2018	12:35	TSP279	2.71
13/06/2018	12:00	CL73FC	3.98
13/06/2018	08:21	CL73FC	3.99
14/06/2018	11:13	CA33UD	4.26
14/06/2018	08:28	CA33UD	4.25
14/06/2018	07:15	CA33UD	4.33
14/06/2018	14:24	BAG663	1.69
14/06/2018	12:46	BAG663	1.63
15/06/2018	14:29	YRQ163	12.75
15/06/2018	13:29	YRQ163	12.86
15/06/2018	12:37	YRQ163	12.98
15/06/2018	11:38	YRQ163	12.75
15/06/2018	10:41	YRQ163	12.97
15/06/2018	09:36	YRQ163	12.92
15/06/2018	08:32	YRQ163	12.98
15/06/2018	07:11	YRQ163	12.95
18/06/2018	14:47	YKQ163	13.00
18/06/2018	13:50	YKQ163	12.78
18/06/2018	11:46	YKQ163	12.99
18/06/2018	10:32	YKQ163	12.96
18/06/2018	09:20	YKQ163	12.85
18/06/2018	16:09	BV35BT	38.77
19/06/2018	14:36	YRQ163	12.97
19/06/2018	13:46	YRQ163	12.98
19/06/2018	12:43	YRQ163	13.01
19/06/2018	11:33	YRQ163	12.93
19/06/2018	10:17	YRQ163	12.98
19/06/2018	09:06	YRQ163	12.81
19/06/2018	08:06	YRQ163	12.97
19/06/2018	07:46	YRQ163	12.88
19/06/2018	15:11	BY80LZ	31.99
19/06/2018	14:12	BY80LZ	32.19
19/06/2018	15:00	CP60LI	12.80
19/06/2018	14:17	CP60LI	12.97
19/06/2018	12:26	CP60LI	12.99
19/06/2018	11:44	CP60LI	12.94
19/06/2018	10:52	CP60LI	12.99
19/06/2018	10:06	CP60LI	12.97
19/06/2018	09:15	CP60LI	12.87

Date	Time	Rego	Weight (tonnes)
19/06/2018	15:37	BAG663	2.49
19/06/2018	14:43	BAG663	2.54
20/06/2018	07:09	BY68YC	32.05
20/06/2018	07:16	YRQ163	12.89
20/06/2018	14:40	YRQ163	12.98
20/06/2018	14:19	YRQ163	13.03
20/06/2018	12:40	YRQ163	12.94
20/06/2018	11:44	YRQ163	12.96
20/06/2018	10:59	YRQ163	12.99
20/06/2018	09:31	YRQ163	13.10
20/06/2018	08:07	YRQ163	12.85
21/06/2018	12:15	YRQ163	13.02
21/06/2018	10:00	YRQ163	12.80
21/06/2018	09:04	YRQ163	12.70
21/06/2018	07:31	YRQ163	12.94
21/06/2018	14:33	BY80LZ	32.58
21/06/2018	14:26	CN70EQ	31.92
22/06/2018	12:41	CC90FS	31.92
22/06/2018	11:48	CC90FS	32.12
22/06/2018	12:15	CA33UD	3.99
22/06/2018	15:33	CC90FS	31.97
25/06/2018	13:36	YRQ163	12.42
26/06/2018	15:22	BAG663	2.50
26/06/2018	14:14	BAG663	2.48
26/06/2018	12:07	BAG663	2.49
29/06/2018	08:55	YRQ163	12.05
29/06/2018	07:43	YRQ163	11.75
3/07/2018	11:13	BTY198	1.00
3/07/2018	13:36	BTY198	0.80
3/07/2018	08:47	BL35JA	12.77
3/07/2018	10:07	BL35JA	13.02
3/07/2018	11:27	BL35JA	12.92
3/07/2018	13:29	BL35JA	12.99
3/07/2018	08:02	CK90FH	32.93
3/07/2018	09:08	CK90FH	32.80
3/07/2018	11:49	CK66NE	33.08
3/07/2018	12:53	CK66NE	32.81
4/07/2018	10:12	BY68YC	19.51
9/07/2018	09:14	CN70EQ	32.77
9/07/2018	12:42	BX80LZ	30.27
9/07/2018	13:56	BX80LZ	32.17
10/07/2018	11:48	CK90FH	32.99
10/07/2018	13:22	CK90FH	32.62
10/07/2018	14:22	CK90FH	33.06
10/07/2018	15:20	CK90FH	32.91
10/07/2018	14:50	AR33BE	24.75
11/07/2018	07:06	CF72RB	12.33
11/07/2018	08:50	CF72RB	12.26
11/07/2018	10:23	CF72RB	12.42
11/07/2018	11:55	CF72RB	12.30
11/07/2018	07:20	AR33BE	25.09
11/07/2018	11:45	AR33BE	25.08
11/07/2018	13:00	AR33BE	25.14
11/07/2018	13:16	CA82TY	14.38
11/07/2018	14:04	CA82TY	14.26
11/07/2018	14:09	AR33BE	25.12
11/07/2018	14:47	CA82TY	14.11
11/07/2018	15:16	AR33BE	24.55
11/07/2018	15:22	CA82TY	14.41
12/07/2018	08:54	CN7VEQ	32.64
12/07/2018	07:28	CN82TY	13.98
12/07/2018	07:31	CE65BB	12.99
12/07/2018	08:43	CN82TY	14.29
12/07/2018	08:45	CE65BB	12.79
12/07/2018	09:42	CN82TY	14.01
12/07/2018	09:54	CE65BB	12.93
12/07/2018	10:39	CE65BB	12.88
12/07/2018	11:00	CN82TY	14.39
12/07/2018	11:21	CE65BB	13.01
12/07/2018	12:15	CE65BB	13.03
12/07/2018	13:00	CE65BB	13.10
12/07/2018	13:06	CN82TY	14.44
12/07/2018	13:48	CE65BB	12.95
12/07/2018	14:23	CN82TY	14.27
12/07/2018	14:25	CE65BB	12.97
12/07/2018	15:05	CE65BB	13.05
12/07/2018	15:26	CN82TY	14.27
12/07/2018	15:41	CE65BB	13.05
12/07/2018	15:58	CN82TY	14.28
12/07/2018	10:25	CN82TY	14.17
12/07/2018	11:59	CN82TY	14.23
12/07/2018	14:31	CN82TY	14.42
13/07/2018	07:46	CN82TY	14.38
16/07/2018	12:11	AKI93L	0.76

Date	Time	Rego	Weight (tonnes)
16/07/2018	08:29	YKQ163	12.12
25/07/2018	09:57	BM70VW	31.94
18/07/2018	07:45	BM70UW	12.47
18/07/2018	08:36	BM70UW	12.41
18/07/2018	14:36	BY68YC	12.21
18/07/2018	14:48	BY68YC	19.41
26/07/2018	16:34	CC9UFS	31.81
26/07/2018	16:44	CN93ZT	39.01
30/07/2018	07:18	BL35JA	12.38
30/07/2018	07:44	BL35JA	12.23
30/07/2018	08:07	BL35JA	12.34
30/07/2018	08:32	BL35JA	12.27
30/07/2018	09:02	BL35JA	12.49
30/07/2018	09:27	BL35JA	12.16
30/07/2018	09:54	BL35JA	12.46
30/07/2018	10:20	BL35JA	12.16
31/07/2018	10:38	CF92RB	11.98
31/07/2018	11:29	CF92RB	12.51
31/07/2018	16:08	BY68YC	12.32
31/07/2018	16:36	CC90FS	31.89
31/07/2018	16:51	CN93ZT	38.93
1/08/2018	08:59	CF72RB	12.37
1/08/2018	09:37	CP60LI	13.06
1/08/2018	10:11	CF72RB	12.35
1/08/2018	10:51	CP60LI	13.05
1/08/2018	11:25	CF72RB	12.19
1/08/2018	12:09	CP60LI	13.09
1/08/2018	12:35	CF72RB	12.39
1/08/2018	13:16	CP60LI	12.78
1/08/2018	14:35	CP60LI	13.02
1/08/2018	11:00	BR16RT	12.80
1/08/2018	12:13	CA33VD	4.09
1/08/2018	13:14	CA33VD	4.05
2/08/2018	07:17	CA33VD	4.24
2/08/2018	08:36	CA33VD	2.02
2/08/2018	10:24	CA33VD	3.96
2/08/2018	12:11	CA33VD	3.02
2/08/2018	07:14	CP60LI	12.85
2/08/2018	08:29	CP60LI	13.04
2/08/2018	12:19	BY68YC	12.43
2/08/2018	12:56	CP60LI	12.96
2/08/2018	14:15	CP60LI	12.87

Date	Time	Rego	Weight (tonnes)
2/08/2018	15:36	CP60LI	12.99
3/08/2018	15:48	BY68YC	19.44
6/08/2018	12:51	BM70UW	31.70
6/08/2018	14:47	CN70EQ	32.82
7/08/2018	07:22	CP55DV	1.47
7/08/2018	07:37	BY80LZ	32.04
7/08/2018	13:35	BY80LZ	32.16
7/08/2018	08:54	CI73FC	3.90
7/08/2018	08:07	AM31JF	29.98
7/08/2018	09:47	AM31JF	30.28
7/08/2018	13:12	CI97ZL	38.53
7/08/2018	14:58	CI97ZL	39.09
7/08/2018	16:21	CI97ZL	39.06
9/08/2018	09:53	A270WD	1.27
9/08/2018	13:26	CP60LI	12.01
14/08/2018	09:47	CM17GJ	5.96
16/08/2018	07:27	YRQ063	11.87
16/08/2018	10:33	YKQ063	10.23
16/08/2018	12:30	BR16RT	32.75
16/08/2018	13:11	BR16RT	32.85
16/08/2018	11:20	CN70EQ	32.60
16/08/2018	11:22	CN70EQ	33.14
16/08/2018	12:41	CN70EQ	32.60
16/08/2018	13:03	CF52KQ	1.45
17/08/2018	09:55	CI73FC	4.00
17/08/2018	12:39	CN93ZT	38.05
20/08/2018	07:34	AK52VN	12.40
20/08/2018	07:54	AK52VN	12.50
20/08/2018	08:59	AK52VN	12.60
20/08/2018	09:56	AK52VN	12.55
20/08/2018	11:00	AK52VN	12.65
20/08/2018	12:08	AK52VN	12.50
20/08/2018	12:12	CM17GJ	12.80
20/08/2018	13:17	AK52VN	12.60
20/08/2018	13:22	CM17GJ	12.75
20/08/2018	14:19	AK52VN	12.40
20/08/2018	14:21	CM17GJ	12.75
21/08/2018	10:44	CM17GJ	12.55
21/08/2018	07:34	CK90FH	32.75
21/08/2018	11:21	CK90FH	32.90
21/08/2018	12:18	CK90FH	32.60
21/08/2018	14:52	BY80LZ	32.10

Date	Time	Rego	Weight (tonnes)
21/08/2018	08:51	YRQ163	10.10
21/08/2018	12:10	YRQ163	11.95
22/08/2018	11:51	YRQ163	12.05
22/08/2018	12:44	YRQ163	11.90
22/08/2018	13:59	YRQ163	15.05
23/08/2018	07:05	YRQ163	12.02
23/08/2018	07:52	YRQ163	12.10
23/08/2018	08:34	YRQ163	12.03
23/08/2018	09:15	YRQ163	11.97
23/08/2018	10:01	YRQ163	12.12
23/08/2018	10:52	YRQ163	11.59
23/08/2018	11:58	YRQ163	12.22
23/08/2018	12:43	YRQ163	11.85
23/08/2018	13:25	YRQ163	11.90
23/08/2018	14:13	YRQ163	12.08
23/08/2018	14:50	YRQ163	11.92
23/08/2018	07:13	CL40HT	32.35
23/08/2018	08:41	CL40HT	32.18
23/08/2018	09:24	AE40FG	2.55
23/08/2018	10:07	CK72BP	3.00
24/08/2018	07:17	YRQ163	12.09
24/08/2018	08:00	YRQ163	12.12
24/08/2018	08:48	YRQ163	12.20
24/08/2018	09:32	YRQ163	12.11
24/08/2018	10:11	YRQ163	12.11
24/08/2018	11:04	YRQ163	11.96
24/08/2018	11:46	YRQ163	12.13
24/08/2018	12:29	YRQ163	12.10
27/08/2018	07:31	CL40HT	38.10
28/08/2018	07:12	CL40HT	38.14
28/08/2018	07:18	CC90FS	31.98
28/08/2018	10:29	CC97ME	12.51
28/08/2018	11:26	CC97ME	12.33
28/08/2018	12:02	CC97ME	12.54
28/08/2018	13:23	CC97MF	12.55
28/08/2018	14:04	CC97MF	12.03
28/08/2018	14:08	CC97ME	15.15
29/08/2018	12:08	CK72BP	5.00
29/08/2018	13:19	CN93ZT	39.02
29/08/2018	13:40	CK90FH	32.41
29/08/2018	14:39	CK90FH	32.82
29/08/2018	15:37	CK90FH	32.89

Date	Time	Rego	Weight (tonnes)
29/08/2018	16:05	BY80LZ	32.12
29/08/2018	16:29	CK90FH	32.65
30/08/2018	09:25	YRQ163	12.12
30/08/2018	12:16	CC97ME	12.18
30/08/2018	15:40	CK90FH	32.67
6/09/2018	14:28	BY80LZ	32.05
6/09/2018	15:30	BY80LZ	32.21
6/09/2018	09:18	CH89HM	11.96
6/09/2018	11:09	CH89HM	11.86
6/09/2018	12:06	CH89HM	11.66
6/09/2018	15:02	CH89HM	11.85
7/09/2018	07:25	CH89HM	11.72
10/09/2018	09:46	CB51NF	1.14
10/09/2018	10:14	CB51NF	2.02
10/09/2018	10:42	CB51NF	2.06
10/09/2018	11:12	CB51NF	2.02
10/09/2018	13:06	CC90FS	32.16
10/09/2018	13:46	CL40HT	31.96
10/09/2018	12:18	BM70VW	12.22
10/09/2018	12:51	BM70VW	12.3
10/09/2018	13:17	BM70VW	12.29
10/09/2018	13:37	BM70VW	12.18
10/09/2018	13:57	BM70VW	12.29
10/09/2018	14:22	BM70VW	12.17
10/09/2018	14:46	BM70VW	12.31
10/09/2018	15:22	BM70VW	12.26
11/09/2018	15:07	CP55DV	1
11/09/2018	10:08	CI73FC	4
11/09/2018	12:32	BY80LZ	32.23
11/09/2018	13:36	BY80LZ	32.11
11/09/2018	14:38	BY80LZ	32.03
11/09/2018	15:39	BY80LZ	31.95
10/09/2018	08:08	CL40HT	38.53
10/09/2018	10:06	CL40HT	38.67
10/09/2018	11:58	CL40HT	38.08
11/09/2018	11:37	CL56RV	30.38
11/09/2018	10:53	BR16RT	32.47
13/09/2018	10:00	PQL571	1
13/09/2018	12:10	CL40HT	38.98
14/09/2018	08:56	CC97ME	12.42
14/09/2018	09:00	CB51NF	1.98
14/09/2018	09:30	CB51NF	1.95

Date	Time	Rego	Weight (tonnes)
14/09/2018	08:24	CK90FH	32.65
14/09/2018	09:15	CK90FH	32.61
14/09/2018	12:10	CK90FH	32.72
14/09/2018	13:56	CK90FH	32.72
14/09/2018	14:11	BY80LZ	32.16
14/09/2018	14:52	CK90FH	32.62
17/09/2018	07:33	CI97ZL	39.09
17/09/2018	09:17	CI97ZL	39.01
17/09/2018	10:49	CI97ZL	39.04
17/09/2018	12:21	CI97ZL	39.08
17/09/2018	14:03	CI97ZL	39.1
17/09/2018	15:26	CI97ZL	39.14
17/09/2018	07:12	CL40HT	38.37
17/09/2018	07:20	BV35BT	38.53
17/09/2018	16:07	BV35BT	38.35
17/09/2018	17:10	CL40HT	38.53
18/09/2018	14:12	AD23FS	13.27
18/09/2018	13:25	CN70EQ	32.54
18/09/2018	14:22	CN70EQ	32.61
18/09/2018	15:28	CN70EQ	32.23
18/09/2018	07:15	CI97ZL	39.19
18/09/2018	08:46	CI97ZL	39.04
18/09/2018	10:14	CI97ZL	39.17
18/09/2018	11:44	CI97ZL	39.15
18/09/2018	13:47	CI97ZL	39.12
18/09/2018	15:21	CI97ZL	39.2
18/09/2018	16:11	CL15ZX	39.14
19/09/2018	09:58	BV35BT	38.56
19/09/2018	11:42	BV35BT	38.4
19/09/2018	13:30	BV35BT	38.53
19/09/2018	08:46	BY80LZ	32.14
19/09/2018	08:57	CN70EQ	32.71
20/09/2018	07:57	BY80LZ	32.01
20/09/2018	08:04	CN70EQ	32.53
21/09/2018	07:20	CI40HI	6.1
21/09/2018	07:20	CI40HI	8.08
21/09/2018	07:34	AM31JF	28.66
21/09/2018	09:20	AM31JF	28.96
21/09/2018	11:07	AM31JF	28.55
21/09/2018	12:55	AM31JF	28.56
21/09/2018	10:28	519GSR	1
21/09/2018	11:45	JYP293	0.98

Date	Time	Rego	Weight (tonnes)
21/09/2018	10:13	CC97ME	28.02
21/09/2018	11:25	CC97ME	27.53
24/09/2018	07:38	BY68YC	32.28
24/09/2018	07:51	CC90FS	32.07
24/09/2018	07:59	BM70UW	31.83
24/09/2018	07:08	AM31JF	28.81
25/09/2018	07:06	AM31JF	30.12
25/09/2018	08:46	AM31JF	30.09
25/09/2018	07:21	CL40HT	38.6
25/09/2018	07:28	BK16RT	32.23
26/09/2018	10:08	BL35JA	12.39
26/09/2018	10:29	BL35JA	12.45
26/09/2018	11:27	YRQ163	12.09
26/09/2018	12:22	YRQ163	12.24
26/09/2018	13:07	YRQ163	14.79
26/09/2018	12:19	VMI631	0.78
26/09/2018	07:59	AM31JF	29.98
26/09/2018	09:52	AM31JF	30.15
26/09/2018	11:41	AM31JF	30.07
26/09/2018	13:37	AM31JF	30
27/09/2018	14:55	AD23FS	12.9
27/09/2018	11:35	AM31JF	30.32
27/09/2018	13:13	AM31JF	29.86
27/09/2018	14:36	AM31JF	30
28/09/2018	07:00	AM31JF	30.1
28/09/2018	08:34	AM31JF	30
28/09/2018	10:16	AM31JF	30.15
02/10/2018	07:14	CL40HT	38.65
02/10/2018	09:00	CL40HT	38.25
02/10/2018	10:43	CL40HT	38.65
02/10/2018	12:39	CL40HT	38.45
02/10/2018	13:34	XN20BP	8
02/10/2018	14:16	CL40HT	38.75
02/10/2018	15:08	XN20BP	8.05
02/10/2018	07:03	AM31JF	30.15
02/10/2018	08:34	AM31JF	30.1
02/10/2018	11:51	AM31JF	30.15
02/10/2018	13:26	AM31JF	30.2
02/10/2018	14:55	AM31JF	30.1
02/10/2018	07:56	BY80LZ	32.1
02/10/2018	10:53	CK90FH	32.15
02/10/2018	12:09	CK90FH	32.05

Date	Time	Rego	Weight (tonnes)
02/10/2018	14:00	CK90FH	32.85
02/10/2018	15:01	CK90FH	32.85
03/10/2018	07:22	SLL520	0.7
03/10/2018	07:10	XN20BP	8
03/10/2018	07:01	AM31JF	30.15
03/10/2018	08:51	AM31JF	30.15
03/10/2018	10:21	AM31JF	30
03/10/2018	11:53	AM31JF	29.95
03/10/2018	13:39	AM31JF	30.1
03/10/2018	15:13	AM31JF	30.05
04/10/2018	07:02	AM31JF	29.9
04/10/2018	08:53	AM31JF	30.1
04/10/2018	10:23	AM31JF	30.1
04/10/2018	11:57	AM31JF	30.1
04/10/2018	13:27	AM31JF	30
04/10/2018	15:01	AM31JF	30.15
04/10/2018	08:38	BY68YC	32.15
04/10/2018	08:43	CL40HT	38.8
04/10/2018	10:37	XN20BP	8.15
04/10/2018	12:25	XN20BP	8.1
04/10/2018	15:09	XN20BP	8.05
04/10/2018	15:42	YBL163	1
05/10/2018	07:52	XN20BP	8.1
05/10/2018	08:19	BY80LZ	31.94
05/10/2018	09:47	BY80LZ	32.1
05/10/2018	10:42	BY80LZ	31.95
05/10/2018	12:16	BY80LZ	32.2
08/10/2018	07:55	CL40HT	38.62
08/10/2018	09:27	CL40HT	38.5
09/10/2018	07:52	BR16RT	32.52
09/10/2018	09:55	CK66NE	33.02
09/10/2018	10:06	BK16RT	32.49
09/10/2018	11:49	CK66NE	32.97
09/10/2018	12:02	BR16RT	32.58
09/10/2018	13:38	CK66NE	33
12/10/2018	13:16	CN93ZT	32
12/10/2018	14:38	CN93ZT	12
18/10/2018	11:05	CN93ZT	12.52
18/10/2018	12:15	CN93ZT	12.43
19/10/2018	10:32	CN93ZT	38.94
22/10/2018	07:54	BR16RT	12.7
22/10/2018	11:33	CP60LI	11.96

