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LISBANE LANDFILL SITE- P0145/06A ANNUAL ENVIRONMENTAL MONITORING REPORT 2018

15047- Armagh Power Generation Ltd.

Version 00- January 2019



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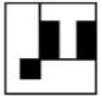
Appendices

Appendix A- Drawings

Appendix B- Monitoring Certificates

Appendix C- In-Waste Gas Monitoring Results

Appendix D- Settlement Assessment and Remaining Void Capacity



1 Introduction

1.1 Background

WDR & RT Taggart were commissioned by Armagh Power Generation Ltd. to carry out the annual report of the environmental monitoring undertaken at the Lisbane Landfill Site.

Lisbane Landfill Site is located on Auglish Road, approximately 2.3km to southeast of Tandragee, Co Armagh. The site covers an area of 3.5ha with the immediate surrounding area being primarily agricultural, open farmland with scattered farm buildings and dwellings.

This report collates the results from January to December 2018 for:

- Leachate;
- Surface Water;
- Groundwater, and
- Landfill Gas.

The monitoring of water quality and landfill gas at Lisbane is undertaken on a monthly basis as a requirement of PPC permit P0145/06A/V5.

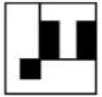
1.2 Scope and Objectives

The objectives of this report are to:

- Review the groundwater quality at the site for the period January to December 2018;
- Review the surface water quality at the site for the period January to December 2018;
- Review leachate quality at the site for the period January to December 2018; and
- Review the landfill gas at the site for the period January to December 2018.

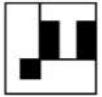
1.3 Terms of Reference

This document represents the Annual Environmental Monitoring Report for Lisbane Landfill Site submitted to the Northern Ireland Environment Agency (NIEA) in pursuance of PPC permit number P0145/06A/V5.



1.4 Limitations of the Review

Some samples were unable to be collected for various reasons, which are detailed in the monitoring section.



2 Site Characteristics

2.1 Site Location

Lisbane Landfill Site occupies a former steep sided quarry and is located on Aughlish Road, approximately 2.3km to southeast of Tandragee, Co Armagh (Irish Grid Reference J 04818 44636). The location is shown on Drawing 15047-500

2.2 Installation Details

The site no longer accepts waste and covers an area of approximately 30,000m². It was engineered as a landfill with a groundwater management system outside a composite lining system, which comprised of: Bentonite Enriched Soil (BES) and a Geo-Synthetic Clay Layer (GCL) overlain by a High-density Polyethylene (HDPE) liner.

Leachate drainage over the base of the site is also provided either in the form of herringbone drains or as a drainage blanket. Leachate is extracted via two leachate extraction points (LEP A and LEP B) and treated in the onsite leachate treatment plant. The site has gas exploitation with a single gas engine and flare installed.

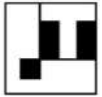
2.3 Geology

The Geological Survey Northern Ireland (GSNI) Bedrock Geology Map shows that the bedrock geology beneath the facility is Sandstone. The GSNI Superficial Geology Map shows that the superficial geology at the majority of the site is Diamicton.

2.4 Hydrogeology

The Groundwater Vulnerability Map for Northern Ireland indicates that the Strangford Group Formation is classed as a weakly permeable formation with soil of low leaching potential.

The overlying till is likely to represent low permeability, non-water bearing drift deposits which can be substantial in thickness and act as a barrier to any downwardly migrating contaminants.



2.5 Hydrology

The landfill has been operated under hydraulic containment since 2010, the maximum leachate level permitted at the site is 19.8mAOD (3m above the basal liner). The direction of groundwater flow in the greywacke sandstone aquifer is towards the site from the south, east and west.

2.6 Environmentally Sensitive Areas

An Area of Special Scientific Interest (ASSI) is located approximately 5km of the Site, this is Moyrourkan Lough ASSI which lies southwest of the Site, it is of special scientific interest because of its wetland flora and fauna.

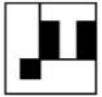
The wetland has a diverse range of communities ranging from open water to swamp and fen. Marginal grasslands and Carr woodland provide additional habit diversity. The open waters of the two small lakes support an extensive growth of floating broad-leaved pondweed, with localised yellow water-lily along the margins. A wide range of fen communities surround the lakes. The fen is dominated by bottle sedge and associated species are highly variable ranging from bogbean and water horsetail in the wetter pockets to sweet vernal-grass and Yorkshire fog in drier areas.

Moyrourkan Lough also supports a notable invertebrate community, including a number of locally distributed species of aquatic Coleoptera (water beetles) such as *Dytiscus circumcinctus*. The community also contains a number of relict species (isolated remnant of a once-abundant species) indicative of undisturbed rich fens, generally restricted to east and central Ireland.

It must be noted that this ASSI is not hydraulically linked to Lisbane Landfill Site. No other environmentally sensitive areas lie within 5 km of the installation.

2.7 Current Site Operations

The site accepted a variety of waste types, primarily non-hazardous, between 1997 and 2013. Currently the site is not accepting waste but leachate is treated on site within the leachate treatment plant. The quantity of leachate removed is shown in section 8.8 below. The first phase of capping at the site has been ongoing, with a concrete yard and a new leachate pump also installed at the site.



2.8 Topography

Lisbane Landfill site is set within an open and relatively undulating rural landscape. The landfill site is situated in a former flooded hard rock quarry (greywacke), which was excavated to approximately 30m deep below its eastern, and lowest, crest.

Topographically the Site falls towards the east, with an elevation drop across the Installation from approximately 65 mAOD in the west to about 35 mAOD in the east.

A topographical survey of Lisbane Landfill was carried out in January 2019. It is available in Appendix A. A settlement assessment and remaining void capacity report is available in Appendix D.



3 Leachate

3.1 Leachate Permit Conditions

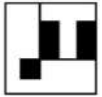
Leachate monitoring occurs at two locations; one before the leachate treatment plant (raw leachate) and one after the leachate treatment plant (treated leachate). Table S4.1 of the permit states that leachate levels must not exceed 3m above the cell base. Details of the leachate monitoring requirements are shown in Table 3.1 and 3.2 below.

Table 3.1 Leachate Level Monitoring Requirements

Monitoring Point	Limit	Frequency
LEP A	3m above base	Monthly
LEP B		

Table 3.2 Leachate Monitoring Requirements

Emission Point Reference	Parameter	Monitoring Frequency
MBR Inlet MBR Outlet	pH, Temperature, Electrical Conductivity, Ammoniacal Nitrogen, Chloride, BOD, COD, Total Suspended Solids	Monthly
MBR Inlet MBR Outlet	TON, TOC, Calcium, Magnesium, Sodium, Potassium, Manganese, Iron, Zinc, Nickel, Chromium, Cadmium, Arsenic, Mercury, Sulphate, Lead, Alkalinity, Mecoprop, Naphthalene, Phenols	Quarterly
MBR Inlet MBR Outlet	Hazardous Substances Screen	Annually



The locations of the groundwater, surface water, leachate and gas monitoring locations are shown in Figure 15047-003.