Date	Time	Rego	Weight (tonnes)
23/10/2018	07:23	CC90FS	32.01
23/10/2018	09:18	CC90FS	32.19
23/10/2018	08:14	XN20BP	8.17
23/10/2018	10:01	XN20BP	8.06
24/10/2018	07:27	BU35BT	38.45
24/10/2018	09:16	BU35BT	38.52
24/10/2018	11:12	BU35BT	38.45
24/10/2018	13:05	BU35BT	38.45
24/10/2018	14:54	BU35BT	38.55
24/10/2018	07:15	CP60LI	12.91
24/10/2018	08:17	CM17GJ	12.6
25/10/2018	08:25	CN92ZT	39
25/10/2018	12:38	CN92ZT	38.9
25/10/2018	08:52	BY80LZ	32
25/10/2018	10:31	BY80LZ	31.95
25/10/2018	12:49	CC97ME	28.3
25/10/2018	14:54	CC97ME	28.65
26/10/2018	09:05	BY68YC	12.3
26/10/2018	11:24	CN70EQ	32.48
26/10/2018	13:53	CN70EQ	32.55
26/10/2018	14:47	BY80LZ	31.94
26/10/2018	14:55	CN70EQ	32.74
26/10/2018	15:03	CK90FH	32.71
26/10/2018	10:22	CC97ME	27.9
26/10/2018	12:10	CC97ME	28.1
29/10/2018	08:14	BR16RT	32.57
30/10/2018	07:18	BY68YC	31.93
30/10/2018	07:25	BR16RT	32.4
30/10/2018	10:50	BY68YC	32.05
30/10/2018	14:44	YBL163	1
30/10/2018	11:45	YRQ063	12.94
30/10/2018	08:56	CN70EQ	32.82
30/10/2018	10:00	CN70EQ	32.81
30/10/2018	11:36	CN70EQ	32.74
31/10/2018	07:16	CJ81QI	39.52
31/10/2018	07:39	AH57PJ	27.2
31/10/2018	08:46	AND089	39.16
31/10/2018	10:25	AND089	39.1
31/10/2018	11:52	AND089	39.22
31/10/2018	13:19	AND089	39.2
31/10/2018	07:22	CH97TC	31.95
31/10/2018	09:02	CH97TC	32.02

Date	Time	Rego	Weight (tonnes)
31/10/2018	08:13	YRQ063	10.49
31/10/2018	14:33	YBL163	2
1/11/2018	10:47	CN93ZT	38.91
1/11/2018	10:56	BY80LZ	31.98
1/11/2018	07:40	AL35SR	2
2/11/2018	07:07	BV35BT	38.5
2/11/2018	07:19	CL40HT	38.55
2/11/2018	08:36	BV35BT	38.55
2/11/2018	09:03	CL40HT	38.51
2/11/2018	09:33	CC69MF	32.98
2/11/2018	09:56	AJ610	38.96
2/11/2018	10:03	BV35BT	38.47
2/11/2018	10:15	CL40HT	38.48
2/11/2018	11:39	CL40HT	38.47
2/11/2018	11:47	BV35BT	38.48
2/11/2018	13:06	AJ610	39.16
2/11/2018	13:13	CL40HT	38.36
2/11/2018	13:26	BV35BT	38.52
2/11/2018	14:36	CL40HT	38.49
2/11/2018	14:42	BS27QQ	32.22
2/11/2018	14:53	BV35BP	38.52
2/11/2018	13:42	AD34FG	3
2/11/2018	15:16	AD34FG	2.96
2/11/2018	08:28	519GSR	1.07
2/11/2018	12:57	519GSR	0.99
2/11/2018	15:09	519GSR	0.98
5/11/2018	07:08	CK40HT	38.82
5/11/2018	07:14	CN93ZT	38.42
5/11/2018	07:20	BY68YC	31.96
5/11/2018	07:30	CK66NE	32.95
5/11/2018	08:39	CK40HT	38.61
5/11/2018	08:44	CN93ZT	38.58
5/11/2018	08:49	BY68YC	31.91
5/11/2018	08:55	BS27QQ	32.48
5/11/2018	09:02	CK66NE	32.94
5/11/2018	10:04	CC40HT	38.45
5/11/2018	10:13	CN93ZT	38.49
5/11/2018	10:32	CK66NE	33.03
5/11/2018	11:19	BZ27UD	32.38
5/11/2018	11:28	CL40HT	38.52
5/11/2018	11:36	BY68YC	31.98
5/11/2018	11:44	CN93ZT	38.5

Date	Time	Rego	Weight (tonnes)
5/11/2018	11:59	CK66NE	33.01
5/11/2018	12:14	BS27QQ	32.38
5/11/2018	12:52	BZ27UD	32.25
5/11/2018	12:58	CC40HT	38.37
5/11/2018	13:05	BY68YC	32.06
5/11/2018	13:15	CN93ZT	38.4
5/11/2018	13:28	CK66NE	33.04
5/11/2018	14:16	BZ27UD	32.37
5/11/2018	14:30	CL40HT	38.51
5/11/2018	14:36	BY68YC	31.95
5/11/2018	14:45	CN93ZT	38.55
5/11/2018	14:54	CK66NE	32.89
5/11/2018	15:50	CL40HT	38.55
5/11/2018	15:57	BY68YC	31.96
5/11/2018	16:08	CN93ZT	38.52
5/11/2018	16:18	BS27QQ	32.36
5/11/2018	10:37	XN20BP	7.95
5/11/2018	12:06	XN20BP	7.65
6/11/2018	12:13	CC90FS	32.11
6/11/2018	13:50	CC90FS	32.12
6/11/2018	11:55	CK90FH	32.68
6/11/2018	10:59	CL40HT	12.43
6/11/2018	12:22	CL40HT	38.36
6/11/2018	15:43	BF32XB	3
6/11/2018	15:43	BF32XB	4
7/11/2018	07:09	CC90FS	32.16
7/11/2018	07:17	AD34FG	2.25
7/11/2018	10:08	CC90FS	32.05
7/11/2018	11:14	CM70UW	31.8
7/11/2018	11:31	CH97TC	32.02
7/11/2018	14:08	BY80LZ	31.95
7/11/2018	15:20	BY80LZ	32.16
8/11/2018	12:36	CH97TC	11.96
9/11/2018	09:35	CL40HT	38.45
9/11/2018	09:59	BY68YC	32.14
9/11/2018	12:44	BY68YC	32.06
9/11/2018	13:17	CL40HT	38.66
12/11/2018	07:03	CL40HT	38.5
12/11/2018	08:15	CH97TC	32.1
12/11/2018	12:58	BY68YC	32.15
12/11/2018	14:45	CC90FS	32.15
12/11/2018	16:29	CH97TC	31.9

Date	Time	Rego	Weight (tonnes)
12/11/2018	16:41	CL40HT	38.6
12/11/2018	16:53	BY68YC	32.3
12/11/2018	07:12	BV35BT	38.3
12/11/2018	07:19	AM31JF	29.85
12/11/2018	07:25	CO90DW	38.95
12/11/2018	08:00	CI97ZL	39.15
12/11/2018	08:08	CN93ZT	38.8
12/11/2018	08:36	BV35BT	38.65
12/11/2018	09:19	CO90DW	39.15
12/11/2018	09:07	SM31JF	30
12/11/2018	09:37	CI97ZL	39
12/11/2018	09:44	CN93ZT	38.9
12/11/2018	10:03	BV35BT	38.15
12/11/2018	10:26	CO99DW	38.55
12/11/2018	10:35	AM31JF	30.15
12/11/2018	10:58	CI97ZL	39.1
12/11/2018	11:06	CN93ZT	38.9
12/11/2018	11:25	BV35BT	37.95
12/11/2018	11:50	CO99DW	38.9
12/11/2018	12:00	AM31JF	29.8
12/11/2018	12:22	CI97ZL	39.1
12/11/2018	12:30	CN93ZT	39.05
12/11/2018	12:49	BV35BT	38.1
12/11/2018	13:11	CO90DW	38.9
12/11/2018	13:28	AM31JF	30.2
12/11/2018	13:48	CI97ZL	39
12/11/2018	13:56	CN93ZT	39.05
12/11/2018	14:57	CO99DW	39
12/11/2018	15:03	AM31JF	30.05
12/11/2018	15:16	CI97ZL	39.15
12/11/2018	15:24	CN93ZT	39.15
12/11/2018	11:38	YBL163	1
12/11/2018	07:34	YWW895	12.05
12/11/2018	08:49	YWW895	12
12/11/2018	09:32	YWW895	1
13/11/2018	14:56	YWW895	11.95
13/11/2018	07:06	CI97ZL	39
13/11/2018	07:13	CL40HT	38.65
13/11/2018	07:22	CN93ZT	38.65
13/11/2018	07:48	AH57PJ	32.2
13/11/2018	08:32	CI97ZL	39
13/11/2018	08:40	CL40HT	38.4

Date	Time	Rego	Weight (tonnes)
13/11/2018	08:55	CN93ZT	38.45
13/11/2018	09:07	BS27QQ	31.95
13/11/2018	09:15	AH57PJ	32.3
13/11/2018	09:23	BZ27UD	32.4
13/11/2018	09:56	CI97ZL	39.15
13/11/2018	10:04	CL40HT	38.7
13/11/2018	10:23	CN93ZT	38.8
13/11/2018	10:34	BS27QQ	32.25
13/11/2018	10:42	AH57PJ	32.05
13/11/2018	11:19	CI97ZL	39.05
13/11/2018	11:30	CL40HT	38.75
13/11/2018	11:44	CN93ZT	38.75
13/11/2018	11:59	BS27QQ	32.15
13/11/2018	12:05	BZ27UD	32.4
13/11/2018	12:12	AH57PJ	32.2
13/11/2018	12:47	CI97ZL	39.05
13/11/2018	12:56	CL40HT	38.9
13/11/2018	13:08	CN93ZT	39.6
13/11/2018	13:26	BS27QQ	32.25
13/11/2018	13:44	AH57PJ	32.15
13/11/2018	14:10	CI97ZL	39.2
13/11/2018	14:18	CL40HT	38.6
13/11/2018	14:33	CN93ZT	39
13/11/2018	15:11	AH57PJ	32.1
13/11/2018	15:28	BZ27UD	32.4
13/11/2018	15:34	CI97ZL	39
13/11/2018	15:41	CL40HT	39.05
13/11/2018	16:03	CN93ZT	38.6
13/11/2018	08:57	BF15MP	0.72
13/11/2018	07:38	BY80LZ	31.9
13/11/2018	08:47	BY80LZ	32.25
13/11/2018	09:46	BY80LZ	32.05
13/11/2018	15:49	CN70EQ	32.45
14/11/2018	07:03	CL40HT	38.8
14/11/2018	07:10	CI92ZL	39
14/11/2018	07:18	CN93ZT	38.9
14/11/2018	07:24	AH57PJ	32.15
14/11/2018	08:28	CL40HT	38.8
14/11/2018	08:34	CI92ZL	39.05
14/11/2018	08:42	BZ27UD	32.35
14/11/2018	08:48	CN93ZT	38.65
14/11/2018	08:55	AH57PJ	32.15

Date	Time	Rego	Weight (tonnes)
14/11/2018	09:57	CL40HT	39
14/11/2018	10:04	CI92ZL	39.15
14/11/2018	10:10	BZ27UD	32.4
14/11/2018	10:16	CN93ZT	38.75
14/11/2018	10:23	AH57PJ	32.2
14/11/2018	11:20	CL40HT	38.8
14/11/2018	11:28	CI92ZL	39.2
14/11/2018	11:35	BZ27UD	32.35
14/11/2018	11:41	CN93ZT	38.9
14/11/2018	11:53	AH57PJ	32.15
14/11/2018	12:44	CL40HT	38.6
14/11/2018	12:50	AJ610	39.15
14/11/2018	12:57	CI92ZL	39.1
14/11/2018	13:07	BZ27UD	32.3
14/11/2018	13:14	CN93ZT	39
14/11/2018	13:28	AH57PJ	32.2
14/11/2018	13:47	BS27QQ	32.05
14/11/2018	14:21	AJ610	39
14/11/2018	14:29	CI97ZL	39.1
14/11/2018	14:38	CN93ZT	38.8
14/11/2018	14:53	AH57PJ	32.15
14/11/2018	14:10	CL40HT	38.55
14/11/2018	15:17	CC69MF	33.05
14/11/2018	15:30	CK04RB	32.8
14/11/2018	15:43	CI44RE	32.3
14/11/2018	15:58	CL40HT	38.55
15/11/2018	07:05	CL40HT	38.9
15/11/2018	07:11	CI97ZL	39
15/11/2018	07:19	CN93ZT	39
15/11/2018	08:04	BZ27UD	32.3
15/11/2018	08:11	BF05DU	32.2
15/11/2018	08:27	CL40HT	38.95
15/11/2018	08:34	CI97ZL	39.1
15/11/2018	08:55	CN93ZT	39.11
15/11/2018	09:28	BZ27UD	32.26
15/11/2018	09:47	BF05DU	32.31
15/11/2018	09:59	CL40HT	38.53
15/11/2018	10:14	CI97ZL	39.41
15/11/2018	10:35	CN93ZT	38.92
15/11/2018	10:56	BZ27UD	32.32
15/11/2018	11:19	BF05DU	32.35
15/11/2018	11:30	CL40HT	38.99

Date	Time	Rego	Weight (tonnes)
15/11/2018	11:41	CI97ZL	39.05
15/11/2018	12:15	CN93ZT	39.02
15/11/2018	12:24	BZ27UD	32.1
15/11/2018	12:56	CL40HT	38.5
15/11/2018	13:07	CI97ZL	39.16
15/11/2018	13:24	AJ610	39.14
15/11/2018	13:34	BI05DU	32.42
15/11/2018	13:46	CN93ZT	38.81
15/11/2018	14:00	BZ27UD	32.3
15/11/2018	14:20	CL40HT	38.8
15/11/2018	14:28	CI97ZL	39.2
15/11/2018	14:49	AJ610	39
15/11/2018	15:24	BF05DU	32.2
15/11/2018	15:29	CN93ZT	38.75
15/11/2018	16:00	BZ27UD	32.4
15/11/2018	16:05	CL40HT	38.75
15/11/2018	16:12	CI97ZL	39.05
15/11/2018	16:18	AJ610	39.1
15/11/2018	16:33	BS27QQ	32.5
15/11/2018	15:02	CK16NE	32.95
15/11/2018	15:08	BM70UW	32
15/11/2018	15:15	CH97TC	32.1
15/11/2018	09:37	CP60LI	12.99
15/11/2018	10:21	CM17GJ	12.88
15/11/2018	14:14	CYM247	1.25
16/11/2018	07:07	CJ81QI	39.6
16/11/2018	07:14	CI97ZL	39.2
16/11/2018	07:21	BZ27UD	32.45
16/11/2018	07:56	BF05DU	32.2
16/11/2018	08:41	CJ81QI	39.55
16/11/2018	08:47	CI97ZL	39
16/11/2018	09:00	BZ27UD	32.25
16/11/2018	09:13	BF05DU	32.2
16/11/2018	09:46	AJ610	39.15
16/11/2018	10:03	CJ81QI	39.5
16/11/2018	10:11	CI97ZL	39.15
16/11/2018	10:18	BZ27UD	32.45
16/11/2018	10:40	BF05DU	32.3
16/11/2018	11:33	CJ81QI	39.5
16/11/2018	11:42	CI97ZL	39.15
16/11/2018	11:54	BZ27UD	32.45
16/11/2018	12:05	BF05DU	32.35

Date	Time	Rego	Weight (tonnes)
16/11/2018	12:57	BS27QQ	32.05
16/11/2018	13:05	CJ81QI	39.5
16/11/2018	13:13	CI97ZL	39
16/11/2018	13:20	BZ27UD	32.2
16/11/2018	13:33	AJ610	39.1
16/11/2018	14:03	BF05DU	32.3
16/11/2018	14:30	CJ81QI	39.6
16/11/2018	14:39	CI97ZL	39.15
16/11/2018	14:48	BZ27UD	32.45
16/11/2018	15:55	CJ81QI	39.5
16/11/2018	16:19	AJ610	38.55
16/11/2018	07:29	CK90FH	32.15
16/11/2018	08:33	CK90FH	12.95
16/11/2018	08:28	TB99YM	20.1
16/11/2018	09:39	CH97TC	31.9
16/11/2018	08:12	CP60LI	13
16/11/2018	11:28	DTT25B	0.6
16/11/2018	09:22	YGN952	1
16/11/2018	10:50	CNL502	1
19/11/2018	12:49	AD23FS	12
19/11/2018	14:26	AD23FS	12
19/11/2018	07:30	BZ27UD	32.2
19/11/2018	09:54	AJ610	38.95
19/11/2018	14:12	AJ610	39.1
19/11/2018	07:40	BM70VW	31.85
20/11/2018	12:51	CN70EQ	32.15
20/11/2018	13:58	CN70EQ	32.3
21/11/2018	07:07	BY68YC	32.15
21/11/2018	15:41	CN70EQ	32.8
21/11/2018	08:05	AD23FS	12
22/11/2018	07:10	BR16RT	32.54
22/11/2018	07:23	BM70VW	31.99
22/11/2018	07:50	CK66NE	32.18
22/11/2018	09:28	CK66NE	32.98
23/11/2018	09:08	CN70EQ	32.78
23/11/2018	11:05	BY13LU	4.54
23/11/2018	15:43	BMG08V	0.99
24/11/2018	09:47	CK90FH	32.68
24/11/2018	10:03	CN70EQ	32.63
26/11/2018	15:48	CN93ZT	32.15
26/11/2018	07:36	CC90FS	32.02
26/11/2018	09:01	CC90FS	32.06

Date	Time	Rego	Weight (tonnes)
26/11/2018	10:41	CN93ZT	39.03
26/11/2018	11:16	CC90FS	32.08
27/11/2018	10:38	CP60LI	12.05
27/11/2018	09:30	CP60LI	9.2
27/11/2018	15:15	CP60LI	12.98
27/11/2018	10:20	BY80LZ	32.1
28/11/2018	16:28	CNL502	1
29/11/2018	08:57	BY80LZ	32.11
29/11/2018	10:22	BY80LZ	32.14
30/11/2018	14:03	BM70UW	31.71
30/11/2018	14:35	CK66NE	19.8
30/11/2018	08:17	CB51NF	2
30/11/2018	12:45	CN93ZT	38.55
3/12/2018	15:58	CP55DV	1
4/12/2018	11:26	XN20BP	8.06
4/12/2018	09:59	XN20BP	8.11
4/12/2018	07:10	XN20BP	8.16
4/12/2018	16:16	CK90FH	32.69
4/12/2018	16:08	CN70EQ	32.8
4/12/2018	14:05	CC90FS	32.11
4/12/2018	11:19	CN93ZT	32.14
4/12/2018	14:19	CC93ZT	39.08
5/12/2018	13:53	YWW895	12.09
5/12/2018	08:06	CK66NE	13.01
5/12/2018	14:15	BL35JA	13.01
5/12/2018	14:02	CN70EQ	32.6
5/12/2018	09:44	CK90FH	32.7
5/12/2018	10:46	CN70EQ	32.77
5/12/2018	13:41	CK90FH	32.78
5/12/2018	07:16	BY68YC	32.04
5/12/2018	09:04	BY68YC	32.13
6/12/2018	13:13	CC97ME	12.45
6/12/2018	14:05	CC97ME	12.53
6/12/2018	10:50	BR10QX	13
6/12/2018	10:42	CK90FH	32.57
6/12/2018	07:23	CK90FH	32.73
6/12/2018	16:14	CN70EQ	32.99
6/12/2018	11:27	BM70UW	31.72
6/12/2018	12:59	BM70UW	31.75
6/12/2018	14:15	BM70UW	31.82
6/12/2018	11:15	CK66NE	32.2
6/12/2018	13:03	CK66NE	32.95