Leachate is currently managed through a leachate drainage, extraction and treatment system. The base of the landfill has been designed with falls to a leachate collection drain and sump. This allows any leachate to be efficiently carried to the drainage sump for extraction from the site via a submersible pump which is connected to an 80mm pumping main. Leachate is pumped from two points within the landfill to the leachate treatment plant.

Leachate samples are taken prior to entry to the treatment plant (raw) and following treatment within the on-site plant (treated).

3.2 Leachate Results and Discussion

The level of leachate in the landfill is monitored via two leachate extraction points; LEP A and LEP B. Table S4.1 of the permit specifies the limit of leachate to be 3m above the cell base.

The level of leachate within LEP A and LEP B throughout the monitoring period is expressed as metres above base and shown in Table 3.3.



Table 3.3 Leachate Levels (m)

Monitoring Point	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
LEP A	7.45	-	-	-	-	-	-	-	-	-	-	-
LEP B	6.12	3.51	3.05	1.73	8.99	7.41	0.43	0.17	0.19	0.3	0.45	0.49

Exceedances were recorded earlier in the year due to issues with the pump at LEP B, levels returned to within compliance later in the year. Please note that LEP A was unable to be dipped throughout the monitoring period.

3.2.1 Leachate Results

Please note that results from the Hazardous Substances Screen are available in Appendix B.

Table 3.4 Raw Leachate Results

Parameter	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Ammoniacal Nitrogen	mg/l	-	154	802	-	-	990	579	511	393	463	9.07	596
BOD	m/l	-	38.1	31.7	-	-	50.5	58.9	42	37.3	31.1	54.2	37.2
Chloride	mg/l	-	200	996	-	-	1,260	1,050	970	848	851	1,160	896
COD	mg/l	-	1,840	946	-	-	1,450	1,210	1,030	864	953	1,360	858
Electrical Conductivity	µS/cms	-	11,100	11,100	-	-	13,500	10,400	8,730	7,820	8,290	13,100	7,010
pH	Units	-	7.41	7.41	-	-	7.48	8.01	7.98	8.26	8.15	7.51	7.7
Suspended Solids	mg/l	-	8	21	-	-	12	24	50	55	50	12	36
Alkalinity	mg/l			4,440			4,810			3,000		5,380	
Arsenic	ug/l			21.2			21.2			16.9		28.3	
Cadmium	ug/l			<0.5			<0.08			<0.5		<0.5	



Calcium	mg/l			134			101			146		112	
Chromium	ug/l			119			87.7			113		159	
Iron	mg/l			7.27			6.27			5.96		7.31	
Lead	ug/l			1.93			1.58			1.03		2.25	
Magnesium	mg/l			63.9			61			54.4		60.4	
Manganese	ug/l			1020			998			759		943	
Mecoprop	ug/l			22.1			27.8			0.489		38	
Mercury	ug/l			<0.02			<0.01			<0.02		0.0303	
Naphthalene	ug/l			0.106			1.59			<0.5		0.0666	
Nickel	ug/l			93.4			90.7			78.4		115	
Phenol	mg/l			<0.01			<0.01			<0.002		<0.002	
Potassium	mg/l			396			320			372		470	
Sodium	mg/l			833			626			651		1030	
Sulphate	mg/l			47.9			44.6			13		<25.00	
TOC	mg/l			366			477			333		454	
TON	mg/l			1.15			0.38			1.53		<0.08	
Zinc	ug/l			49			38.7			65.6		82.3	

*Raw Leachate unable to be collected in January, April and May.

Table 3.5 Treated Leachate Results

Parameter	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Ammoniacal Nitrogen	mg/l	0.58	4.28	13.2	54.6	27.6	7.67	0.55	0.2	0.45	0.58	1.13	3.57
BOD	m/l	103	5.04	<1	46.8	15.3	10.5	6.32	3.08	4.06	3.46	1.65	3.67
Chloride	mg/l	196	192	950	963	970	944	1,100	1,170	1,160	1,190	1,150	1,290
COD	mg/l	928	914	975	1,500	1,270	1,290	1,210	1,200	1,100	1,090	972	910
Electrical Conductivity	µS/cms	9,290	9,170	9,440	10,200	9,740	11,000	11,600	11,500	11,500	11,200	11,400	11,000
pH	Units	7.15	7.56	8.27	9	8.94	8.93	8.59	8.46	7.09	6.53	6.77	6.91



Suspended Solids	mg/l	116	16	100	892	264	31	58	35	38	11	18	12
Alkalinity	mg/l			415			1440			301		232	
Arsenic	ug/l			18.2			27.5			22.5		24.3	
Cadmium	ug/l			<0.5			0.28			<0.5		<0.5	
Calcium	mg/l			43			54.6			92.7		94.5	
Chromium	ug/l			202			156			215		192	
Iron	mg/l			9.46			8.74			9.38		8.53	
Lead	ug/l			4.24			3.83			4.05		4.43	
Magnesium	mg/l			16.4			18.5			43.4		54	
Manganese	ug/l			398			169			63		167	
Mecoprop	ug/l			0.41			1.58			0.129		<0.04	
Mercury	ug/l			<0.02			<0.01			<0.02		0.0381	
Naphthalene	ug/l			<0.01			0.0295			<0.5		0.0253	
Nickel	ug/l			112			114			123		128	
Phenol	mg/l			<0.002			<0.01			<0.002		<0.002	
Potassium	mg/l			450			422			471		498	
Sodium	mg/l			1810			2270			1670		1800	
Sulphate	mg/l			17.2			85.6			120		109	
TOC	mg/l			362			464			414		369	
TON	mg/l			860			682			2.4		2.35	
Zinc	ug/l			285			133			205		293	

3.3 Leachate Conclusions

Results for raw leachate remained fairly consistent throughout the year, parameters showing the most differences throughout the year were suspended solids and ammoniacal nitrogen.

Treated leachate results were also relatively consistent, with ammoniacal nitrogen, BOD and suspended showing the most variations during the year.

Compared to previous years, raw leachate has shown an overall decrease across measured parameters, while the main differences shown in treated leachate were found in ammoniacal nitrogen and suspended solids.

4 Groundwater

4.1 Groundwater Permit Conditions

There are a total of thirteen groundwater monitoring points, with eight located up-gradient (BH1, BH2, BH4, BH7A, BH9, BH10, BH11, BH12, and BH13) and five down-gradient (BH5, BH5A, BH6, BH6A and BH8) of the site.

The required groundwater monitoring schedule is shown in Tables 4.1 and 4.2 below.

Table 4.1 Groundwater Monitoring Requirements

Emission Point Reference	Parameter	Control Limit	Trigger Limit	Monitoring Frequency
BH1, BH2, BH4, BH5, BH5A BH6, BH6A, BH7A, BH8, BH9, BH10, BH12, BH13 and GWL	Chloride	150 mg/l	250 mg/l	Monthly
	Ammoniacal Nitrogen	0.25 mg/l	1 mg/l	
BH1, BH2, BH4, BH5, BH5A BH6, BH6A, BH7A, BH8, BH9, BH10, BH12, BH13 and GWL	Nickel	19 ug/l	20 ug/l	Quarterly
	Cadmium	1 µg/l	1 µg/l	
	Mercury	0.1 µg/l	0.1 µg/l	
	Zinc	800 µg/l	1000 µg/l	
	Mecoprop	20 µg/l	20 µg/l	
	Naphthalene	10 µg/l	10 µg/l	
	Phenol	20 µg/l	30 µg/l	

Table 4.2 Other Groundwater Monitoring Requirements

Monitoring point reference	Parameter	Monitoring Frequency
BH1, BH2, BH4, BH5, BH5A BH6, BH6A, BH7A, BH8, BH9, BH10, BH12, BH13	pH Water Level Temperature COD Electrical Conductivity	Monthly
BH1, BH2, BH4, BH5, BH5A BH6, BH6A, BH7A, BH8, BH9, BH10, BH12, BH13	Alkalinity TON TOC BOD Calcium Magnesium Sodium Potassium Manganese Iron Chromium Lead Arsenic Sulphate	Quarterly
BH1, BH2, BH4, BH5, BH5A BH6, BH6A, BH7A, BH8, BH9, BH10, BH12, BH13	Hazardous Substances Screen	Annually

4.2 Groundwater Results and Conditions

Tables 4.4 to 4.15 below show the results for groundwater sampling undertaken from January to December 2018. The results are screened against limits listed in Schedule 4 of the permit; any exceedances will be highlighted in red, with any exceedances of EQS/UKDWS limits highlighted in blue. Groundwater levels throughout the year are shown in Table 4.3

Please note that BH10 was dry throughout the monitoring period and unable to be sampled. Results of the Hazardous Substances Screen are available in Appendix B. Please note that BH5A was longer required to be sampled from August due to permit changes. BH7A was unable to be sampled from June and BH12 from November on as they were blocked.



Table 4.3 Groundwater Levels

Monitoring Point	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
BH1	17.9	17.9	18.1	18	18.1	17.1	18.2	18.4	18.5	18.6	18.2	18
BH2	22.3	22.8	23.4	23.5	23.55	23.5	23.6	23.55	23.6	23.5	23.5	23.2
BH4	4.1	4	5.4	5.8	5.85	7.1	6.2	5.4	6.1	5.8	6	5.2
BH5	3.4	3.7	4.6	4.8	4.9	5.1	5.2	4.65	5.1	4.9	5.1	4.6
BH5A	4.4	4.5	5	5.1	5.1	5.3	5.4	5.15	5.2	5.1	5.1	4.9
BH6	3.55	3.8	4	4.4	4.35	4.5	4.6	4.4	4.3	4.3	4.4	4.3
BH6A	3.9	4.1	4.7	4.75	4.7	4.9	5.1	4.8	5.3	5.0	4.9	4.7
BH7A	15.2	16.4	17.2	17.25	17.2	-	-	-	-	-	-	-
BH8	10.45	11	11.9	12	12.1	12.5	12.6	12.1	12.1	12.1	12	11.4
BH9	16.3	16.7	17.1	17.3	17.3	17.4	17.6	17.3	17.4	17.3	17.1	16.8
BH10	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3
BH12	-	8.0	9.5	10.4	12.05	15.5	16.5	16.8	16.9	-	-	-
BH13	9.45	9.8	10.5	10.5	10.55	10.7	10.6	10.55	10.6	10.4	10.7	10.1

*Groundwater levels are measured from the top of the borehole cover and expressed as mAOD.



Table 4.4 BH1 Results

Parameter	Limit	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Ammoniacal Nitrogen	1	mg/l	<0.11	<0.11	-	<0.11	<0.2	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.2
Chloride	250	mg/l	11.5	11.1	-	10.1	9.45	14.2	35.9	11	10.8	34.6	10.8	11.5
COD		mg/l	<25	<25	-	51	118	<25	59	31	51	50	<25	<25.
Electrical Conductivity		µS/cm	539	523	-	523	521	517	917	518	518	828	511	532
pH		Units	7.67	7.66	-	7.75	7.53	7.61	7.05	7.61	7.56	7.27	7.53	7.57
Alkalinity		mg/l			-			214			212		212	
Arsenic		ug/l			-			1.56			4.63		4.5	
BOD		ug/l			-			<1			<1		<1	
Cadmium	1	ug/l			-			<0.08			<0.5		<0.5	
Calcium		ug/l			-			62.2			60.8		62.3	
Chromium		ug/l			-			<1			5.28		7.05	
Iron		mg/l			-			<0.019			4.13		4.59	
Lead		ug/l			-			<0.2			1.72		2.89	
Magnesium		mg/l			-			24.4			22.6		26.7	
Manganese		ug/l			-			<3			63.7		78.8	
Mecoprop	20	ug/l			-			<0.01			<0.01		<0.04	
Mercury	0.1	ug/l			-			<0.01			<0.02		0.0357	
Naphthalene	10	ug/l			-			<0.01			<0.01		0.0186	
Nickel	20	ug/l			-			<0.4			6.33		7.6	
Phenol	0.03	mg/l			-			<0.002			<0.002		<0.002	
Potassium		mg/l			-			1.17			1.46		1.96	
Sodium		mg/l			-			16.5			13.8		15.4	
Sulphate		mg/l			-			84			66.2		48.7	
TOC		mg/l			-			4.7			2.79		1.39	
TON		mg/l			-			0.59			0.63		0.33	
Zinc	1000	ug/l			-			<1			9.7		18	



Table 4.5 BH2 Results

Parameter	Limit	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Ammoniacal Nitrogen	1	mg/l	<0.11	-	-	<0.11	<0.2	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.2
Chloride	250	mg/l	16	-	-	17.6	15.5	16	16.8	16.3	15.8	16.2	20.9	34.1
COD		mg/l	<25	-	-	45	<25	<25	<25	<25	<25	<25	<25	<25
Electrical Conductivity		µS/cm	716	-	-	725	706	671	667	669	656	639	769	790
pH		Units	7.46	-	-	7.24	7.44	7.37	7.36	7.45	7.3	7.35	7.4	7.51
Alkalinity		mg/l			-			181			192		168	
Arsenic		ug/l			-			60.9			87.4		78.3	
BOD		ug/l			-			<1			1.18		1.3	
Cadmium	1	ug/l			-			<0.08			<0.5		<0.5	
Calcium		ug/l			-			76.3			84.4		86.4	
Chromium		ug/l			-			<1			<3		<3	
Iron		mg/l			-			<0.019			1.78		1.08	
Lead		ug/l			-			<0.2			2.39		3.95	
Magnesium		mg/l			-			34			29.5		35.8	
Manganese		ug/l			-			18.8			76.7		208	
Mecoprop	20	ug/l			-			<0.01			<0.01		<0.04	
Mercury	0.1	ug/l			-			<0.01			<0.02		<0.02	
Naphthalene	10	ug/l			-			<0.01			<0.01		<0.01	
Nickel	20	ug/l			-			1.85			4.6		5.81	
Phenol	0.03	mg/l			-			<0.002			<0.002		<0.002	
Potassium		mg/l			-			3.49			2.99		3.68	
Sodium		mg/l			-			20.2			16.8		20.8	
Sulphate		mg/l			-			152			127		185	
TOC		mg/l			-			4.7			4.52		5.18	
TON		mg/l			-			0.12			0.23		4.4	
Zinc	1000	ug/l			-			2.12			8.31		10.9	