Date	Time	Rego	Weight (tonnes)
6/12/2018	14:50	CK66NE	33.06
7/12/2018	07:56	AL35SR	4.48
7/12/2018	13:18	CNL502	2
7/12/2018	11:08	CK90FS	32.62
7/12/2018	07:31	CK90FS	32.65
7/12/2018	07:44	BM70UW	31.82
7/12/2018	10:33	BY68YC	32.07
10/12/2018	15:43	BQ16ZT	12.7
10/12/2018	07:51	BR16RT	32.37
10/12/2018	11:18	BR16RT	32.47
10/12/2018	09:37	BR16RT	32.49
10/12/2018	07:39	CI97ZT	39.14
10/12/2018	09:09	CI97ZT	39.15
10/12/2018	10:37	CI97ZT	39.16
10/12/2018	14:04	CI97ZT	39.16
10/12/2018	12:33	CI97ZT	39.18
11/12/2018	07:59	CH97TC	19.02
11/12/2018	10:11	CI97ZL	39
11/12/2018	07:10	CI97ZL	39.04
11/12/2018	14:56	CI97ZL	39.04
11/12/2018	13:19	CI97ZL	39.07
11/12/2018	08:39	CI97ZL	39.12
11/12/2018	11:45	CI97ZL	39.13
12/12/2018	12:07	AL35SK	3.07
12/12/2018	14:53	CH97TC	11.97
12/12/2018	15:36	CF72RB	12.28
12/12/2018	15:31	AD23FS	12.95
12/12/2018	12:00	CH97TC	32.05
12/12/2018	10:36	CH97TC	31.97
12/12/2018	13:29	CH97TC	32.02
13/12/2018	07:57	CM17GJ	11.9
13/12/2018	13:36	CM17GJ	12.49
13/12/2018	12:45	YWW895	12.89
13/12/2018	12:21	AD23FS	12.77
13/12/2018	16:00	AD23FS	12.97
13/12/2018	14:46	AD23FS	12.98
13/12/2018	07:27	BY80LZ	32.24
13/12/2018	13:14	BY68YC	31.93
13/12/2018	11:49	BY68YC	32.04
13/12/2018	10:26	BY68YC	32.08
13/12/2018	14:40	BY68YC	32.42
14/12/2018	13:32	CF72RB	12.42
14/12/2018	08:10	AD23FS	12.78
14/12/2018	11:32	AD23FS	12.82
14/12/2018	14:38	AD23FS	12.87
14/12/2018	09:18	AD23FS	13.04
14/12/2018	10:30	AD23FS	13.04
14/12/2018	13:36	AD23FS	13.28
14/12/2018	12:33	AD23FS	13.68
17/12/2018	11:37	BY13LU	4.49
17/12/2018	11:44	BR16RT	32.43
18/12/2018	07:13	BY13LU	3
18/12/2018	11:30	CN70EQ	32.57
18/12/2018	14:26	CN70EQ	32.67
18/12/2018	15:24	CN70EQ	32.76
18/12/2018	12:31	CN70EQ	32.79
19/12/2018	16:00	CK90FM	32.73
19/12/2018	13:01	BR16RT	32.54
20/12/2018	07:14	BY80LZ	32.15
20/12/2018	12:11	BY80LZ	32.15
20/12/2018	09:42	BY80LZ	32.19
20/12/2018	14:03	CK90FH	32.65
20/12/2018	13:13	CI70EQ	32.72
21/12/2018	10:51	AL35SR	4.53
21/12/2018	12:19	AU56QD	11.91
21/12/2018	07:21	AU56QD	12
21/12/2018	08:40	AU56QD	12.06

APPENDIX E

Table 1: Surface Water Monitoring Results

MP ID	Date	pH	Conductivity	Nitrate (NO_3)	Aluminium (Al)	Total Arsenic (As)	Cadmium (Cd)	Total Chromium (Cr)	Copper (Cu)	Mercury (Hg)	Nickel (Ni)	Oil & Grease	TSS	Lead (Pb)	Zinc (Zn)
ANZECC 2000 Trigger Values[1]		6.5-8.5[2]	0.350 dS/m	0.7 mg/L	0.055 mg/L	0.024 mg/L	0.0002 mg/L	n/s mg/L[3]	0.0014 mg/L	0.0006 mg/L	0.011 mg/L	No visible sheen or detectable odour	50 mg/L[4]	0.0034 mg/L	0.008 mg/L
MP1	22/03/2018	7.02	0.134	0.036	**0.161**	<0.001	<0.0001	<0.001	0.001	<0.0005	0.001	None	9	<0.001	0.005
	21/06/2018	6.94	0.158	0.042	**0.117**	<0.001	<0.0001	<0.001	0.001	<0.0005	0.001	None	8	<0.001	0.006
	24/09/2018	7.27	0.178	0.01	**0.541**	<0.001	<0.0001	0.001	0.001	<0.0005	0.001	None	11	<0.001	0.006
	06/12/2018	7.06	0.156	<0.005	**0.079**	<0.001	<0.0001	<0.001	**0.013**	<0.0005	<0.001	None	12	<0.001	0.003
MP2	22/03/2018	**6.01**	0.174	0.006	**0.426**	<0.001	<0.001	0.001	**0.002**	<0.0005	0.002	None	41	<0.001	0.008
	21/06/2018	6.65	0.179	0.031	**0.151**	<0.001	<0.0001	<0.001	0.001	<0.0005	<0.001	None	10	<0.001	0.005
	24/09/2018	7.27	0.184	0.005	**0.585**	<0.001	<0.0001	<0.001	0.001	<0.0005	0.001	None	15	<0.001	0.005
	06/12/2018	7.05	0.156	<0.005	**0.095**	<0.001	<0.0001	<0.001	<0.001	<0.0005	<0.001	None	12	<0.001	0.003
MP3	22/03/2018	Insufficient Water Levels													
	21/06/2018	Insufficient Water Levels													
	24/09/2018	No Access													
	06/12/2018	No Access													
MP4	22/03/2018	Insufficient Water Levels													
	21/06/2018	Insufficient Water Levels													
	24/09/2018	Insufficient Water Levels													
	06/12/2018	Insufficient Water Levels													
MP5	22/03/2018	**5.82**	0.05	0.012	**0.445**	<0.001	<0.0001	<0.001	0.001	<0.0005	<0.001	None	**69**	<0.001	0.004
	21/06/2018	**5.37**	0.059	0.009	**0.415**	<0.001	<0.0001	<0.001	0.001	<0.0005	<0.001	None	**76**	0.001	0.004
	24/09/2018	**4.88**	0.082	0.008	**0.286**	<0.001	<0.0001	<0.001	**0.005**	<0.0005	0.001	None	15	0.001	0.004
	05/10/2018	**4.74**	0.086	0.005	**0.069**	<0.001	**<0.001**	<0.001	**0.008**	<0.0005	0.003	None	11	0.002	**0.022**
	23/11/2018	**6.1**	0.1	<0.005	**0.244**	<0.001	**<0.001**	<0.001	**0.004**	<0.0005	0.002	None	15	0.001	**0.021**

MP ID	Date	pH	Conductivity	Nitrate (NO_3)	Aluminium (Al)	Total Arsenic (As)	Cadmium (Cd)	Total Chromium (Cr)	Copper (Cu)	Mercury (Hg)	Nickel (Ni)	Oil & Grease	TSS	Lead (Pb)	Zinc (Zn)
ANZECC 2000 Trigger Values[1]		6.5-8.5[2]	0.350 dS/m	0.7 mg/L	0.055 mg/L	0.024 mg/L	0.0002 mg/L	n/s mg/L[3]	0.0014 mg/L	0.0006 mg/L	0.011 mg/L	No visible sheen or detectable odour	50 mg/L[4]	0.0034 mg/L	0.008 mg/L
	06/12/2018	6.72	0.106	<0.005	**0.08**	<0.001	<0.0001	<0.001	**0.003**	<0.0005	<0.001	None	7	<0.001	**0.012**
MP6	22/03/2018	No Discharge													
	21/06/2018	No Discharge													
	24/09/2018	No Discharge													
	06/12/2018	No Discharge													
MP7	pH Only – See alternative table														

1 Initially data will be compared against ANZECC Trigger Values with the aim to develop site specific trigger levels once a large enough baseline data set is available.

2 It is noted that the pH of nearby soil and receiving waters are mildly acidic pH4.5-pH5.3. Site specific pH trigger levels to be established once a large enough baseline data set is available.

3 ANZECC Guidelines do not specify a trigger value for total chromium (Cr) due to insufficient data. This will be established as part of the baseline criteria for the site.

4 EPL 20562 maximum level once the stormwater management system is constructed and operational. Exceedance permitted at overflow point for duration of overflow when wet weather overflow is occurring due to stormwater events ≥ 60.2mm in total falling over any consecutive 5 day period.

Data in **bold** indicates the data is outside the trigger levels.

Table 2: Water Reuse Dam (MP7) – pH Results

Date	pH (Trigger Levels 6.5 – 8.5)	
3/01/2018	5.58	
10/01/2018	5.63	
17/01/2018	5.69	
24/01/2018	5.75	
31/01/2018	5.62	
7/02/2018	5.78	
14/02/2018	5.65	
21/02/2018	5.79	
28/02/2018	5.68	
7/03/2018	5.75	
14/03/2018	5.85	
21/03/2018	5.82	
28/03/2018	5.81	
4/04/2018	5.72	
11/04/2018	5.69	
18/04/2018	5.71	
26/04/2018	5.61	
2/05/2018	5.59	
9/05/2018	5.67	
16/05/2018	5.71	
23/05/2018	5.68	
30/05/2018	5.51	
6/06/2018	5.72	
13/06/2018	5.69	
21/06/2018	5.40	
28/06/2018		Tester Unavailable
5/07/2018	5.48	
16/07/2018	5.26	
20/07/2018	5.49	
27/07/2018	5.47	
3/08/2018		Faulty pH meter
10/08/2018	5.34	
24/08/2018	5.38	
31/08/2018	5.21	
7/09/2018	4.73	
14/09/2018	4.84	
21/09/2018	4.78	
28/09/2018	4.88	
5/10/2018	4.77	
12/10/2018	4.79	
19/10/2018	4.81	
26/10/2018	4.80	
2/11/2018	5.12	
9/11/2018	6.22	
16/11/2018	6.60	
23/11/2018	6.10	
30/11/2018	6.60	
7/12/2018	6.50	
14/12/2018	6.65	
21/12/2018	7.23	
28/12/2018	7.12	

Table 3: Groundwater Monitoring Results

MP ID	Date	pH	Conductivity (dS/m)	Nitrate (NO_3) (mg/L)	Aluminium (Al) (mg/L)	Total Arsenic (As) (mg/L)	Cadmium (Cd) (mg/L)	Total Chromium (Cr) (mg/L)	Copper (Cu) (mg/L)	Mercury (Hg) (mg/L)	Nickel (Ni) (mg/L)	Lead (Pb) (mg/L)	Zinc (Zn) (mg/L)
ANZECC 2000 Trigger Values[1]		6.5 - 8.5 [3]	0.35	0.7	0.055	0.024	0.0002	n/s[4]	0.0014	0.0006	0.011	0.0034	0.008
NHMRC Drinking Water Guidelines[2]		6.5 - 8.5 [3]	n/s	50	0.2	0.01	0.002	0.05	2	0.001	0.02	0.01	3
MP8	22/03/2018	**4.47**	0.57	0.005	0.071	<0.001	<0.0001	<0.001	0.005	<0.0005	0.007	<0.001	0.03
	21/06/2018	Insufficient Water levels											
	25/09/2018	No Access											
	06/12/2018	No Access											
MP9	22/03/2018	**5.45**	0.125	0.226	0.149	<0.001	<0.0001	<0.001	0.002	<0.0005	0.001	0.001	0.054
	21/06/2018	**5.40**	0.246	0.114	0.174	<0.001	<0.001	<0.001	0.001	<0.0005	0.001	0.001	0.019
	25/09/2018	**5.26**	0.28	0.029	0.060	<0.001	<0.0001	<0.001	0.000503	<0.0005	0.0009	0.001	0.02695
	06/12/2018	**5.28**	0.459	0.01	0.007	<0.001	<0.0001	<0.001	0.002	<0.0005	0.002	0.001	0.023
MP10	22/03/2018	**4.46**	0.101	0.106	0.127	<0.001	<0.0001	0.001	0.002	<0.0005	0.001	<0.001	0.018
	21/06/2018	**4.39**	0.118	0.036	0.174	<0.001	<0.0010	0.001	0.002	<0.0005	0.001	<0.001	0.012
	25/09/2018	No Access											
	06/12/2018	No Access											
MP11	22/03/2018	Level measured -0.54m											
	21/06/2018	Site Not accessible											
	25/09/2018	Windmill not accessible											
	06/12/2018	Windmill not accessible											
MP12	22/03/2018	**6.19**	0.488	0.048	0.037	<0.001	<0.001	<0.001	0.001	<0.0005	0.001	<0.001	0.01
	21/06/2018	**6.14**	0.486	0.073	0.035	<0.001	<0.001	<0.001	0.001	<0.0005	0.003	<0.001	0.019
	25/09/2018	**6.11**	0.494	0.034	0.063	<0.001	<0.001	<0.001	0.00058	<0.0005	0.001361	<0.001	0.01601
	06/12/2018	**5.28**	0.256	0.156	0.105	<0.001	<0.001	<0.001	0.001	<0.0005	0.001	<0.001	0.014

[1] Initially data will be compared against ANZECC Trigger Values with the aim to develop site specific trigger levels once a large enough baseline data set is available.

[2] Initially data will be compared against NHMRC Drinking Water Guidelines with the aim to develop site specific trigger levels once a large enough baseline data set is available.

[3] It is noted that the pH of nearby soil and receiving waters are mildly acidic pH4.5-pH5.3. Site specific pH trigger levels to be established once a large enough baseline data set is available.

[4] ANZECC Guidelines do not specify a trigger value for total chromium (Cr) due to insufficient data. This will be established as part of the baseline criteria for the site.

Data in **bold** indicates the data is outside the trigger levels.

APPENDIX F

Site Photographs of Bunds, Screening and Koala Habitat Area

Where access was permitted a current photograph has been supplied. Bund A, B, and the koala habitat planting area photographs were unable to be photographed as the current owner has denied access in writing.

BUND A

View of Bund A from the eastern end, trees planted to the north of the Bund and a single row of non-koala habitat trees on the south-western side of the Bund. Photo March 2018.

BUND B

Bund B – Low earth mound 10 metres wide. Established and grassed and planted with 2 rows of non-koala habitat trees/shrubs. Photo March 2018.

BUND C

Earth bund surrounding the Sand Washing Plant approx. 15 metres wide. Photo January 2019.

BUND D

10 metre wide bund. Established and grassed. Photo March 2019.

BUND E

Low sacrificial bund 10 metres wide. Established and grassed. Photo March 2019.

AREA TO THE NORTH OF THE MAIN ACCESS ROAD

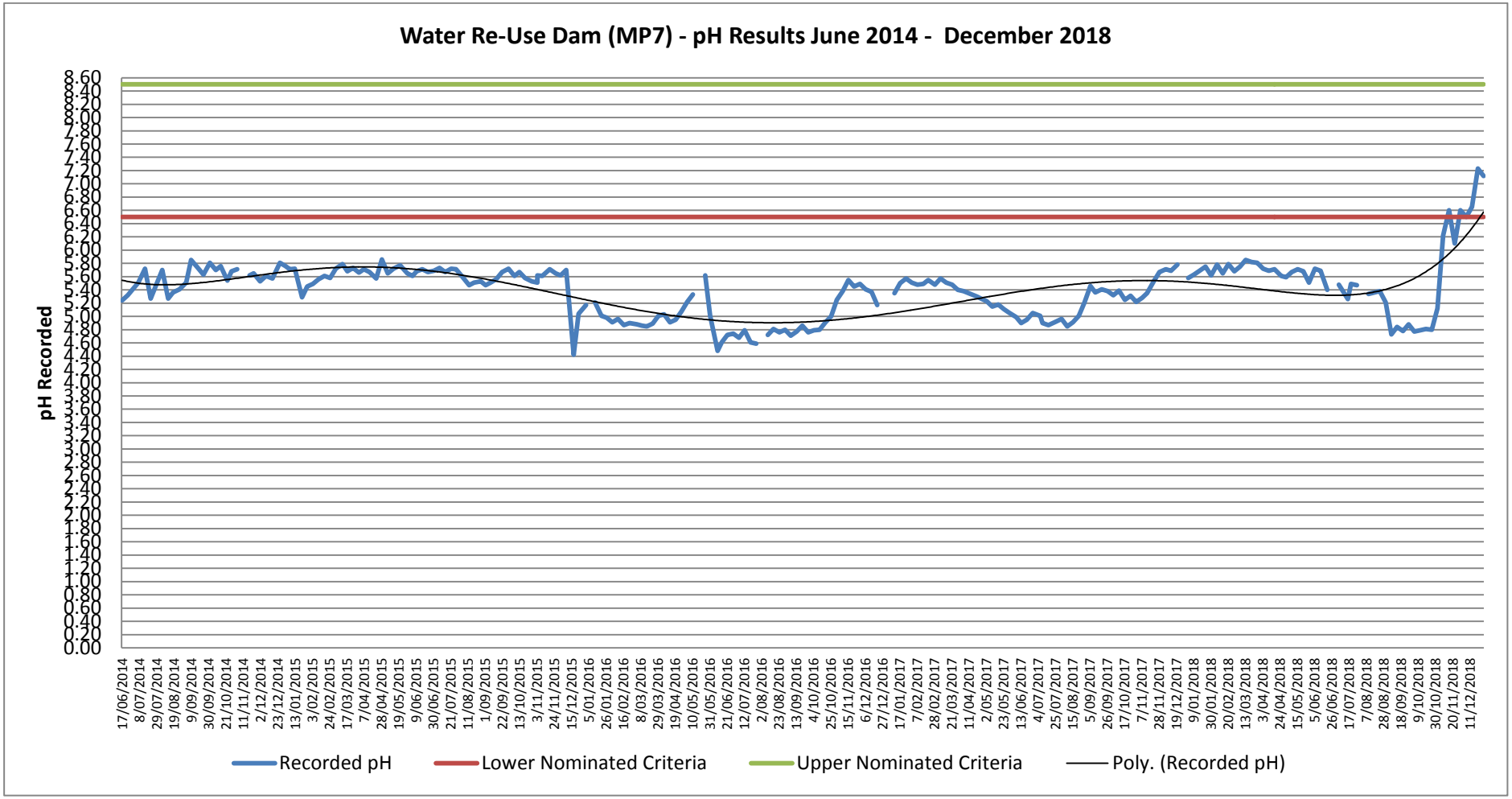
Established, grassed and planted with 2 rows of non-koala habitat trees/shrubs. Photo March 2019.

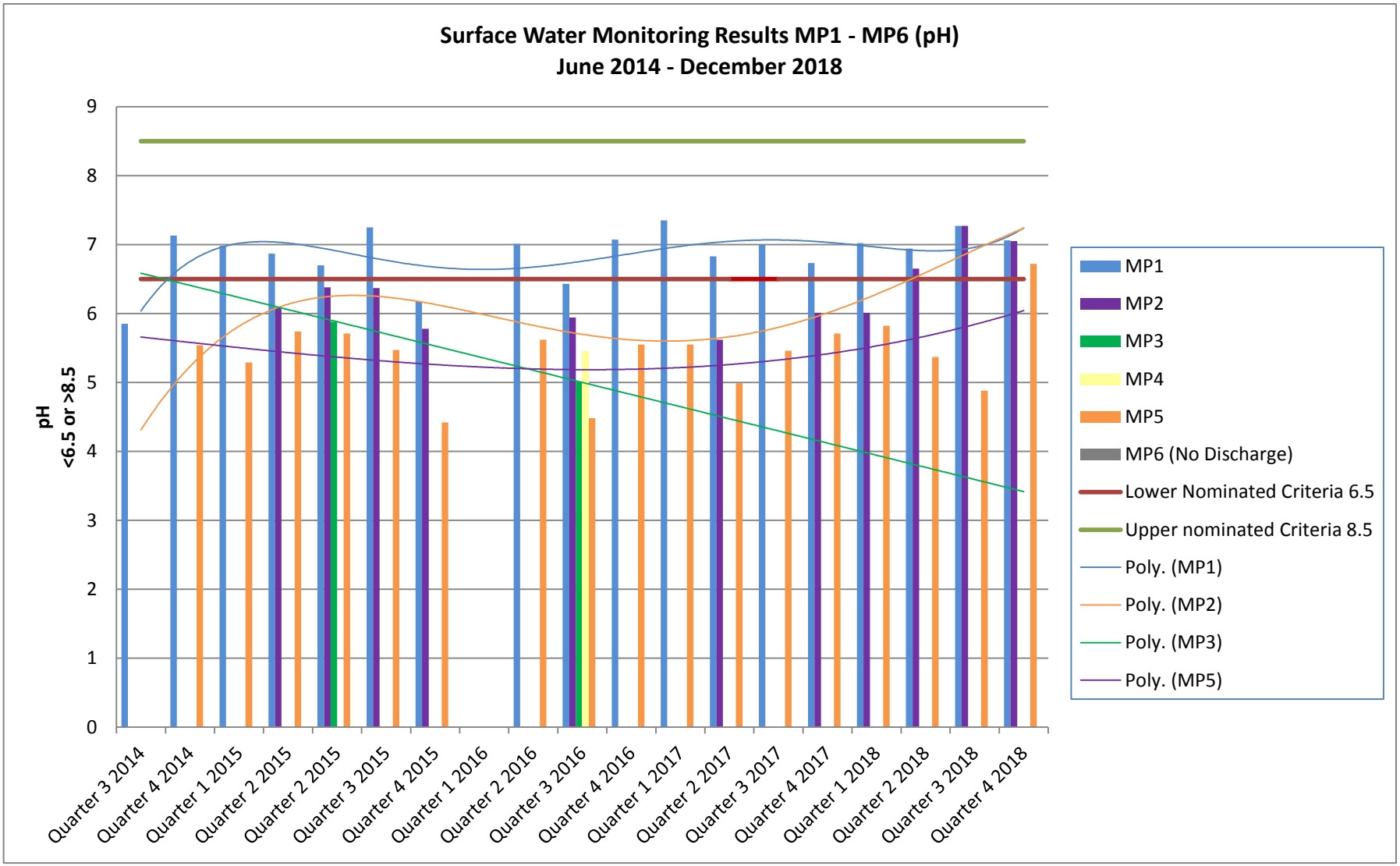
KOALA HABITAT PLANTING AREA

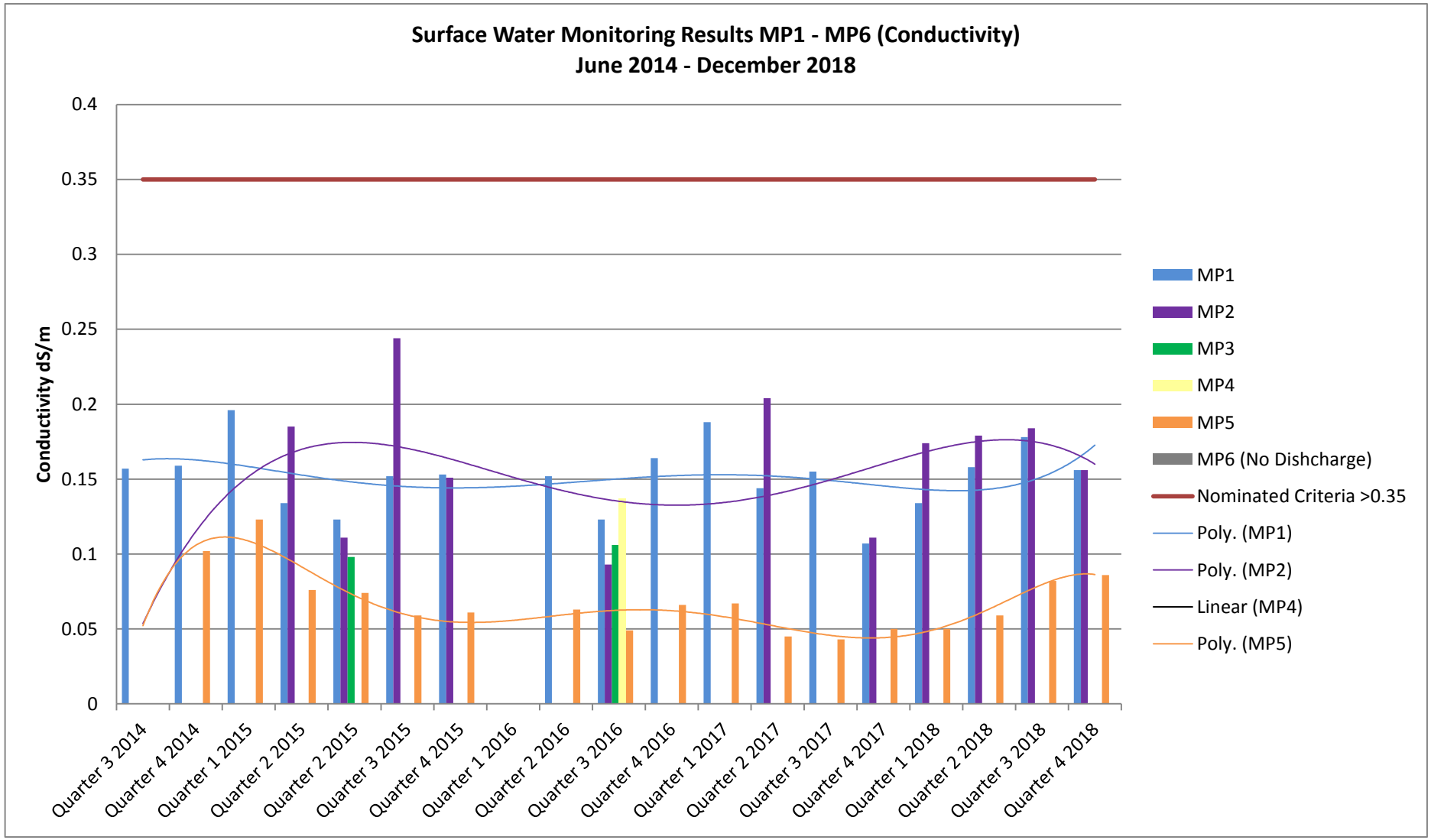
Established, grassed and planted with 3 rows of koala habitat trees/shrubs. This area was planted in September 2017. Photo March 2018.

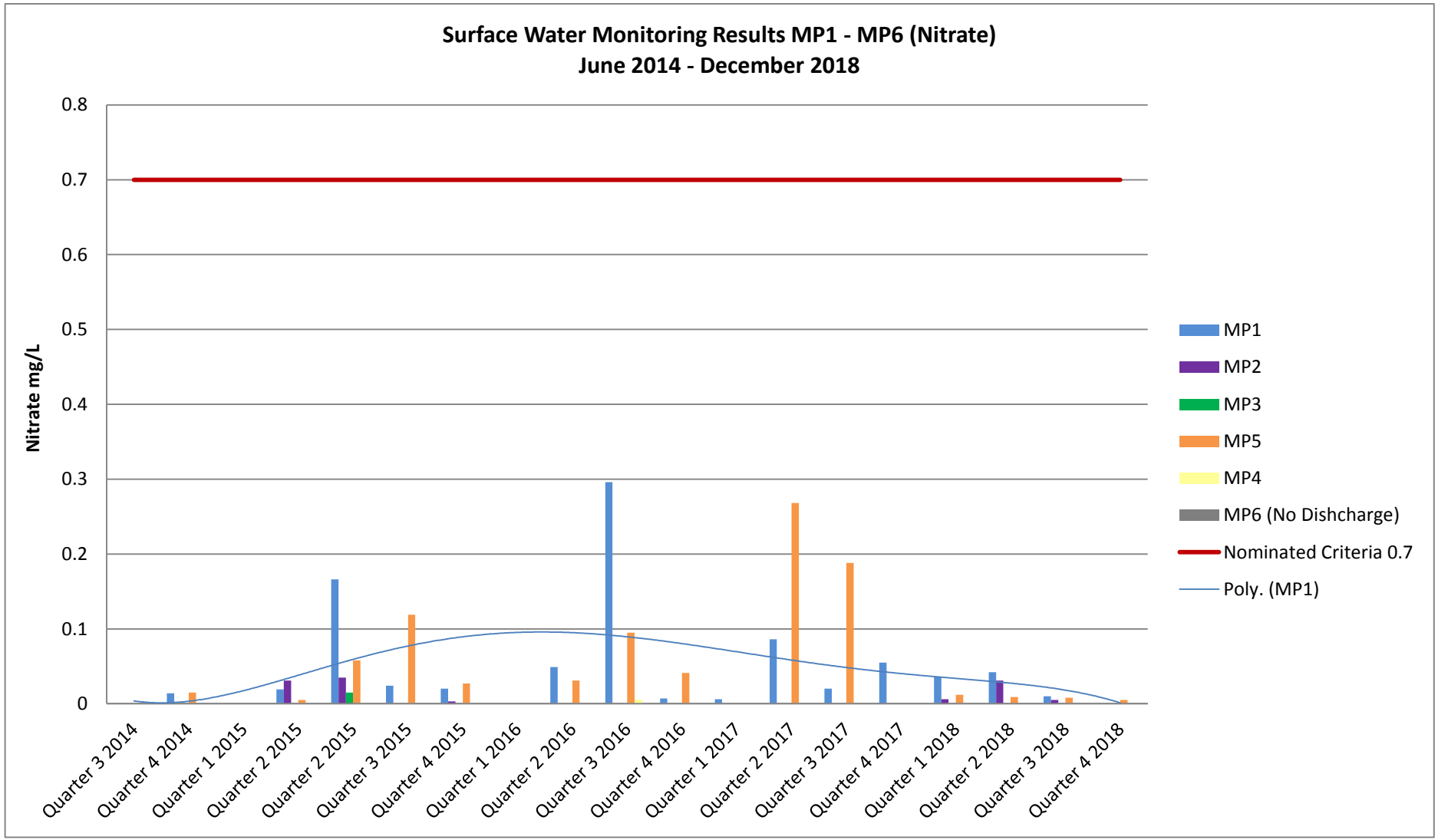
APPENDIX G

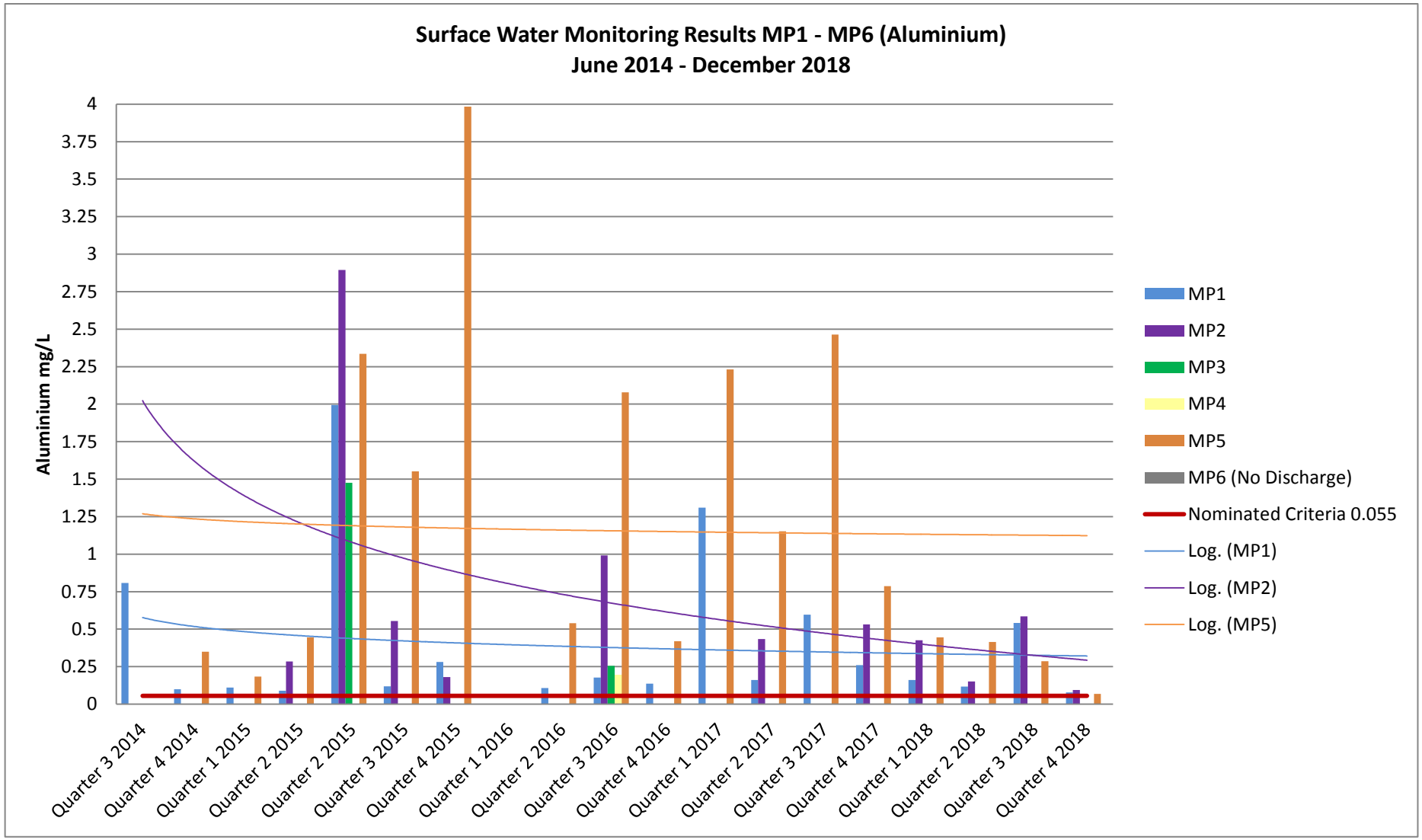
Monitoring Result Graphs

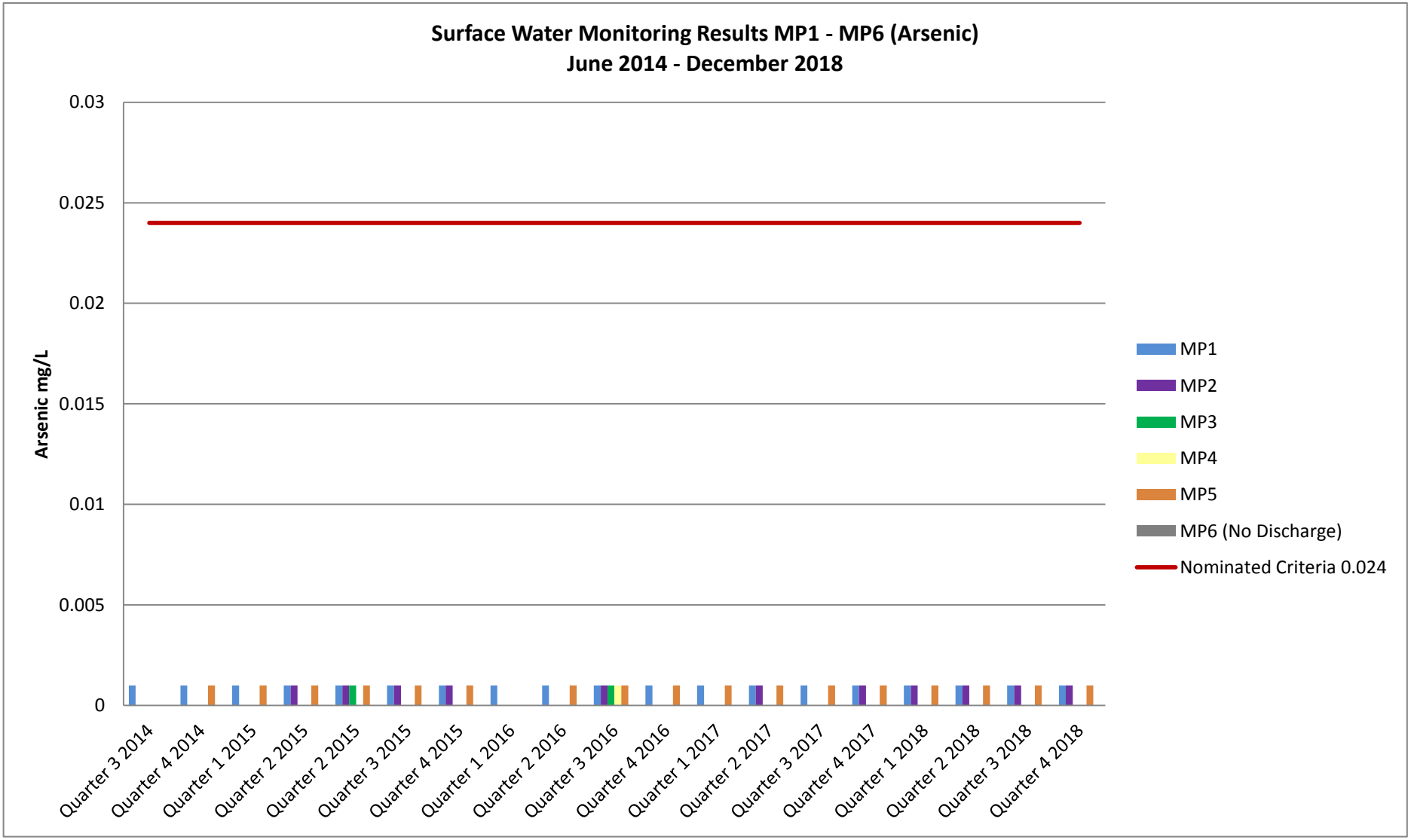


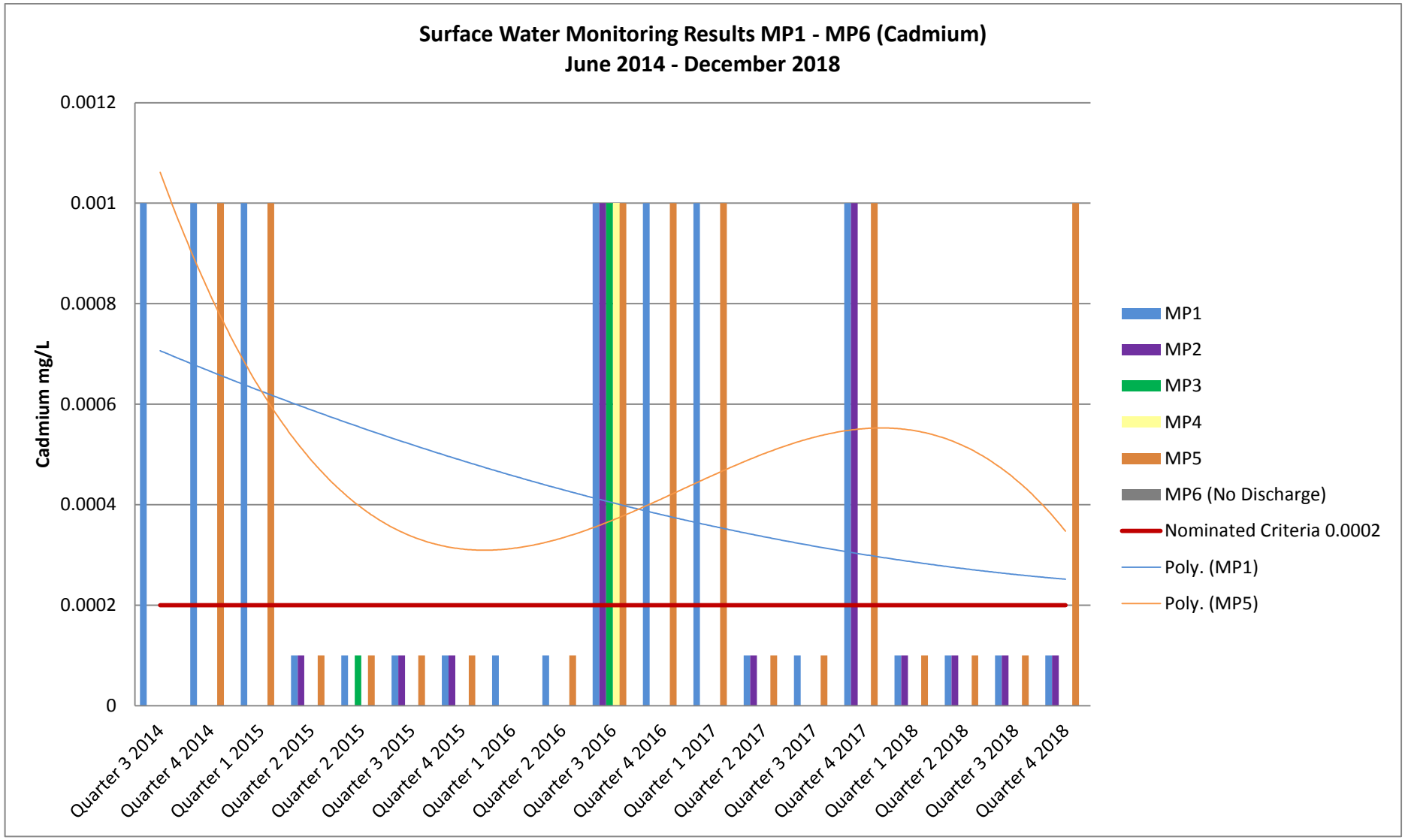

Surface Water Monitoring Results MP1 - MP6 (pH)
June 2014 - December 2018
pH
<6.5 or >8.5
0
1
2
3
4
5
6
7
8
9
Quarter 3 2014
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP1
MP2
MP3
MP4
MP5
MP6 (No Discharge)
Lower Nominated Criteria 6.5
Upper nominated Criteria 8.5
Poly. (MP1)
Poly. (MP2)
Poly. (MP3)
Poly. (MP5)

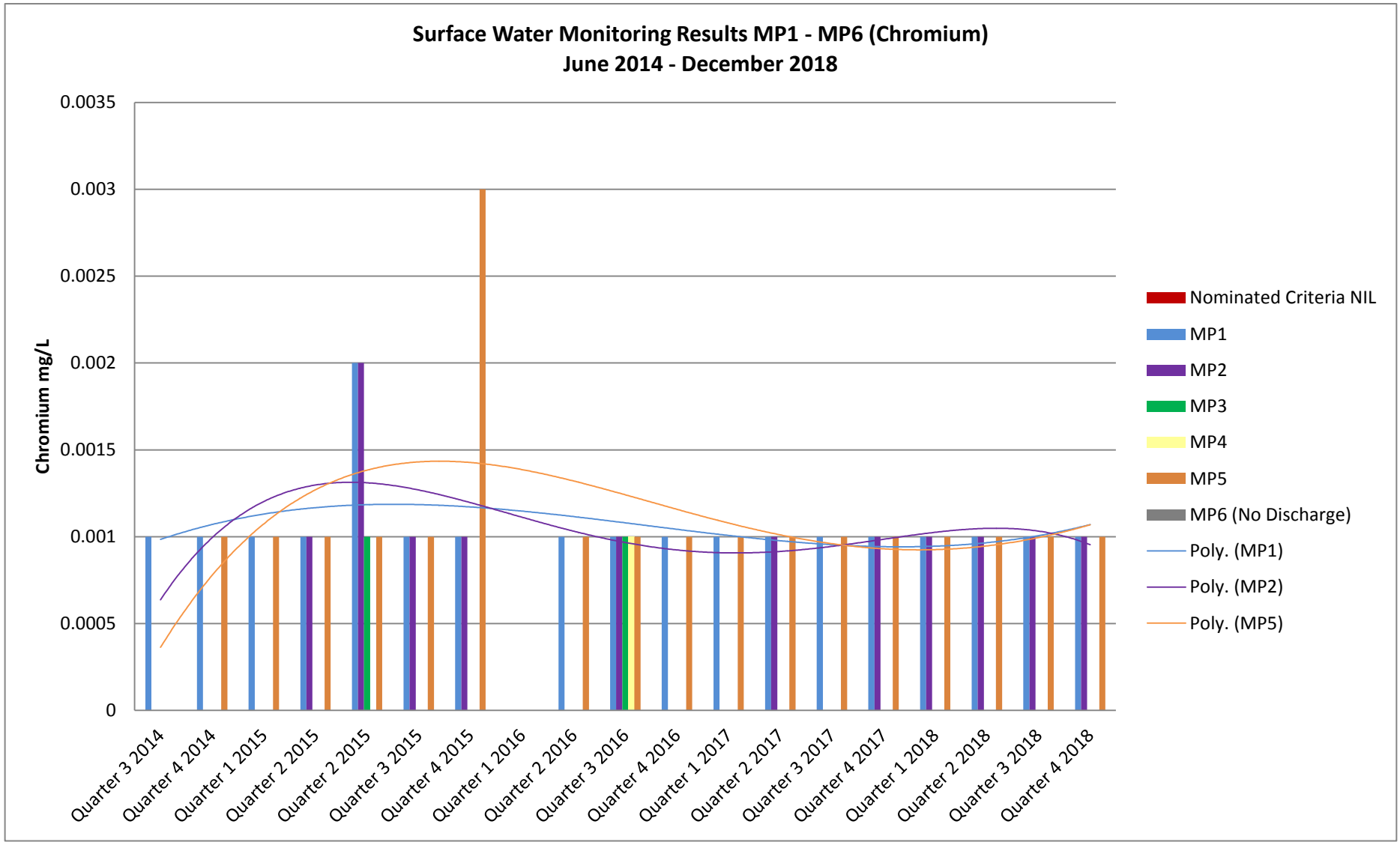

Surface Water Monitoring Results MP1 - MP6 (Conductivity)
June 2014 - December 2018
Conductivity dS/m
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
Quarter 3 2014
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP1
MP2
MP3
MP4
MP5
MP6 (No Dishcharge)
Nominated Criteria >0.35
Poly. (MP1)
Poly. (MP2)
Linear (MP4)
Poly. (MP5)