Table 4.6 BH4 Results

Parameter	Limit	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Ammoniacal Nitrogen	1	mg/l	<0.11	<0.11	<0.11	<0.11	<0.2	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.2
Chloride	250	mg/l	18.7	18.5	22.5	18	15.8	16.8	19.1	19.4	19.9	15.3	12.8	21.5
COD		mg/l	25	<25	<25	<25	<25	<25	<25	32	31	<25	<25	<25
Electrical Conductivity		µS/cm	1120	1130	1130	1120	1100	1080	1010	1010	1050	1040	1050	1150
pH		Units	6.74	6.97	7.1	6.83	6.9	6.92	6.95	7.02	6.88	6.96	6.86	7.14
Alkalinity		mg/l			338			329			288		260	
Arsenic		ug/l			<2			0.768			<2		<2	
BOD		ug/l			<1.00			<1			<1		<1	
Cadmium	1	ug/l			<0.5			<0.08			<0.5		<0.5	
Calcium		ug/l			211			147			160		171	
Chromium		ug/l			4.06			<1			4.27		<3	
Iron		mg/l			2.49			<0.019			3.18		0.577	
Lead		ug/l			<1			<0.2			<1		<1	
Magnesium		mg/l			53			52.4			40.9		37	
Manganese		ug/l			193			315			264		312	
Mecoprop	20	ug/l			<0.02			<0.01			<0.01		<0.04	
Mercury	0.1	ug/l			<0.02			<0.01			<0.02		<0.02	
Naphthalene	10	ug/l			<0.01			<0.01			0.0135		<0.01	
Nickel	20	ug/l			5.42			3.05			6.37		2.6	
Phenol	0.03	mg/l			<0.025			<0.002			<0.002		<0.002	
Potassium		mg/l			4.74			4.11			4.54		5.75	
Sodium		mg/l			20.3			22.7			15		10.5	
Sulphate		mg/l			281			247			268		308	
TOC		mg/l			1.72			3.36			3.21		2.45	
TON		mg/l			<0.08			0.08			<0.08		2	
Zinc	1000	ug/l			6.48			1.38			7.41		6.57	



Table 4.7 BH5 Results

Parameter	Limit	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Ammoniacal Nitrogen	1	mg/l	<0.11	<0.11	<0.11	<0.11	<0.2	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	0.291
Chloride	250	mg/l	17.9	16.7	45.4	51.9	60.4	40.3	86.6	20.9	32.9	25.3	26.3	21.2
COD		mg/l	<25	<25	35	49	42	<25	42	<25	48	33	<25	<25
Electrical Conductivity		µS/cm	469	435	807	915	965	859	1170	851	1040	874	921	714
pH		Units	6.87	7.24	7.08	7.04	7	7.07	6.96	7.01	7.13	7.02	7.05	7.34
Alkalinity		mg/l			165			182			178		160	
Arsenic		ug/l			<2			0.593			<2		2.49	
BOD		ug/l			<1			<1			<1		<1	
Cadmium	1	ug/l			<0.5			<0.08			<0.5		<0.5	
Calcium		ug/l			131			101			148		132	
Chromium		ug/l			3.02			<1			3.94		5.81	
Iron		mg/l			1.95			<0.019			2.7		4.24	
Lead		ug/l			2.04			<0.2			2.12		4.2	
Magnesium		mg/l			23			26.9			33.4		34	
Manganese		ug/l			148			7.89			252		475	
Mecoprop	20	ug/l			<0.02			0.013			<0.01		<0.04	
Mercury	0.1	ug/l			<0.02			<0.01			<0.02		0.0963	
Naphthalene	10	ug/l			<0.01			<0.01			0.0549		<0.01	
Nickel	20	ug/l			11.5			6.64			15.6		17.9	
Phenol	0.03	mg/l			<0.025			<0.002			<0.002		<0.002	
Potassium		mg/l			8.5			7.99			11.1		9.48	
Sodium		mg/l			31			30.6			33.5		30.6	
Sulphate		mg/l			172			191			306		277	
TOC		mg/l			13.5			6.71			15.7		9.82	
TON		mg/l			4.77			3.76			4.84		5.4	
Zinc	1000	ug/l			10.9			2.37			13.1		25.1	



Table 4.8 BH5A Results

Parameter	Limit	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18
Ammoniacal Nitrogen	1	mg/l	6.14	7.26	12.9	14.7	15	16.6	14.5
Chloride	250	mg/l	47.5	47.7	100	106	96.5	70.4	61.9
COD		mg/l	63	56	36	55	48	<25	48
Electrical Conductivity		µS/cm	1450	1320	1670	1730	1640	537	1460
pH		Units	6.6	6.97	7.17	6.94	6.98	6.93	6.93
Alkalinity		mg/l			579			484	
Arsenic		ug/l			<2			<0.5	
BOD		ug/l			<1			<1	
Cadmium	1	ug/l			<0.5			0.121	
Calcium		ug/l			225			136	
Chromium		ug/l			4.05			<1	
Iron		mg/l			1.62			<0.019	
Lead		ug/l			1.2			<0.2	
Magnesium		mg/l			55.1			43.5	
Manganese		ug/l			857			895	
Mecoprop	20	ug/l			0.9			0.353	
Mercury	0.1	ug/l			<0.02			<0.01	
Naphthalene	10	ug/l			<0.01			<0.01	
Nickel	20	ug/l			48			35	
Phenol	0.03	mg/l			<0.025			<0.002	
Potassium		mg/l			25.3			25.4	
Sodium		mg/l			93.5			81.3	
Sulphate		mg/l			173			215	
TOC		mg/l			11.1			4.83	
TON		mg/l			3.07			2.53	
Zinc	1000	ug/l			14.8			3.38	

*Not required to be sampled from June on, due to a Permit variation.