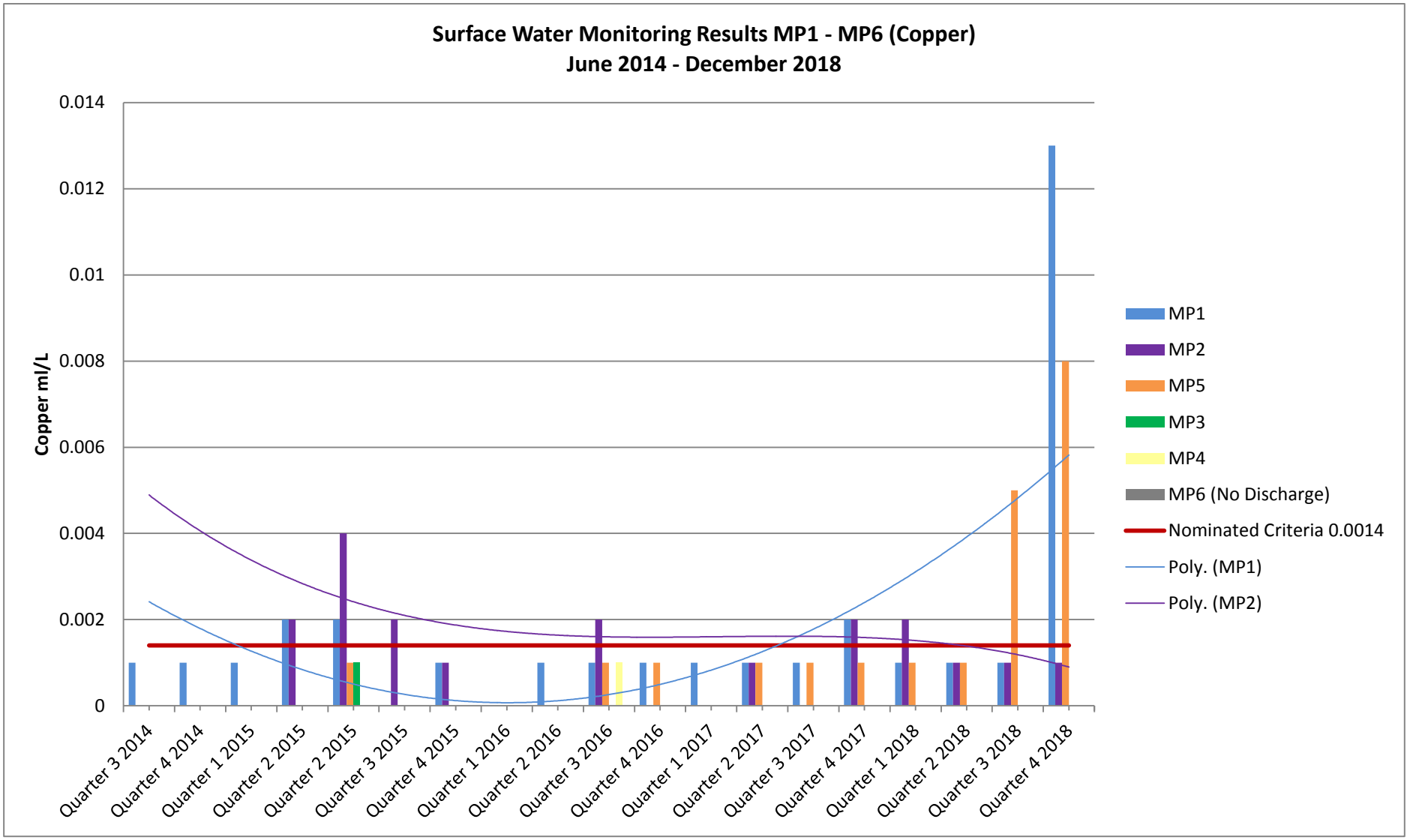

Surface Water Monitoring Results MP1 - MP6 (Nitrate)
June 2014 - December 2018
Nitrate mg/L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Quarter 3 2014
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP1
MP2
MP3
MP5
MP4
MP6 (No Dishcharge)
Nominated Criteria 0.7
Poly. (MP1)

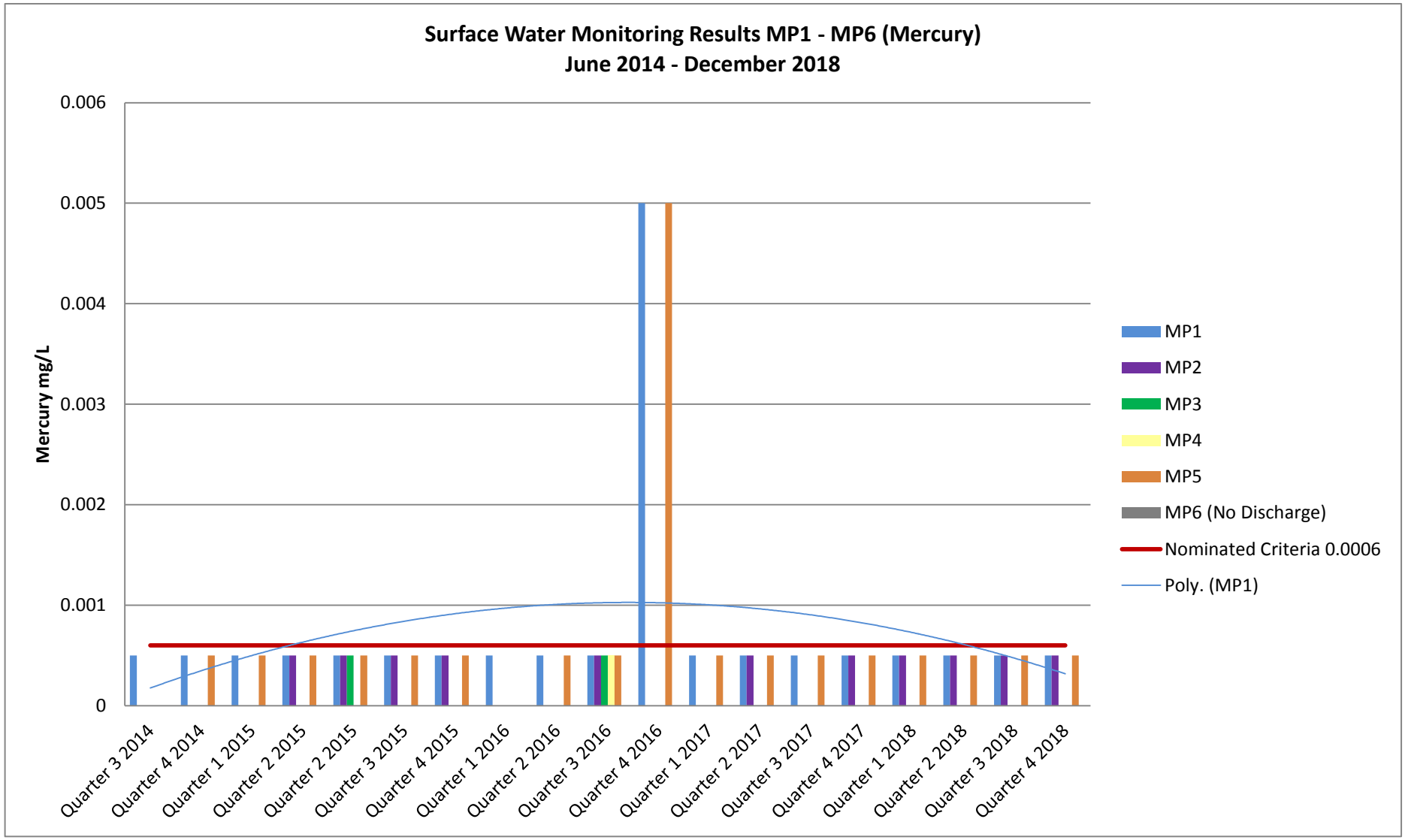

Surface Water Monitoring Results MP1 - MP6 (Aluminium)
June 2014 - December 2018
Aluminium mg/L
4
3.75
3.5
3.25
3
2.75
2.5
2.25
2
1.75
1.5
1.25
1
0.75
0.5
0.25
0
Quarter 3 2014
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP1
MP2
MP3
MP4
MP5
MP6 (No Discharge)
Nominated Criteria 0.055
Log. (MP1)
Log. (MP2)
Log. (MP5)

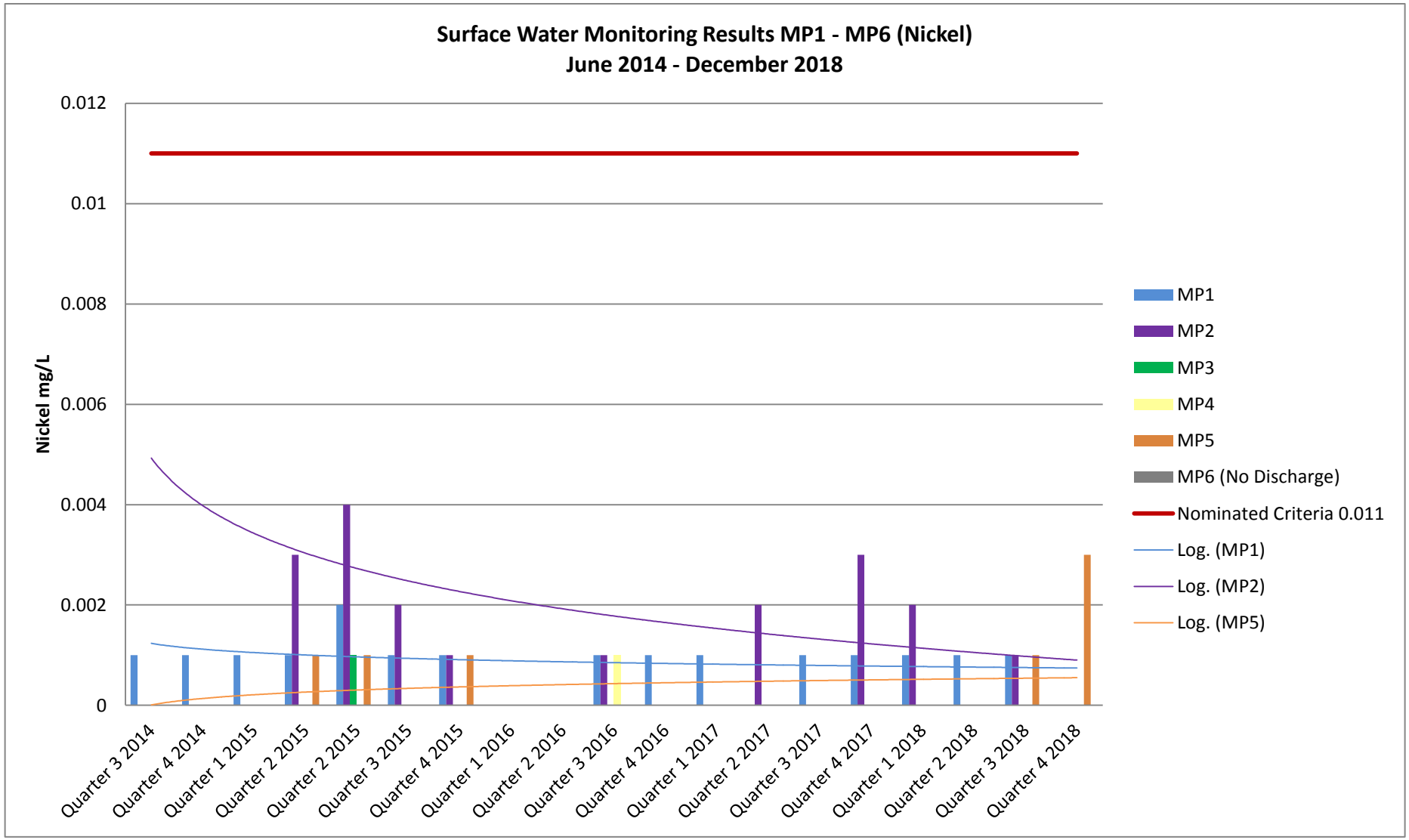

Surface Water Monitoring Results MP1 - MP6 (Arsenic)
June 2014 - December 2018
Arsenic mg/L
0.03
0.025
0.02
0.015
0.01
0.005
0
Quarter 3 2014
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP1
MP2
MP3
MP4
MP5
MP6 (No Discharge)
Nominated Criteria 0.024

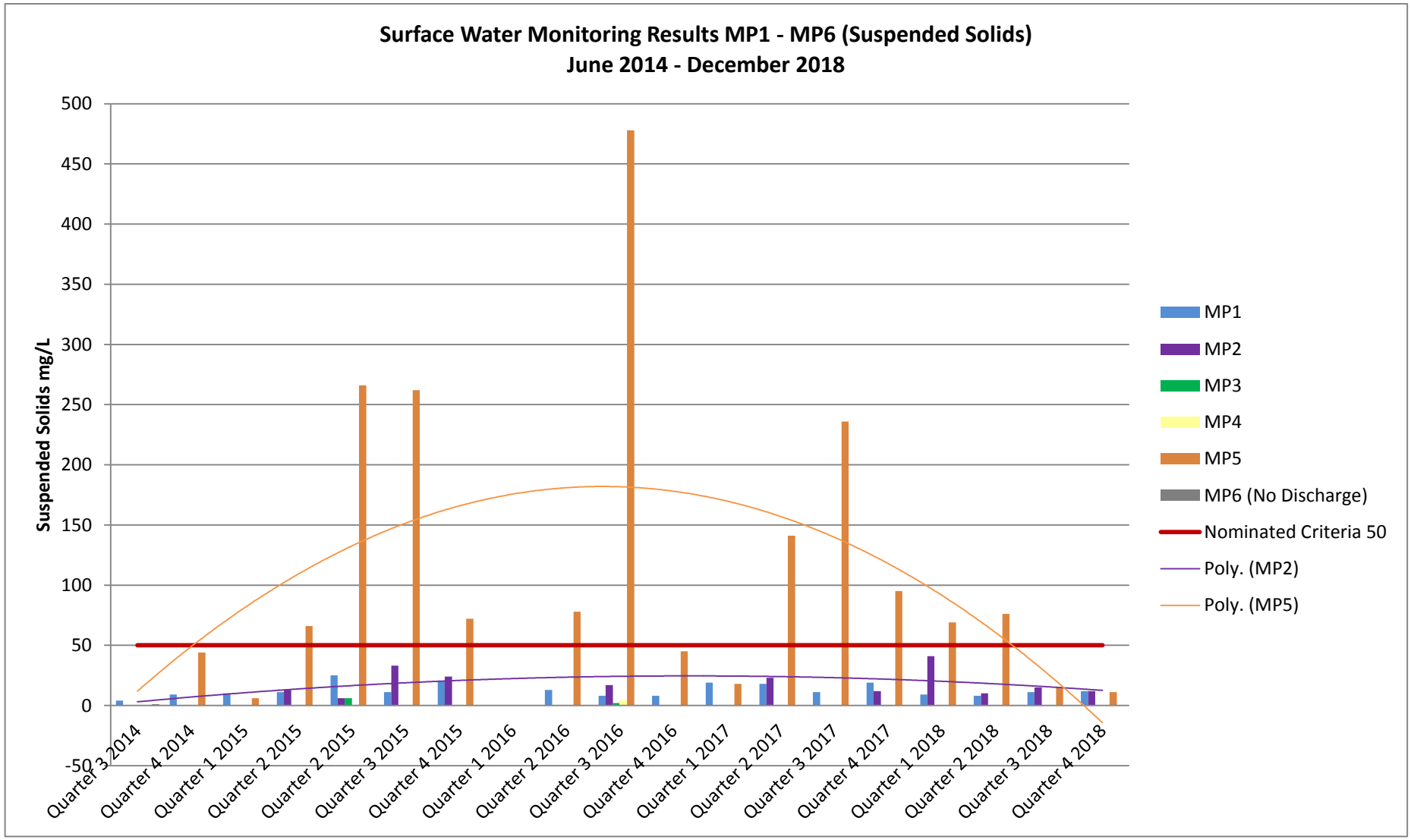

Surface Water Monitoring Results MP1 - MP6 (Cadmium)
June 2014 - December 2018
Cadmium mg/L
0.0012
0.001
0.0008
0.0006
0.0004
0.0002
0
Quarter 3 2014
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP1
MP2
MP3
MP4
MP5
MP6 (No Discharge)
Nominated Criteria 0.0002
Poly. (MP1)
Poly. (MP5)

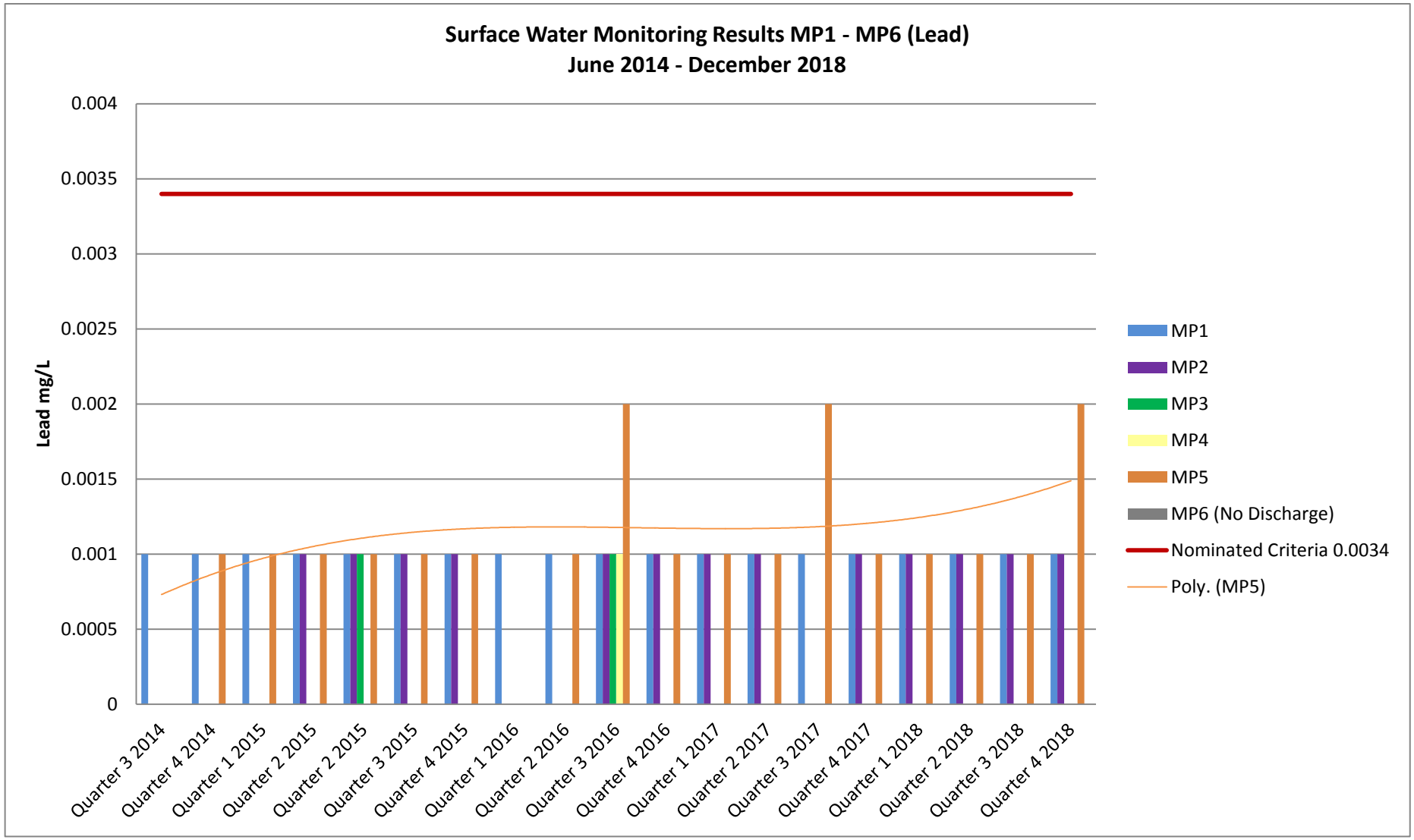

Surface Water Monitoring Results MP1 - MP6 (Chromium)
June 2014 - December 2018
Chromium mg/L
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
Quarter 3 2014
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
Nominated Criteria NIL
MP1
MP2
MP3
MP4
MP5
MP6 (No Discharge)
Poly. (MP1)
Poly. (MP2)
Poly. (MP5)