Table 4.9 BH6 Results

Parameter	Limit	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Ammoniacal Nitrogen	1	mg/l	<0.11	0.79	1.01	0.4	<0.2	0.72	3.03	2.38	0.71	0.21	-	1.09
Chloride	250	mg/l	23.8	28.4	25.5	25.7	22.9	28.9	35.4	26.1	29	28	-	29.9
COD		mg/l	54	1350	-	61	81	-	85	72	38	46	-	51
Electrical Conductivity		µS/cm	548	669	638	1030	1040	1270	1250	1240	1310	1280	-	983
pH		Units	7.1	7.55	7.54	7.33	7.23	7.37	7.19	7.1	7.35	7.15	-	7.3
Alkalinity		mg/l			131			218			223		-	
Arsenic		ug/l			41.5			7.12			136		-	
BOD		ug/l			37.7			127			31		-	
Cadmium	1	ug/l			<3			<0.08			<5.5		-	
Calcium		ug/l			157			163			351		-	
Chromium		ug/l			217			<1			194		-	
Iron		mg/l			167			0.0879			103		-	
Lead		ug/l			112			<0.2			345		-	
Magnesium		mg/l			92.4			54.4			254		-	
Manganese		ug/l			8330			6200			24700		-	
Mecoprop	20	ug/l			<0.02			<0.01			<0.01		-	
Mercury	0.1	ug/l			<0.02			<0.01			0.34		-	
Naphthalene	10	ug/l			0.014			0.0591			<0.1		-	
Nickel	20	ug/l			386			11.3			1660		-	
Phenol	0.03	mg/l			<0.025			<0.002			<0.002		-	
Potassium		mg/l			12.1			8.94			20.7		-	
Sodium		mg/l			18.6			27.8			22.1		-	
Sulphate		mg/l			152			455			538		-	
TOC		mg/l			235			435			501		-	
TON		mg/l			1.23			0.29			0.57		-	
Zinc	1000	ug/l			606			<1			1750		-	



Table 4.10 BH6A Results

Parameter	Limit	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Ammoniacal Nitrogen	1	mg/l	<0.11	<0.11	<0.11	<0.11	<0.2	0.36	0.18	0.43	0.16	0.15	0.54	0.344
Chloride	250	mg/l	24	25.2	27.1	26.9	32	43.5	44.2	42	34.2	34.2	26.6	29.6
COD		mg/l	<25	<25	<25	<25	<25	44	31	145	254	61	1960	<25
Electrical Conductivity		µS/cm	695	662	626	638	758	969	953	1020	954	930	944	954
pH		Units	6.67	7	7.14	6.95	6.99	6.81	7.01	7.06	7.11	6.98	6.94	7.03
Alkalinity		mg/l			128			208			225		213	
Arsenic		ug/l			8.62			<0.5			2.94		6.89	
BOD		ug/l			<1			<1			<1		<1	
Cadmium	1	ug/l			<0.5			<0.08			<0.5		<0.5	
Calcium		ug/l			110			118			133		119	
Chromium		ug/l			70.4			<1			56.5		51.2	
Iron		mg/l			38.1			<0.019			24.8		22.3	
Lead		ug/l			49.7			<0.2			7.51		30.7	
Magnesium		mg/l			21.6			30.7			27.7		30.5	
Manganese		ug/l			884			593			220		790	
Mecoprop	20	ug/l			<0.02			0.148			0.084		<0.04	
Mercury	0.1	ug/l			0.138			<0.01			0.0203		0.0839	
Naphthalene	10	ug/l			<0.01			<0.01			<0.01		<0.01	
Nickel	20	ug/l			46.4			7.99			34		34	
Phenol	0.03	mg/l			<0.025			<0.002			<0.002		<0.002	
Potassium		mg/l			6.61			5.55			6.31		8.39	
Sodium		mg/l			23.4			37.6			33.9		35.7	
Sulphate		mg/l			150			209			203		250	
TOC		mg/l			6.19			7.78			7.61		60.8	
TON		mg/l			2			4.29			2.71		4.08	
Zinc	1000	ug/l			214			3.83			30.5		108	



Table 4.11 BH7A Results

Parameter	Limit	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18
Ammoniacal Nitrogen	1	mg/l	<0.11	<0.11	<0.11	1.23	1.36
Chloride	250	mg/l	21.3	39.1	39.8	51.4	71.2
COD		mg/l	27	32	36	85	71
Electrical Conductivity		µS/cm	943	1080	1380	1580	1600
pH		Units	6.62	6.69	6.71	6.87	6.75
Alkalinity		mg/l			128		
Arsenic		ug/l			<2		
BOD		ug/l			<1		
Cadmium	1	ug/l			<0.5		
Calcium		ug/l			233		
Chromium		ug/l			<3		
Iron		mg/l			0.334		
Lead		ug/l			<1		
Magnesium		mg/l			53.8		
Manganese		ug/l			30		
Mecoprop	20	ug/l			<0.02		
Mercury	0.1	ug/l			<0.02		
Naphthalene	10	ug/l			0.0101		
Nickel	20	ug/l			3.93		
Phenol	0.03	mg/l			<0.025		
Potassium		mg/l			27.1		
Sodium		mg/l			36.3		
Sulphate		mg/l			515		
TOC		mg/l			13.9		
TON		mg/l			18.6		
Zinc	1000	ug/l			9.17		

*Unable to be sampled from June on



Table 4.12 BH8 Results

Parameter	Limit	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Ammoniacal Nitrogen	1	mg/l	<0.11	<0.11	<0.11	<0.11	<0.2	<0.11	<0.11	-	-	<0.11	<0.11	<0.2
Chloride	250	mg/l	22.9	15.6	14.9	5.92	20.8	76.2	60.9	-	-	33.6	31.2	11.4
COD		mg/l	<25	<25	<25	<25	<25	<25	<25	-	-	<25	<25	<25
Electrical Conductivity		µS/cm	1040	1010	869	717	1060	1390	1260	-	-	998	1150	1050
pH		Units	7.07	7.3	7.41	7.6	7.17	7.05	7.11	-	-	7.26	7.32	7.26
Alkalinity		mg/l			147			396			-		244	
Arsenic		ug/l			<2			0.765			-		2.01	
BOD		ug/l			<1			<1			-		1.11	
Cadmium	1	ug/l			<0.5			<0.08			-		<0.5	
Calcium		ug/l			191			176			-		170	
Chromium		ug/l			<3			<1			-		3.61	
Iron		mg/l			0.818			<0.019			-		2.75	
Lead		ug/l			1.1			<0.2			-		3.17	
Magnesium		mg/l			48.1			54.4			-		53.7	
Manganese		ug/l			3170			<3			-		2600	
Mecoprop	20	ug/l			<0.02			0.143			-		<0.04	
Mercury	0.1	ug/l			<0.02			<0.01			-		<0.02	
Naphthalene	10	ug/l			<0.01			<0.01			-		1.92	
Nickel	20	ug/l			8.42			9.46			-		15.2	
Phenol	0.03	mg/l			<0.025			<0.002			-		<0.002	
Potassium		mg/l			1.86			1.98			-		2.3	
Sodium		mg/l			22.3			31.1			-		22.1	
Sulphate		mg/l			287			277			-		365	
TOC		mg/l			4.18			2.93			-		2.26	
TON		mg/l			0.23			<0.08			-		0.35	
Zinc	1000	ug/l			16.1			1.21			-		40.1	



Table 4.13 BH9 Results

Parameter	Limit	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Ammoniacal Nitrogen	1	mg/l	0.55	<0.11	0.77	1.49	2.08	3.78	2.83	2.23	2.85	1.69	1.71	0.618
Chloride	250	mg/l	56.4	95	66.1	66.6	73.7	97.4	107	69.4	62.7	84.4	67.9	66.5
COD		mg/l	35	86	66	74	62	48	34	127	41	59	40	46
Electrical Conductivity		µS/cm	1360	1910	1610	1550	1610	1670	1650	1820	1640	1810	1730	1670
pH		Units	6.92	6.93	6.87	6.91	6.82	6.86	6.86	6.7	6.97	6.75	6.88	6.89
Alkalinity		mg/l			319			434			331		358	
Arsenic		ug/l			4.05			<0.5			<2		3.85	
BOD		ug/l			<2			<1			<1		<1	
Cadmium	1	ug/l			<0.5			<0.08			<0.5		<0.5	
Calcium		ug/l			246			169			213		207	
Chromium		ug/l			18.3			<1			4.16		15.3	
Iron		mg/l			13.4			<0.019			2.93		12.8	
Lead		ug/l			5.72			<0.2			1.91		5.21	
Magnesium		mg/l			61			57.1			56.4		66.4	
Manganese		ug/l			535			396			465		883	
Mecoprop	20	ug/l			0.14			0.135			0.165		<0.04	
Mercury	0.1	ug/l			<0.02			<0.01			<0.02		0.0288	
Naphthalene	10	ug/l			<0.01			<0.01			0.0329		<0.01	
Nickel	20	ug/l			31.2			20.1			19		30.3	
Phenol	0.03	mg/l			<0.025			<0.002			<0.002		<0.002	
Potassium		mg/l			15.7			19.9			16.9		17.3	
Sodium		mg/l			63.7			81.6			65.9		74	
Sulphate		mg/l			466			248			447		492	
TOC		mg/l			19.8			10.5			9.21		16.8	
TON		mg/l			13			12.1			9.64		8.3	
Zinc	1000	ug/l			20.7			1.15			6.68		20.2	



Table 4.14 BH12 Results

Parameter	Limit	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Ammoniacal Nitrogen	1	mg/l	<0.11	<0.11	<0.11	<0.11	<0.2	<0.11	<0.11	<0.11	<0.11
Chloride	250	mg/l	39	37.6	35	34.6	37.1	46.5	11	36.4	31.3
COD		mg/l	33	29	<25	37	<25	26	36	55	59
Electrical Conductivity		µS/cm	819	865	858	864	945	1160	412	919	836
pH		Units	6.71	6.9	7.07	7.09	6.98	6.9	8.02	6.95	7.08
Alkalinity		mg/l			344			427			299
Arsenic		ug/l			<2			<0.5			<2
BOD		ug/l			<1			<1			<1
Cadmium	1	ug/l			<0.5			<0.08			<0.5
Calcium		ug/l			144			144			114
Chromium		ug/l			<3			<1			8.3
Iron		mg/l			1.28			<0.019			7.24
Lead		ug/l			1.11			<0.2			3.48
Magnesium		mg/l			38.2			53.2			35.6
Manganese		ug/l			41.5			36.7			184
Mecoprop	20	ug/l			<0.02			<0.01			<0.01
Mercury	0.1	ug/l			0.0226			<0.01			<0.02
Naphthalene	10	ug/l			<0.01			<0.01			0.0502
Nickel	20	ug/l			3.48			<0.4			9.95
Phenol	0.03	mg/l			<0.025			<0.002			<0.002
Potassium		mg/l			2.47			2.76			2.34
Sodium		mg/l			23.9			31			21.9
Sulphate		mg/l			86.8			156			114
TOC		mg/l			9.09			2.94			11.8
TON		mg/l			1			<0.08			0.45
Zinc	1000	ug/l			6.58			<1			17

*Inaccessible from October on



Table 4.15 BH13 Results

Parameter	Limit	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Ammoniacal Nitrogen	1	mg/l	<0.11	<0.11	<0.11	<0.11	0.249	<0.11	0.86	<0.11	<0.11	<0.11	<0.11	<0.2
Chloride	250	mg/l	27.8	26.1	27	28.3	26.2	28.1	28.8	28.8	27.6	3.68	27	27.9
COD		mg/l	<25	<25	<25	<25	<25	<25	<25	<25	<25	27.6	<25	<25
Electrical Conductivity		µS/cm	689	677	691	708	709	721	739	729	734	1170	729	727
pH		Units	7.2	7.65	7.76	7.6	7.51	7.45	7.4	7.43	7.57	7.26	7.51	7.62
Alkalinity		mg/l			195			187			187		190	
Arsenic		ug/l			6.24			3.85			4.9		5.54	
BOD		ug/l			<1			<1			2.54		1.21	
Cadmium	1	ug/l			<0.5			<0.08			<0.5		<0.5	
Calcium		ug/l			91.8			61.6			83.7		87.1	
Chromium		ug/l			<3			<1			<3		<3	
Iron		mg/l			0.285			<0.019			0.34		0.404	
Lead		ug/l			<1			<0.2			<1		<1	
Magnesium		mg/l			37.7			36.8			35.3		43.3	
Manganese		ug/l			217			<3			459		1260	
Mecoprop	20	ug/l			<0.02			<0.01			<0.01		<0.04	
Mercury	0.1	ug/l			<0.02			<0.01			<0.02		<0.02	
Naphthalene	10	ug/l			0.0107			<0.01			0.103		<0.01	
Nickel	20	ug/l			1.07			<0.4			1.64		2.8	
Phenol	0.03	mg/l			<0.025			<0.002			<0.002		<0.002	
Potassium		mg/l			1.19			1.27			1.11		1.33	
Sodium		mg/l			21.2			21.3			19.1		19.7	
Sulphate		mg/l			146			156			154		154	
TOC		mg/l			3.31			<1.00			1.62		<1.00	
TON		mg/l			0.08			<0.08			<0.08		0.24	
Zinc	1000	ug/l			<5			2.27			32.3		6.7	



4.3 Groundwater Conclusions

Groundwater levels remained fairly consistent throughout the monitoring period and are similar to previous years.

From tables 4.4 to 4.15 it can be seen that BH5A experienced levels above the compliance limits for ammoniacal nitrogen and nickel throughout the monitoring period. BH6 recorded slight exceedances of ammoniacal nitrogen in March (1.01 mg/l), July (3.03 mg/l), August (2.38 mg/l) and December (1.09 mg/l). Nickel exceeded in March (386 ug/l), with Mercury (0.34 ug/l) and Zinc (1,750 ug/l) exceeding in September.

BH6A exceeded mercury limits (0.138 ug/l) in March and nickel limits in March (46.4 ug/l), September (34 ug/l) and November (34 ug/l). BH7A recorded exceedances of ammoniacal nitrogen in April (1.23 mg/l) and May (1.36 mg/l). BH9 recorded exceedances of ammoniacal nitrogen from April to November and Nickel in June (20.1 ug/l), August (28.1 ug/l) and November (30.3 ug/l). Ammoniacal nitrogen returned to compliance in December.