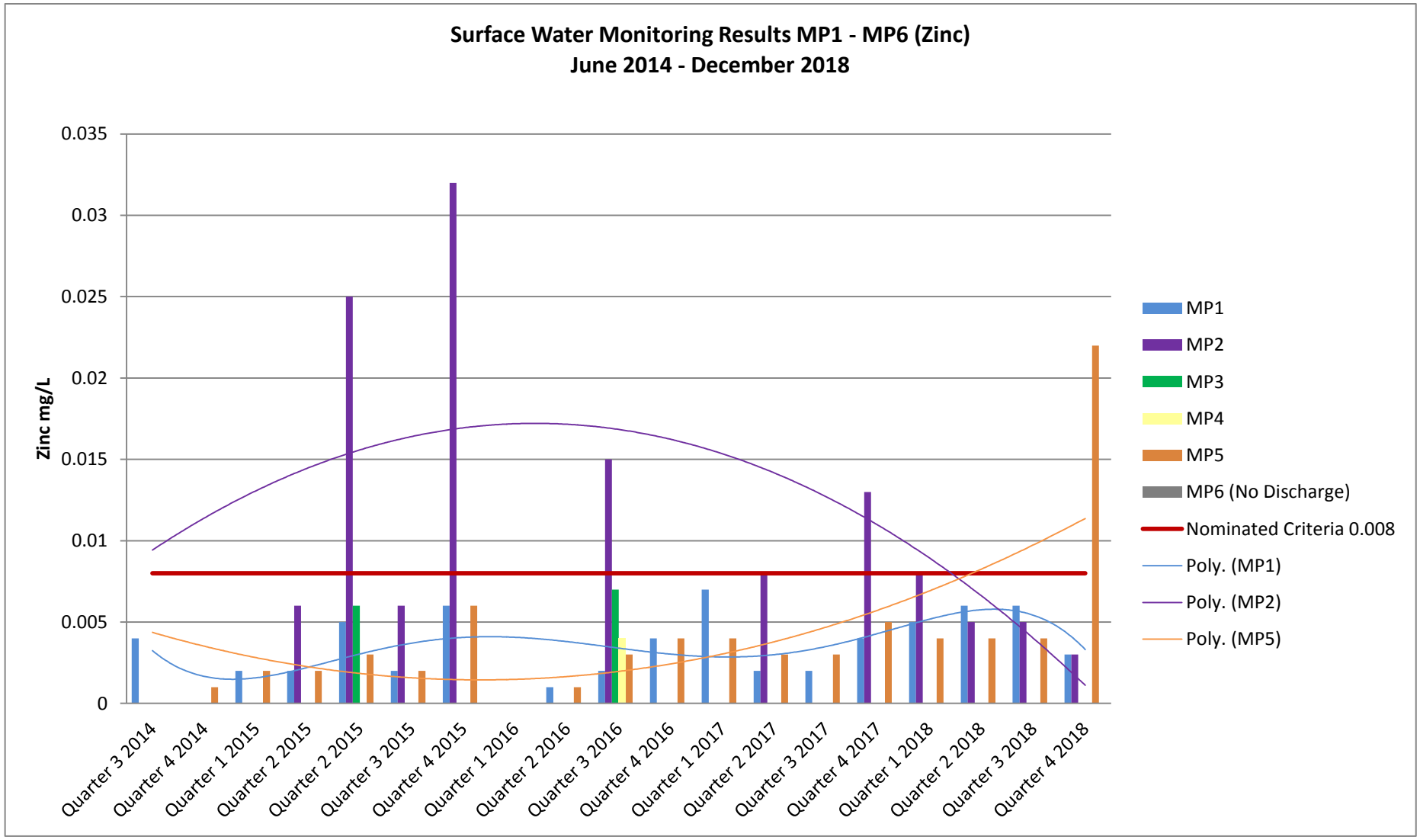

Surface Water Monitoring Results MP1 - MP6 (Copper)
June 2014 - December 2018
Copper ml/L
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
Quarter 3 2014
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP1
MP2
MP5
MP3
MP4
MP6 (No Discharge)
Nominated Criteria 0.0014
Poly. (MP1)
Poly. (MP2)

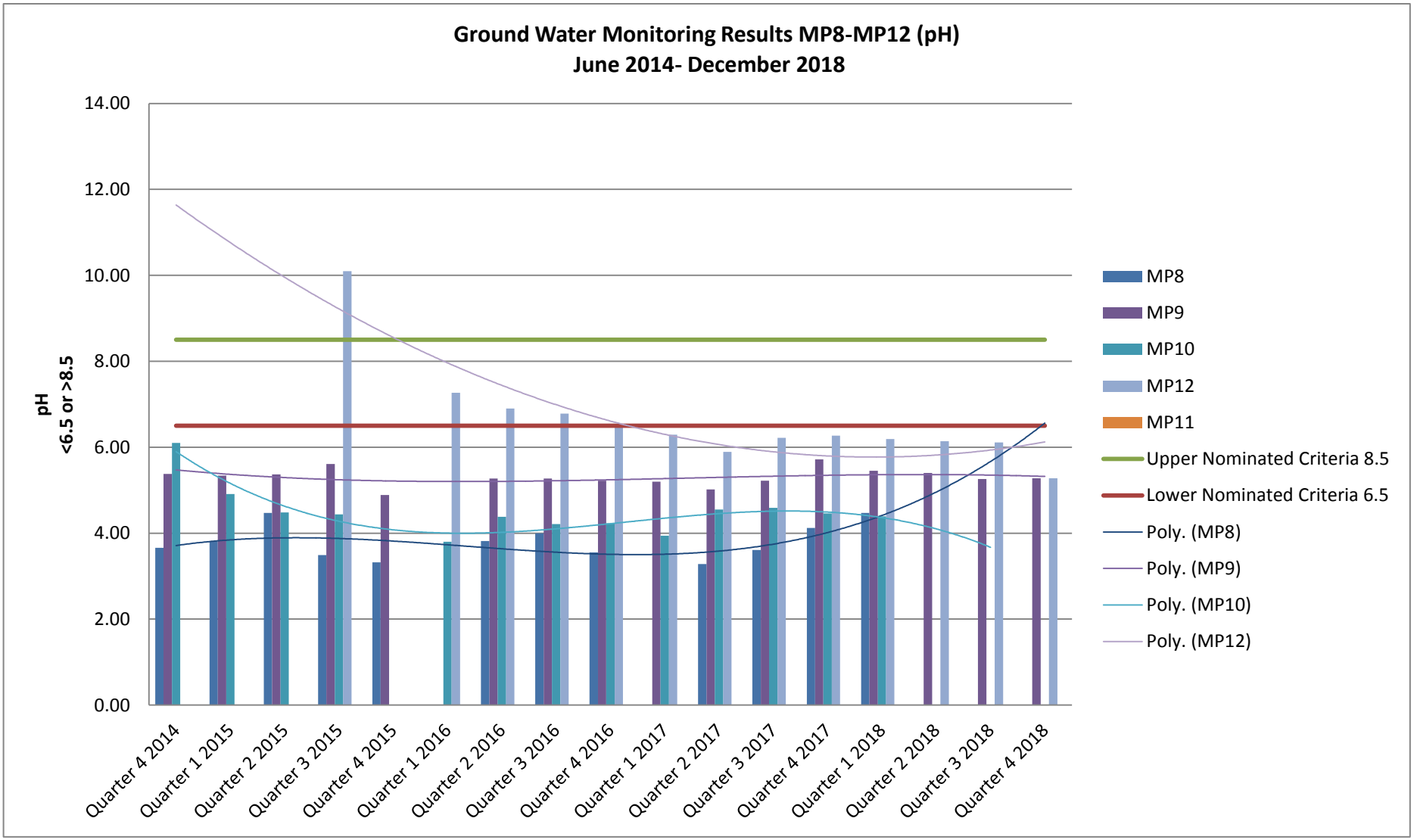

Surface Water Monitoring Results MP1 - MP6 (Mercury)
June 2014 - December 2018
Mercury mg/L
0.006
0.005
0.004
0.003
0.002
0.001
0
Quarter 3 2014
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP1
MP2
MP3
MP4
MP5
MP6 (No Discharge)
Nominated Criteria 0.0006
Poly. (MP1)

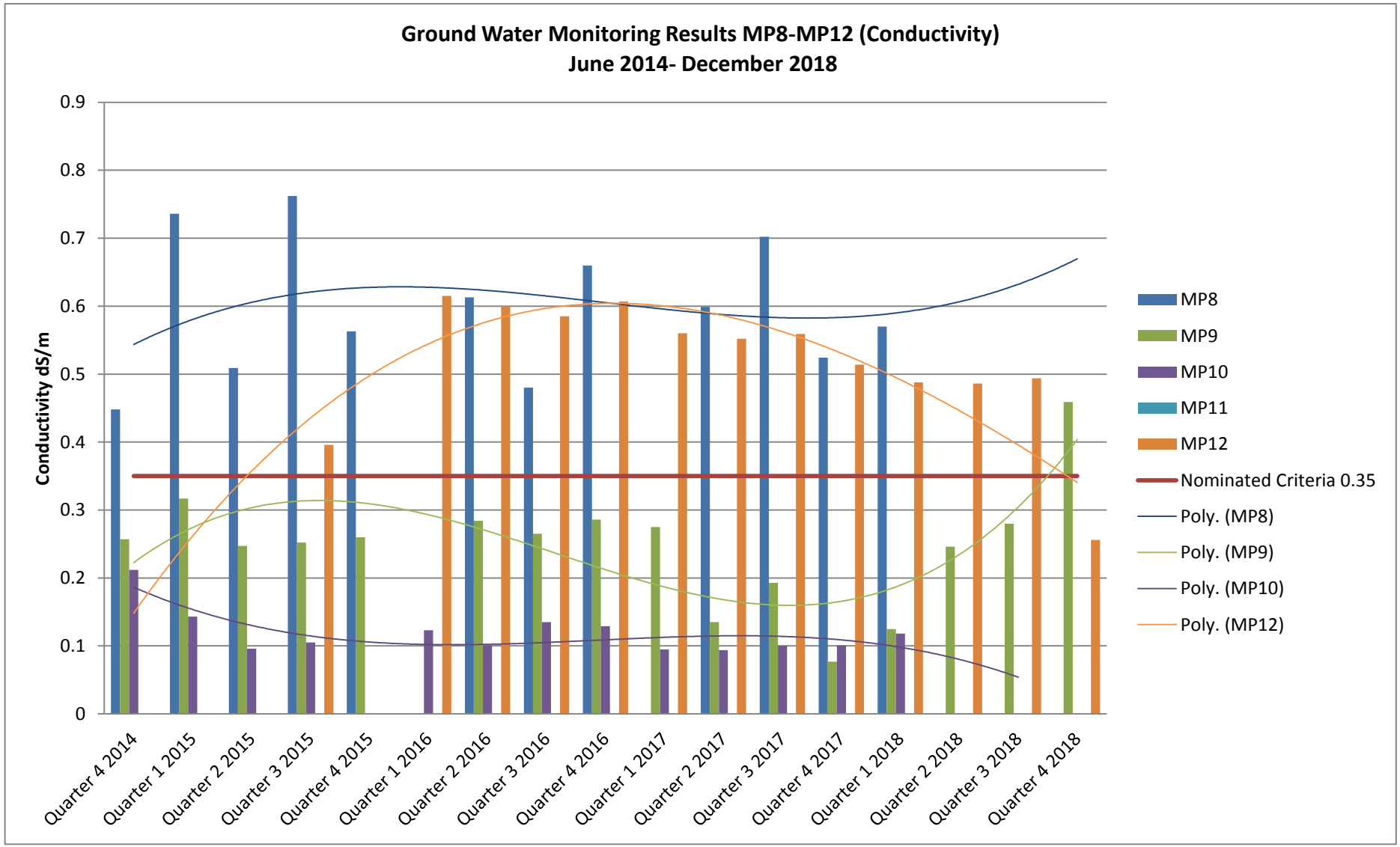

Surface Water Monitoring Results MP1 - MP6 (Nickel)
June 2014 - December 2018
Nickel mg/L
0.012
0.01
0.008
0.006
0.004
0.002
0
Quarter 3 2014
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP1
MP2
MP3
MP4
MP5
MP6 (No Discharge)
Nominated Criteria 0.011
Log. (MP1)
Log. (MP2)
Log. (MP5)

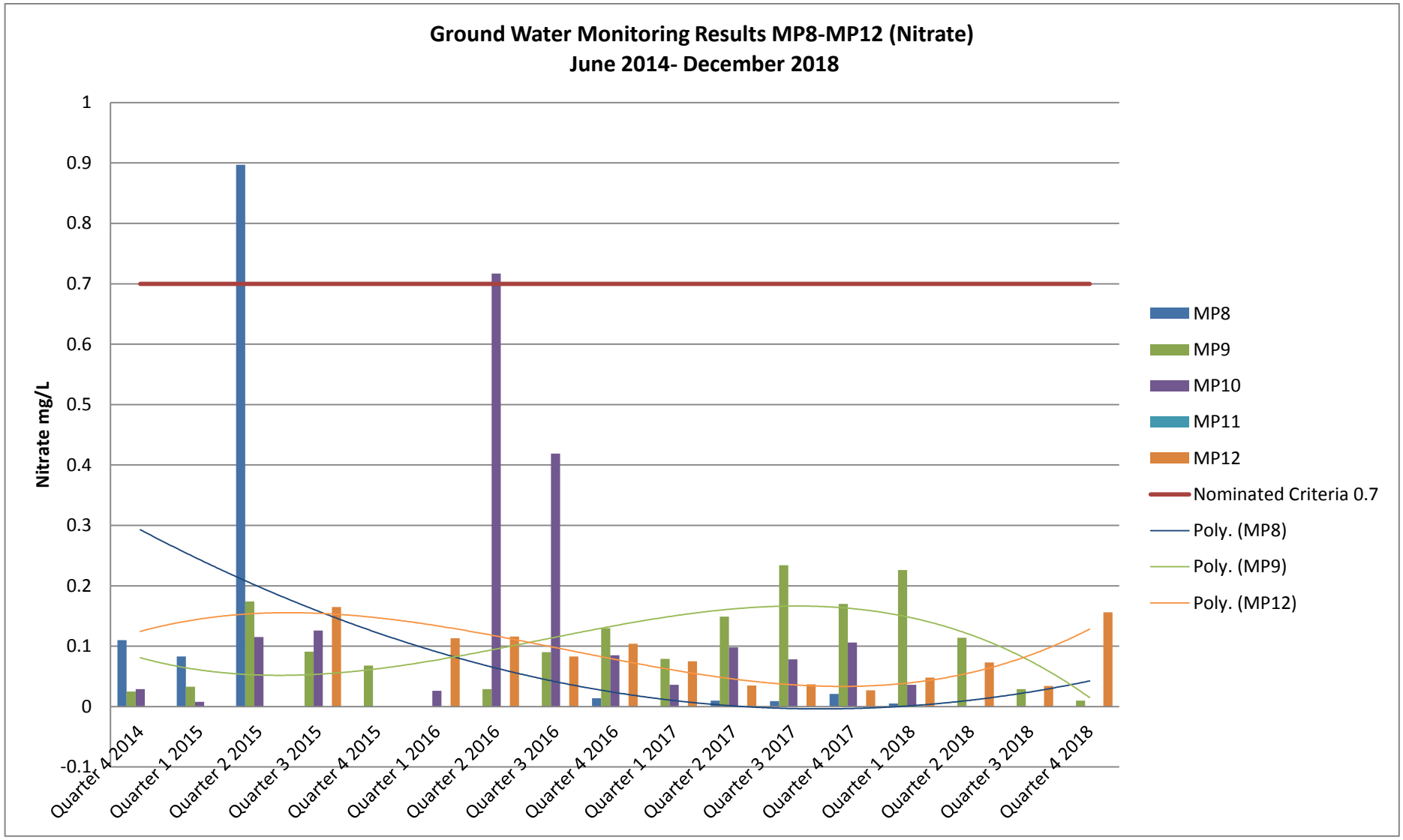

Surface Water Monitoring Results MP1 - MP6 (Suspended Solids)
June 2014 - December 2018
Suspended Solids mg/L
500
450
400
350
300
250
200
150
100
50
0
-50
Quarter 3 2014
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP1
MP2
MP3
MP4
MP5
MP6 (No Discharge)
Nominated Criteria 50
Poly. (MP2)
Poly. (MP5)

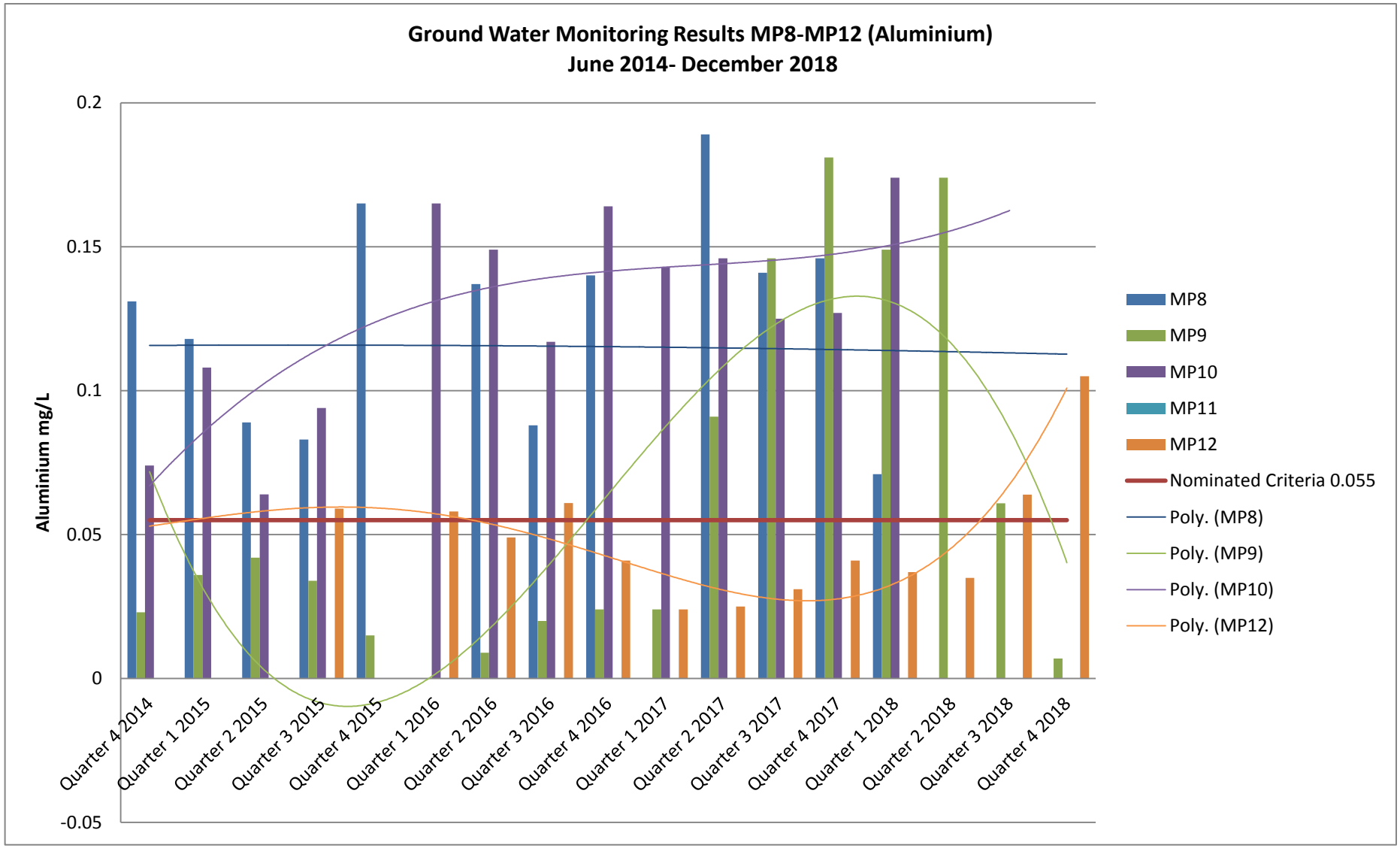

Surface Water Monitoring Results MP1 - MP6 (Lead)
June 2014 - December 2018
Lead mg/L
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
Quarter 3 2014
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP1
MP2
MP3
MP4
MP5
MP6 (No Discharge)
Nominated Criteria 0.0034
Poly. (MP5)