All other boreholes recorded levels within compliance of the limits set by the permit. Results have also been screened against relevant EQS/UKDWS limits. The following exceedances were found:

Parameter	Borehole(s)
Iron	BH1, BH2, BH4, BH5, BH5A, BH6, BH6A, BH7A, BH9, BH12, BH13
Manganese	BH1, BH4, BH5, BH5A, BH6, BH6A, BH9, BH12, BH13
Arsenic	BH2, BH6
Magnesium	BH4, BH5A, BH6, BH7A, BH9, BH12
Sulphate	BH4, BH5, BH6, BH7A, BH9
Ammoniacal Nitrogen	BH5A, BH6, BH6A, BH7A, BH9
Mecoprop	BH5A, BH6A, BH9
Nickel	BH5A, BH6A
Potassium	BH5A, BH6, BH7A, BH9
Chromium	BH6, BH6A
Lead	BH6, BH6A
Calcium	BH6

All other parameters were within EQS/UKDWS across all the monitoring points.



5 Surface Water

5.1 Surface Water Permit Conditions

There are a total of four surface water monitoring points surrounding the site. Surface water is monitored upstream of the site at the main culverted section (SW1) and further downstream as it re-emerges at the northern boundary of the site (SW2). Surface water is also monitored upstream (SW3) and downstream (SW4) of the site in a tributary of the Cusher River. The required surface water monitoring schedule including emission limits are shown in Tables 5.1 to 5.2 below.

Table 5.1 Surface Water Monitoring Requirements

Emission Point Reference	Parameter	Limit	Monitoring Frequency
SW1, SW2, SW3, SW4	Suspended Solids	50 mg/l	Monthly
	pH	>6 and <9	
	BOD	5mg/l	
	Ammoniacal Nitrogen	1mg/l	
	Oil and Grease	None Visible	

Table 5.2 Other Surface Water Monitoring Requirements

Emission Point Reference	Parameter	Monitoring Frequency
SW1,SW2, SW3, SW4	Chloride Electrical Conductivity Temperature	Monthly



Emission Point Reference	Parameter	Monitoring Frequency
SW1,SW2, SW3, SW4	COD TON TOC Total Alkalinity Copper Calcium Magnesium Sodium Potassium Manganese Iron Nickel Cadmium Chromium Zinc Lead Sulphate Dissolved Oxygen Mecoprop Naphthalene Phenols	Quarterly
SW1,SW2, SW3, SW4	Hazardous Substances Screen	Annually

5.2 Surface Water Results and Discussion

Tables 5.3 to 5.6 below show the results for surface water sampling undertaken from January to December 2017. The results are screened against limits listed in Schedule 4 of the permit; any exceedances will be highlighted in red, with any exceedances of EQS/UKDWS limits highlighted in blue. Please note that results from the Hazardous Substances Screen are available in Appendix B.



Table 5.3 Results SW1

Parameter	Limit	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Ammoniacal Nitrogen	1	mg/l	0.31	<0.11	<0.11	<0.11	<0.2	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.2
BOD	5	mg/l	7.38	2.13	<1	<1	<1	<1	1.25	<1	<1	3.68	1.14	<1
Chloride		mg/l	19.6	14.5	22.2	25.5	25.4	27.40	28.9	25.7	27.6	27.6	26.9	25.9
Electrical Conductivity		µS/cm	423	420	597	1090	1,140	1,290	1,290	1,010	1380	1170	991	755
Oil and Grease	None visible	-	None	None	None	None	None	None	None	None	None	None	None	None
pH	6.0-9.0	Units	6.94	7.56	7.53	7.6	7.61	7.74	7.66	7.45	7.51	7.26	7.45	7.46
Suspended Solids	50	mg/l	14	8	83	8	3	3	28	7	4	403	19	<3
Alkalinity		mg/l			117			231			225		138	
Cadmium		ug/l			<0.5			<0.08			<0.5		<0.5	
Calcium		mg/l			90.9			171			204		133	
Chromium		ug/l			9.7			<1			<3		<3	
COD		mg/l			33			<25			<25		<25	
Copper		ug/l			11.3			1.24			1.54		5.15	
Dissolved Oxygen		mg/l			8.53			8.94			8.2		9.13	
Iron		mg/l			7.41			<0.019			0.102		0.924	
Lead		ug/l			3.51			<0.2			<1		<1	
Magnesium		mg/l			26			60.5			63		45.4	
Manganese		ug/l			130			40			41.9		23.1	
Mecoprop		ug/l			<0.02			<0.01			<0.01		<0.04	
Naphthalene		ug/l			0.0284			<0.01			<0.01		<0.01	
Nickel		ug/l			20.2			5.11			5.06		7.61	
Phenol		mg/l			<0.025			<0.002			<0.002		<0.002	
Potassium		mg/l			6.58			6.29			6.46		7.97	
Sodium		mg/l			16.1			32.4			27.6		21.3	



Sulphate		mg/l			149			471			511		357	
TOC		mg/l			7			3.04			3.64		6.74	
TON		mg/l			1.65			0.22			<0.08		3.35	
Zinc		ug/l			24.1			1.56			<5		7.55	

Table 5.4 Results SW2

Parameter	Limit	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Ammoniacal Nitrogen	1	mg/l	0.3	<0.11	0.24	<0.11	<0.2	0.15	-	0.42	<0.11	<0.11	0.79	<0.2
BOD	5	mg/l	7.28	2	1.12	<1	<1	<1	-	<1	<1	1.34	1.47	<1
Chloride		mg/l	21.3	14.7	17.3	25.5	25.6	27	-	26.7	27.9	27.8	26.8	26.3
Electrical Conductivity		µS/cm	421	419	447	1100	1,150	1,290	-	992	1370	1150	893	752
Oil and Grease	None visible	-	None	None	None	None	None	None	-	None	None	None	None	None
pH	6.0-9.0	Units	6.98	7.56	7.64	7.65	7.68	7.81	-	7.58	7.74	7.56	7.46	7.55
Suspended Solids	50	mg/l	15	8	50	8	3	<3	-	3	12	5	13	<3
Alkalinity		mg/l			83.7			224			224		127	
Cadmium		ug/l			<0.5			<0.08			<0.5		<0.5	
Calcium		mg/l			56.1			175			201		116	
Chromium		ug/l			4.91			<1			<3		<3	
COD		mg/l			30			<25			<25		<25	
Copper		ug/l			6.72			1			2.96		5.59	
Dissolved Oxygen		mg/l			8.93			9.06			8.97		9.28	
Iron		mg/l			3.91			<0.019			0.923		0.882	
Lead		ug/l			2.25			<0.2			<1		<1	
Magnesium		mg/l			17.2			62.3			61.8		39.1	
Manganese		ug/l			74.1			29.9			56.8		31.5	
Mecoprop		ug/l			<0.02			<0.01			<0.01		<0.04	