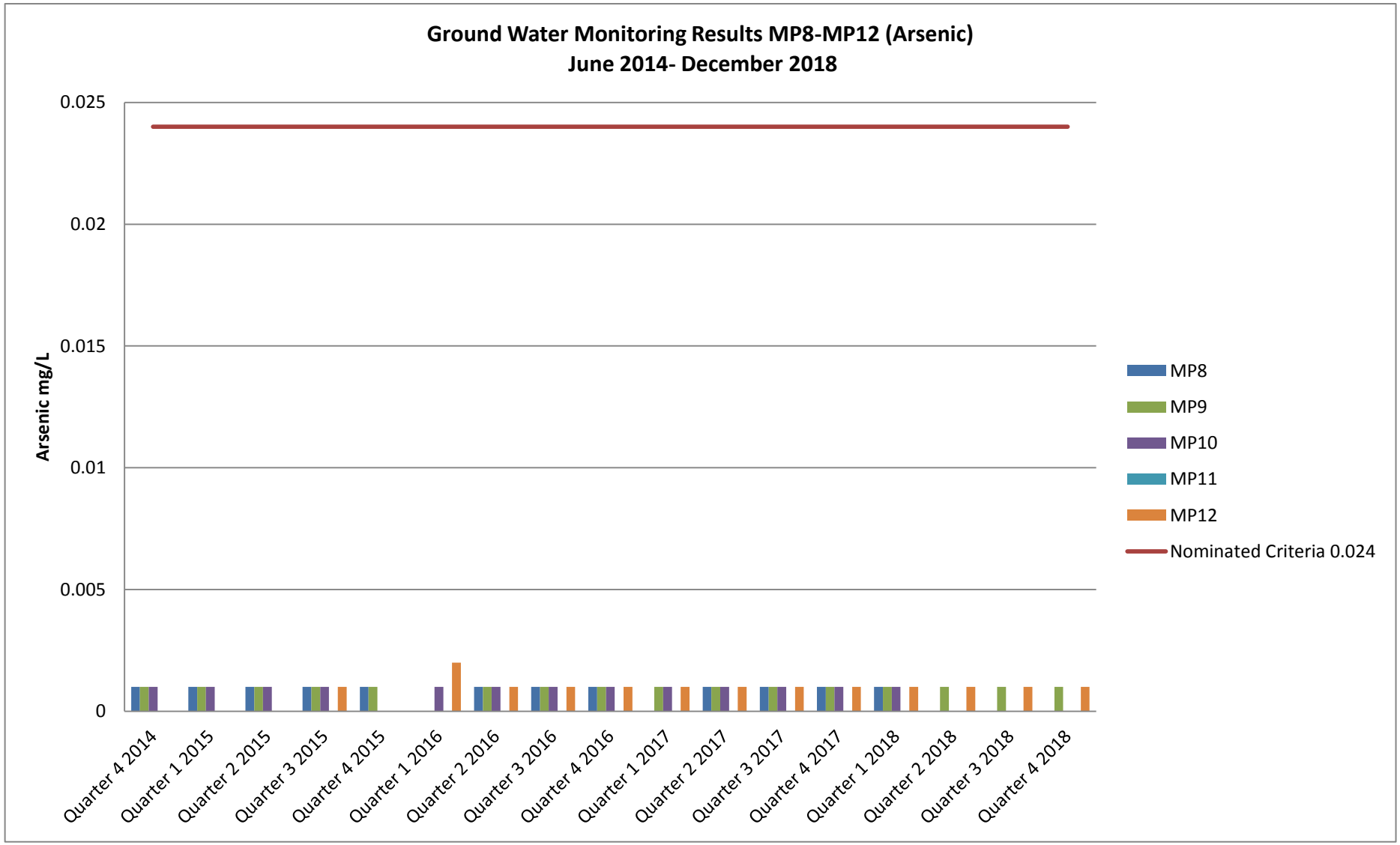

Surface Water Monitoring Results MP1 - MP6 (Zinc)
June 2014 - December 2018
Zinc mg/L
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
Quarter 3 2014
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP1
MP2
MP3
MP4
MP5
MP6 (No Discharge)
Nominated Criteria 0.008
Poly. (MP1)
Poly. (MP2)
Poly. (MP5)

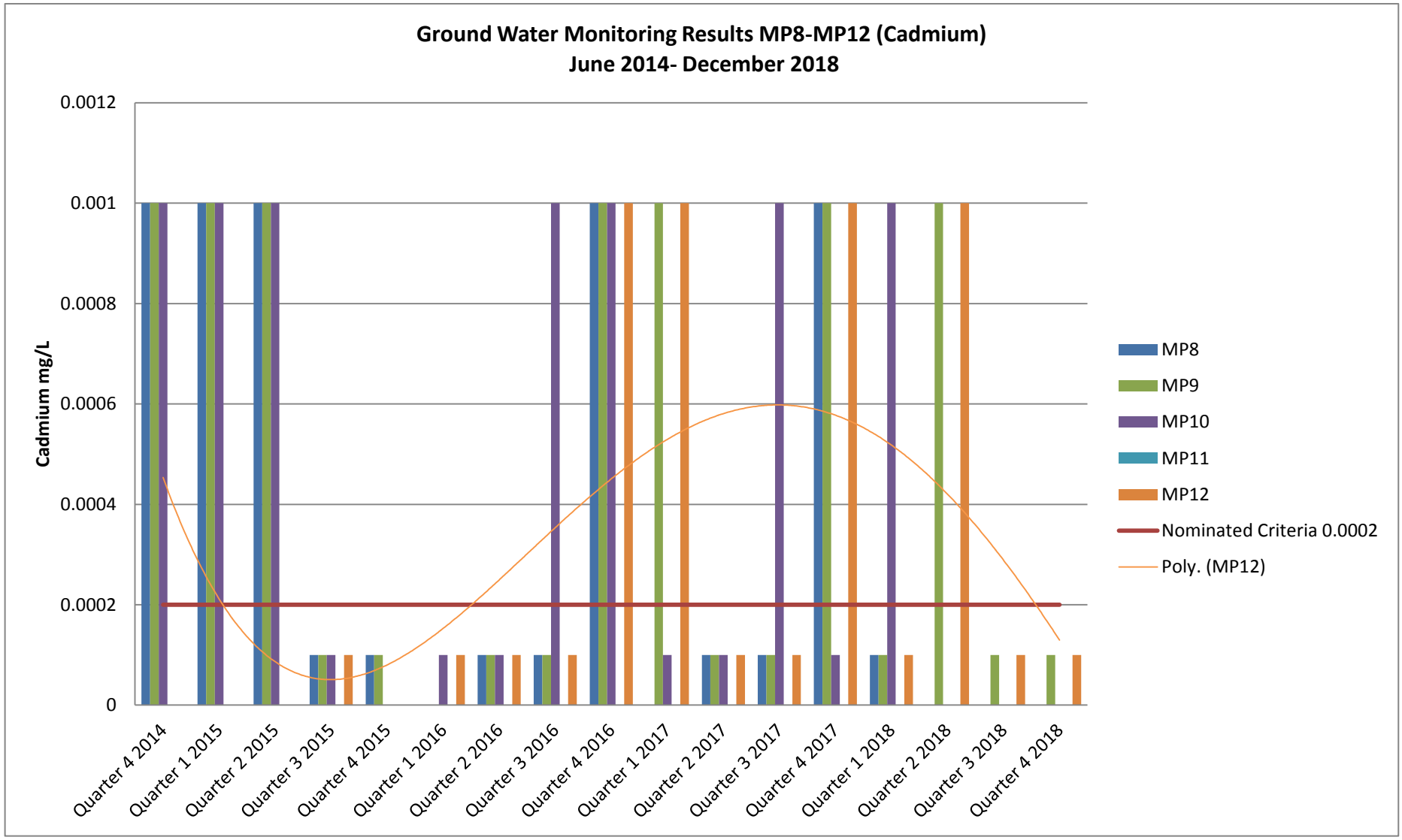

Ground Water Monitoring Results MP8-MP12 (pH)
June 2014- December 2018
pH
<6.5 or >8.5
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP8
MP9
MP10
MP12
MP11
Upper Nominated Criteria 8.5
Lower Nominated Criteria 6.5
Poly. (MP8)
Poly. (MP9)
Poly. (MP10)
Poly. (MP12)

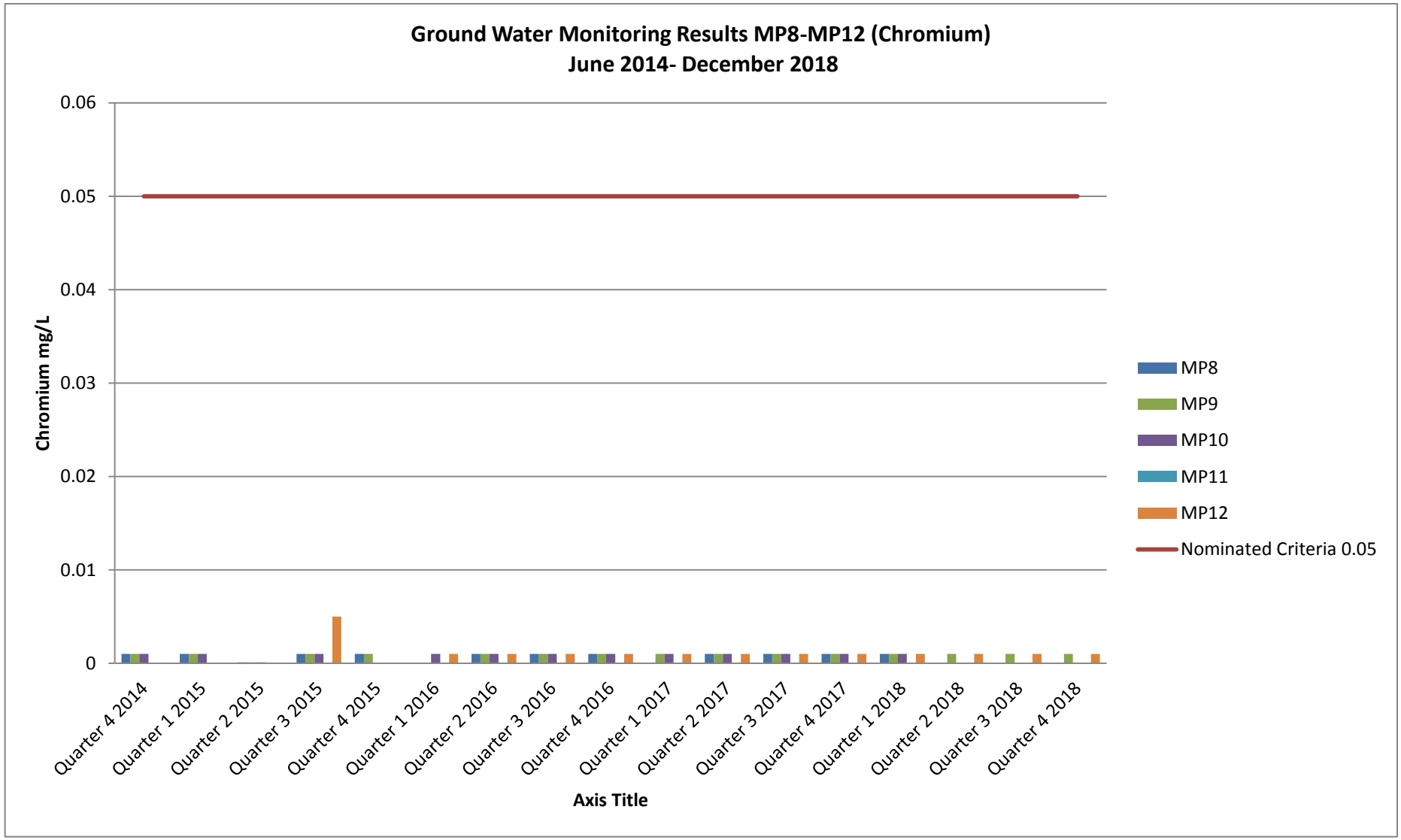

Ground Water Monitoring Results MP8-MP12 (Conductivity)
June 2014- December 2018
Conductivity dS/m
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP8
MP9
MP10
MP11
MP12
Nominated Criteria 0.35
Poly. (MP8)
Poly. (MP9)
Poly. (MP10)
Poly. (MP12)

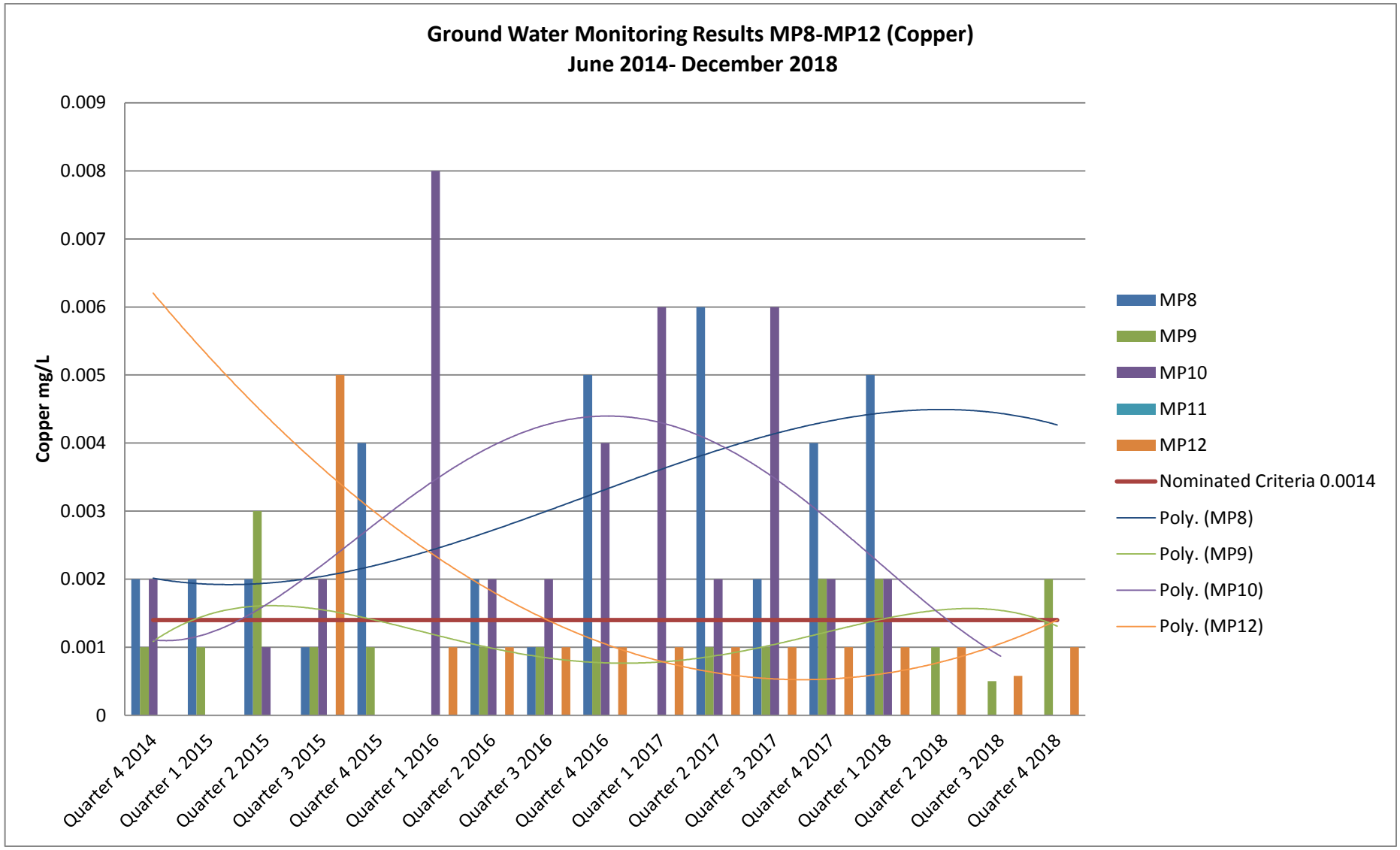

Ground Water Monitoring Results MP8-MP12 (Nitrate)
June 2014- December 2018
Nitrate mg/L
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP8
MP9
MP10
MP11
MP12
Nominated Criteria 0.7
Poly. (MP8)
Poly. (MP9)
Poly. (MP12)

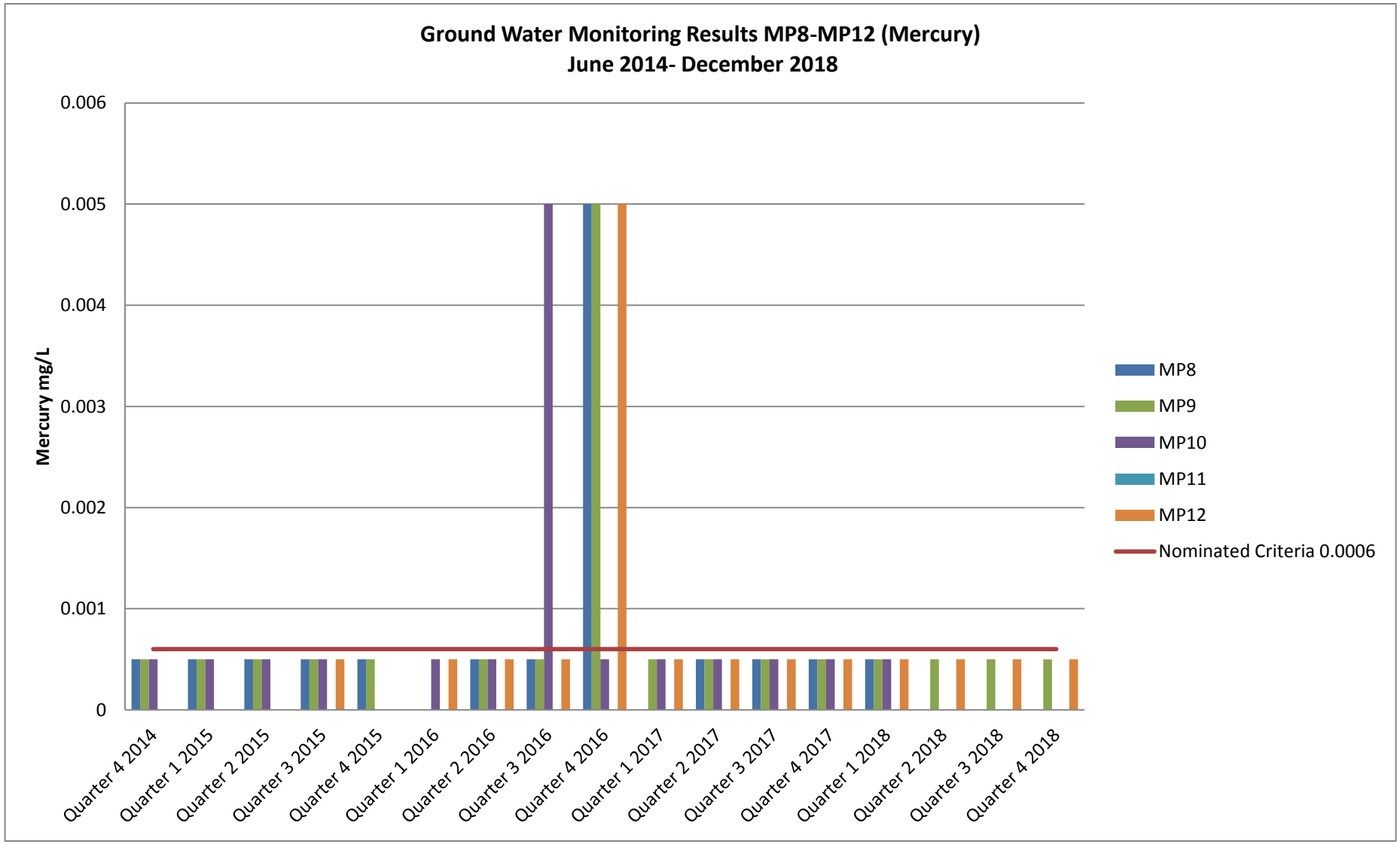

Ground Water Monitoring Results MP8-MP12 (Aluminium)
June 2014- December 2018
Aluminium mg/L
0.2
0.15
0.1
0.05
0
-0.05
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP8
MP9
MP10
MP11
MP12
Nominated Criteria 0.055
Poly. (MP8)
Poly. (MP9)
Poly. (MP10)
Poly. (MP12)

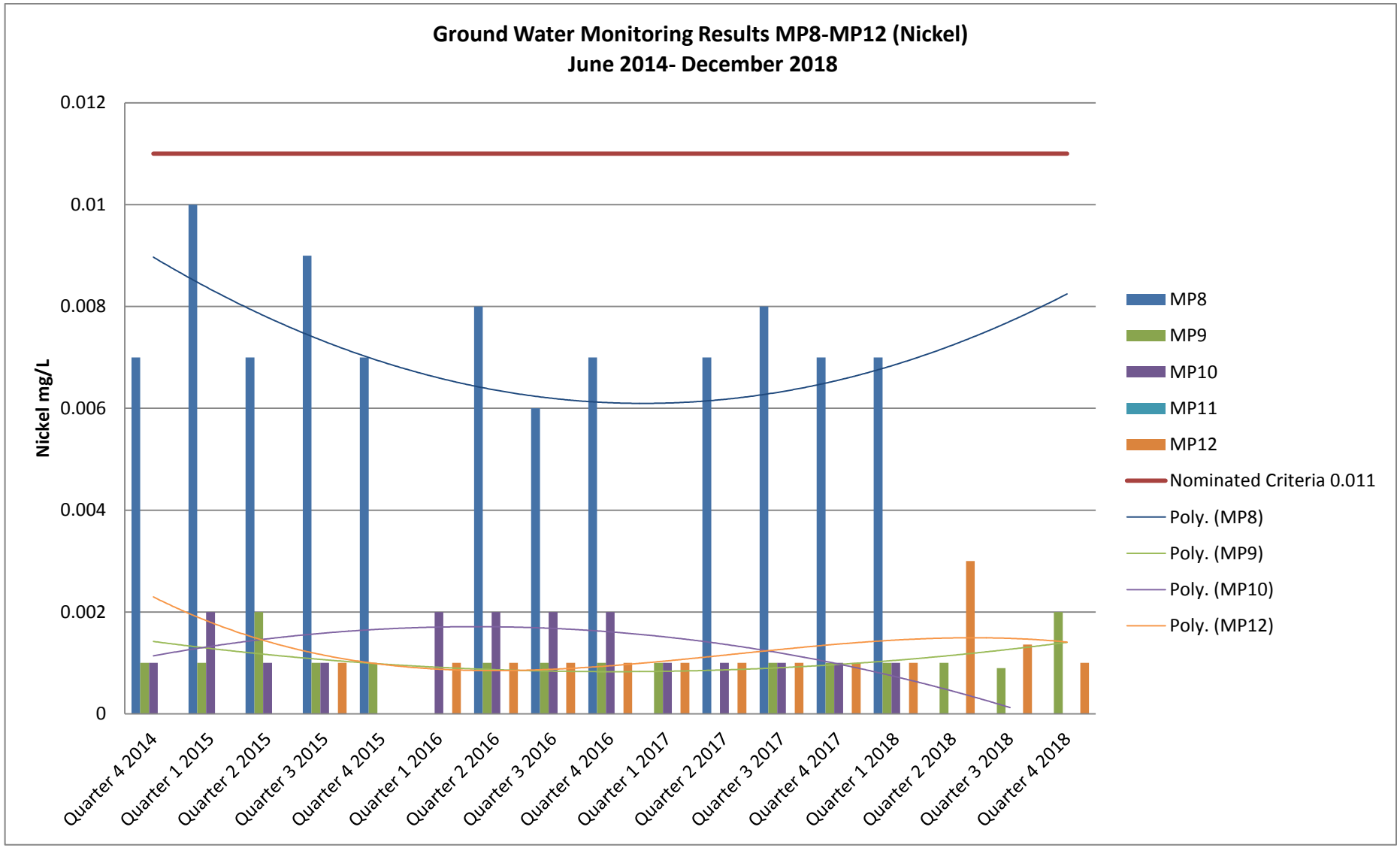

Ground Water Monitoring Results MP8-MP12 (Arsenic)
June 2014- December 2018
Arsenic mg/L
0.025
0.02
0.015
0.01
0.005
0
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP8
MP9
MP10
MP11
MP12
Nominated Criteria 0.024

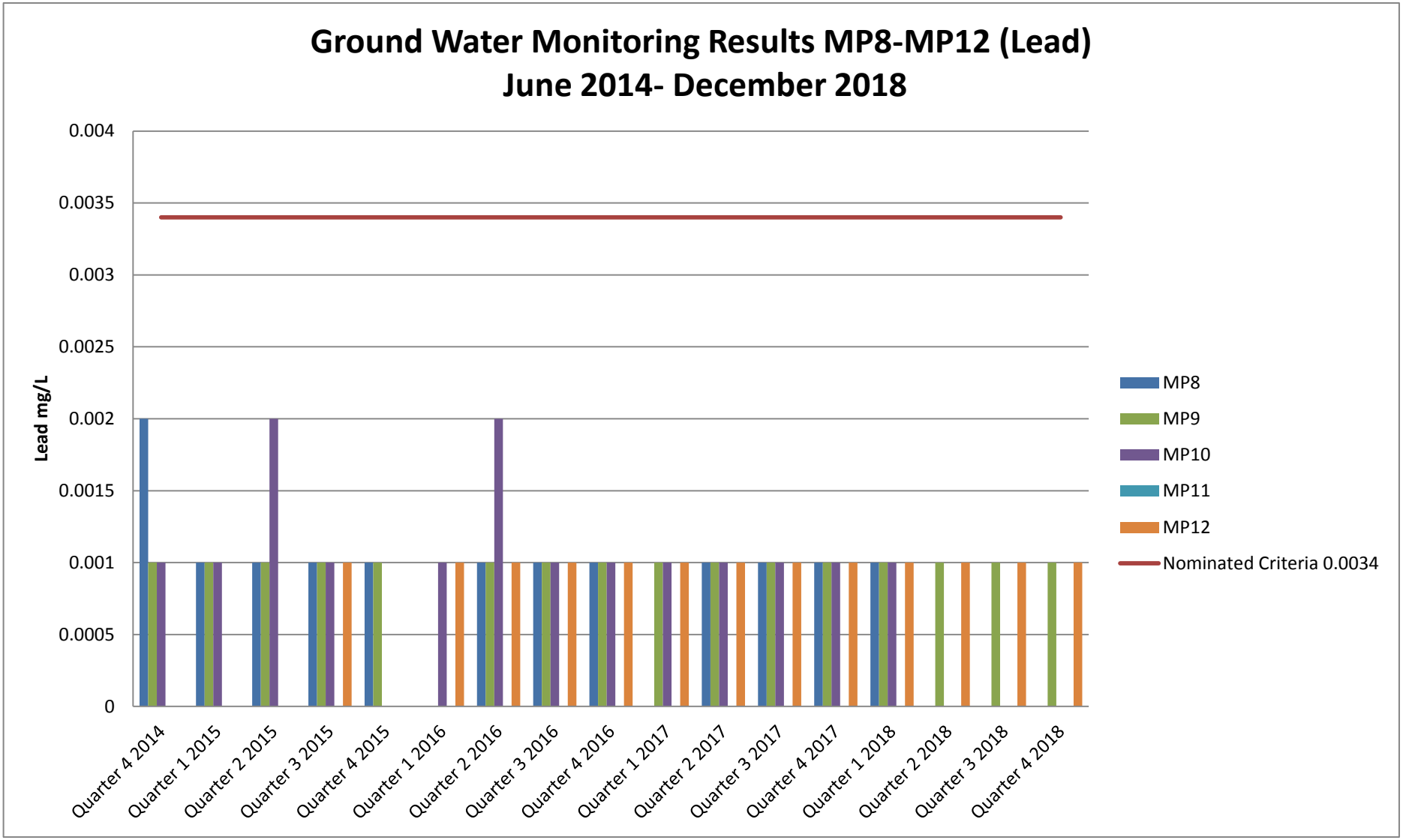

Ground Water Monitoring Results MP8-MP12 (Cadmium)
June 2014- December 2018
Cadmium mg/L
0.0012
0.001
0.0008
0.0006
0.0004
0.0002
0
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP8
MP9
MP10
MP11
MP12
Nominated Criteria 0.0002
Poly. (MP12)

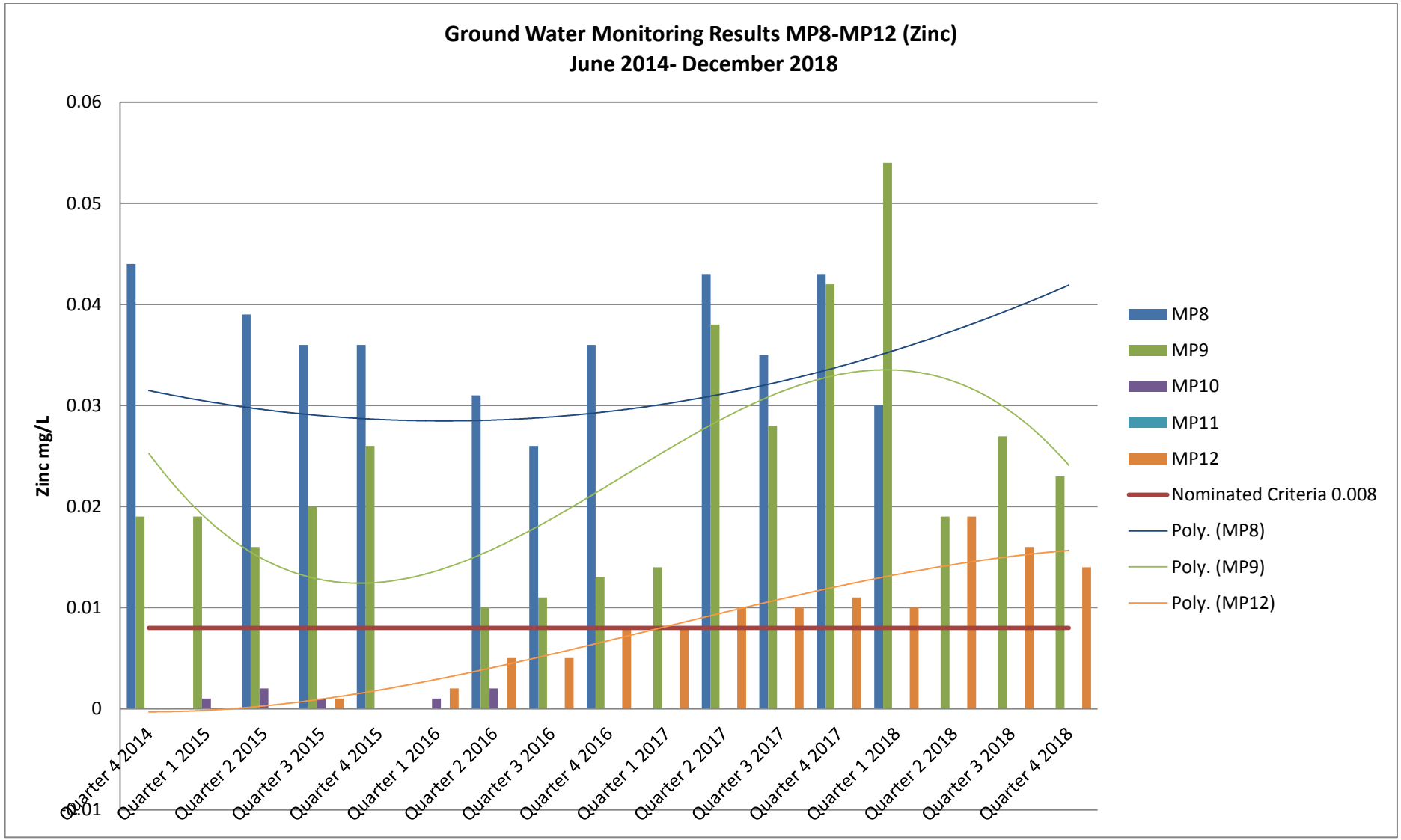

Ground Water Monitoring Results MP8-MP12 (Chromium)
June 2014- December 2018
Chromium mg/L
0.06
0.05
0.04
0.03
0.02
0.01
0
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
Axis Title
MP8
MP9
MP10
MP11
MP12
Nominated Criteria 0.05

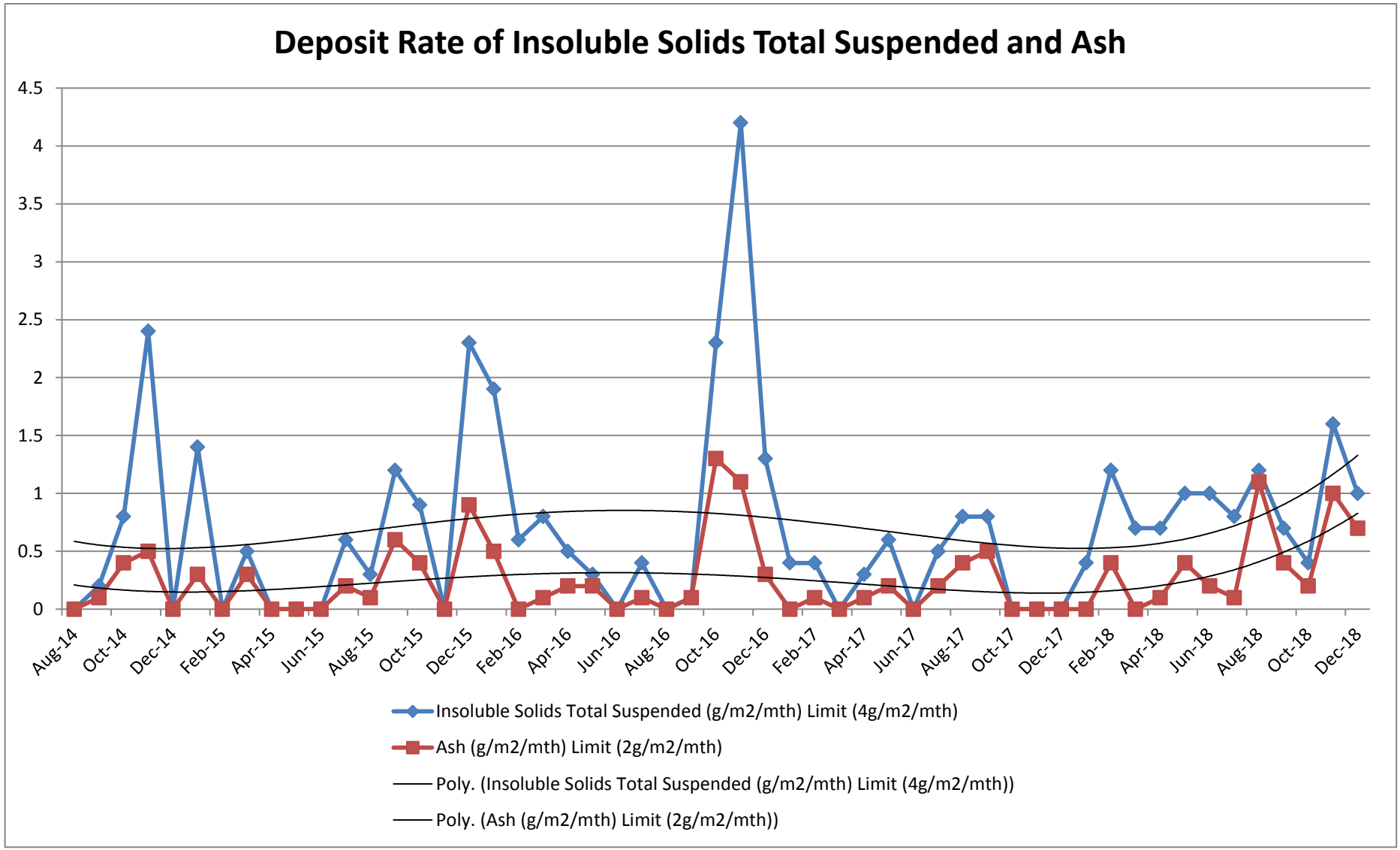

Ground Water Monitoring Results MP8-MP12 (Copper)
June 2014- December 2018
Copper mg/L
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP8
MP9
MP10
MP11
MP12
Nominated Criteria 0.0014
Poly. (MP8)
Poly. (MP9)
Poly. (MP10)
Poly. (MP12)

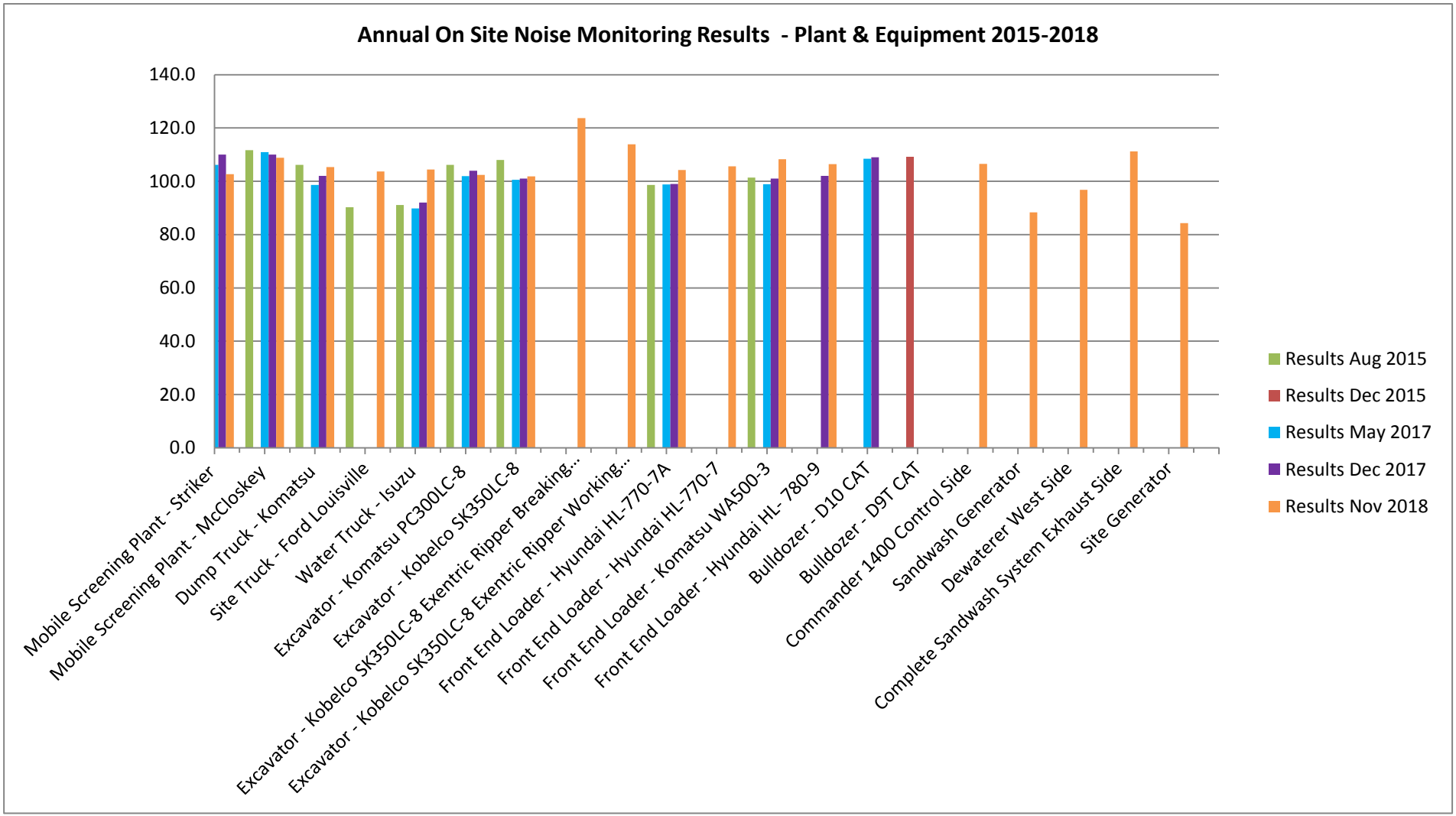

Ground Water Monitoring Results MP8-MP12 (Mercury)
June 2014- December 2018
Mercury mg/L
0.006
0.005
0.004
0.003
0.002
0.001
0
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP8
MP9
MP10
MP11
MP12
Nominated Criteria 0.0006


Ground Water Monitoring Results MP8-MP12 (Nickel)
June 2014- December 2018
Nickel mg/L
0.012
0.01
0.008
0.006
0.004
0.002
0
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP8
MP9
MP10
MP11
MP12
Nominated Criteria 0.011
Poly. (MP8)
Poly. (MP9)
Poly. (MP10)
Poly. (MP12)


Ground Water Monitoring Results MP8-MP12 (Lead)
June 2014- December 2018
Lead mg/L
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP8
MP9
MP10
MP11
MP12
Nominated Criteria 0.0034


Ground Water Monitoring Results MP8-MP12 (Zinc)
June 2014- December 2018
Zinc mg/L
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.01
Quarter 4 2014
Quarter 1 2015
Quarter 2 2015
Quarter 3 2015
Quarter 4 2015
Quarter 1 2016
Quarter 2 2016
Quarter 3 2016
Quarter 4 2016
Quarter 1 2017
Quarter 2 2017
Quarter 3 2017
Quarter 4 2017
Quarter 1 2018
Quarter 2 2018
Quarter 3 2018
Quarter 4 2018
MP8
MP9
MP10
MP11
MP12
Nominated Criteria 0.008
Poly. (MP8)
Poly. (MP9)
Poly. (MP12)


Deposit Rate of Insoluble Solids Total Suspended and Ash
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Aug-14
Oct-14
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15
Dec-15
Feb-16
Apr-16
Jun-16
Aug-16
Oct-16
Dec-16
Feb-17
Apr-17
Jun-17
Aug-17
Oct-17
Dec-17
Feb-18
Apr-18
Jun-18
Aug-18
Oct-18
Dec-18
Insoluble Solids Total Suspended (g/m2/mth) Limit (4g/m2/mth)
Ash (g/m2/mth) Limit (2g/m2/mth)
Poly. (Insoluble Solids Total Suspended (g/m2/mth) Limit (4g/m2/mth))
Poly. (Ash (g/m2/mth) Limit (2g/m2/mth))


Annual On Site Noise Monitoring Results - Plant & Equipment 2015-2018
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
Mobile Screening Plant - Striker
Mobile Screening Plant - McCloskey
Dump Truck - Komatsu
Site Truck - Ford Louisville
Water Truck - Isuzu
Excavator - Komatsu PC300LC-8
Excavator - Kobelco SK350LC-8
Excavator - Kobelco SK350LC-8 Exentric Ripper Breaking...
Excavator - Kobelco SK350LC-8 Exentric Ripper Working...
Front End Loader - Hyundai HL-770-7A
Front End Loader - Hyundai HL-770-7
Front End Loader - Komatsu WA500-3
Front End Loader - Hyundai HL- 780-9
Bulldozer - D10 CAT
Bulldozer - D9T CAT
Commander 1400 Control Side
Sandwash Generator
Dewaterer West Side
Complete Sandwash System Exhaust Side
Site Generator
Results Aug 2015
Results Dec 2015
Results May 2017
Results Dec 2017
Results Nov 2018