Naphthalene		ug/l			0.0187			<0.01			<0.01		<0.01	
Nickel		ug/l			10.9			4.28			6.34		6.8	
Phenol		mg/l			<0.025			<0.002			<0.002		<0.002	
Potassium		mg/l			4.51			6.27			6.57		7.16	
Sodium		mg/l			13.7			31.6			27.9		20.3	
Sulphate		mg/l			111			470			506		299	
TOC		mg/l			7.83			2.58			4.33		10.5	
TON		mg/l			1.44			<0.08			<0.08		3.26	
Zinc		ug/l			13.9			2.02			6.05		10.1	

Table 5.5 Results SW3

Parameter	Limit	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Ammoniacal Nitrogen	1	mg/l	0.56	0.22	<0.11	<0.11	<0.2	0.11	0.25	0.15	<0.11	<0.11	<0.11	<0.2
BOD	5	mg/l	1.81	1.1	2.01	<1	<1	1.93	2.98	2.01	-	5.02	3.27	2.06
Chloride		mg/l	63.2	53.4	176	50.8	53.5	49.9	52	45	48.8	50.5	49.8	45.2
Electrical Conductivity		µS/cm	468	432	867	527	553	563	574	489	595	619	587	478
Oil and Grease	None visible	-	None	None	None	None	None	None	None	None	None	None	None	None
pH	6.0-9.0	Units	6.41	6.94	7.27	7.15	7.12	6.89	7.24	7.02	6.92	6.87	6.98	7.12
Suspended Solids	50	mg/l	27	7	15	<3	4	25	22	15	37	24	48	7
Alkalinity		mg/l			117			169			185		142	
Cadmium		ug/l			<0.5			<0.08			<0.5		<0.5	
Calcium		mg/l			54			63.9			76.3		70.7	
Chromium		ug/l			<3			<1			<3		<3	
COD		mg/l			<25			<25			48		<25	
Copper		ug/l			5.69			<0.3			1.92		6.02	
Dissolved Oxygen		mg/l			8.46			6.17			4.45		7.05	



Iron	mg/l	0.88	0.05	1.75	1.65
Lead	ug/l	1.07	<0.2	<1	<1
Magnesium	mg/l	13.3	17.9	17.2	18.8
Manganese	ug/l	38.8	73.7	788	755
Mecoprop	ug/l	<0.02	<0.01	0.015	<0.04
Naphthalene	ug/l	0.0273	<0.01	<0.01	<0.01
Nickel	ug/l	4.42	1.16	3.23	7.92
Phenol	mg/l	<0.025	<0.002	<0.002	<0.002
Potassium	mg/l	3.73	2.4	7.26	7.24
Sodium	mg/l	96	26.1	24.8	29.1
Sulphate	mg/l	31.2	35.7	56.7	62.4
TOC	mg/l	7.08	4.18	14.6	7.31
TON	mg/l	2.13	<0.08	<0.08	3.6
Zinc	ug/l	23.1	<1	14.5	69

Table 5.6 Results SW4

Parameter	Limit	Unit	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Ammoniacal Nitrogen	1	mg/l	0.36	<0.11	0.15	<0.11	<0.2	<0.11	<0.10	<0.11	<0.11	<0.11	0.44	<0.2
BOD	5	mg/l	5.69	1.83	<1	<1	<1	<1	<0	<1	1.22	2.27	1.53	<1
Chloride		mg/l	31.4	26.2	57.5	37.4	38.3	36.1	37.5	29.8	34.4	33.2	32.5	32.7
Electrical Conductivity		µS/cm	436	424	447	855	902	1,020	1,030	897	1100	1020	815	675
Oil and Grease	None visible	-	None	None	None	None	None	None	None	None	None	None	None	None
pH	6.0-9.0	Units	6.89	7.32	7.55	7.72	7.67	7.79	7.97	7.73	7.72	7.62	7.47	7.5
Suspended Solids	50	mg/l	11	9	48	7	6	6	55	7	8	8	6	<3
Alkalinity		mg/l			93.3			210			207		127	
Cadmium		ug/l			<0.5			<0.08			<0.5		<0.5	



Calcium		mg/l			56.4			129			153		104	
Chromium		ug/l			4.38			<1			<3		<3	
COD		mg/l			26			<25			<25		<25	
Copper		ug/l			6.84			0.9			1.47		3.31	
Dissolved Oxygen		mg/l			8.86			9.01			9		9.3	
Iron		mg/l			3.27			<0.019			0.175		0.312	
Lead		ug/l			1.89			<0.2			<1		<1	
Magnesium		mg/l			16.5			49.3			46.4		33.2	
Manganese		ug/l			79.2			9.4			26		15.1	
Mecoprop		ug/l			<0.02			<0.01			<0.01		<0.04	
Naphthalene		ug/l			0.0284			<0.01			<0.01		<0.01	
Nickel		ug/l			9.61			2.46			2.91		4.51	
Phenol		mg/l			<0.025			<0.002			<0.002		<0.002	
Potassium		mg/l			4.43			4.89			5.44		6.16	
Sodium		mg/l			38.2			29.2			25.5		22.5	
Sulphate		mg/l			91.4			285			347		228	
TOC		mg/l			8.09			3.63			5.21		8.89	
TON		mg/l			1.6			0.41			0.27		3.59	
Zinc		ug/l			16.6			4.73			<5		5.63	



5.3 Surface Water Conclusions

From the above tables it can be seen that SW1 recorded an exceedance of BOD in January (7.38 mg/l) and suspended solids in March (83 mg/l) and October (403 mg/l). SW2 recorded a slight exceedance of BOD (7.28 mg/l) in January, with all other parameters within compliance limits.

SW3 exceeded limits of BOD in October (5.02 mg/l). Please note that this monitoring point was experiencing very low flow at times, which may have contributed to the exceedance recorded. SW4 recorded a slight exceedance of BOD in January (5.69 mg/l) and suspended solids in July (55 mg/l)

All parameters returned to within compliance soon after the exceedances were recorded.

Results have also been screened against relevant EQS/UKDWS limits, with any exceedances shown below:

Parameter	Borehole(s)
Magnesium	SW1
Sulphate	SW1, SW2, SW4
Iron	SW1, SW2, SW3, SW4
Ammoniacal Nitrogen	SW2, SW3
Manganese	SW2, SW3, SW4
pH	SW3



6 Landfill Gas

6.1 Landfill Gas Permit Conditions

Gas monitoring is undertaken from 13 perimeter boreholes and 23 in waste gas wells. The gas monitoring required by the permit is shown in Tables 6.1 and 6.2 below.

Table 6.1 Landfill Gas Limits

Monitoring Locations	Parameter	Unit	Limit	Frequency of Monitoring Required
LISBH001, LISBH002, LISBH003, LISBH004, LISBH005, LISBH005A, LISBH006, LISBH006A, LISBH007A, LISBH008, LISBH009, LISBH010, LISBH011, LISBH012, LISBH013.	Methane	% v/v	1	Monthly
	Carbon Dioxide	% v/v	1.5	
	Oxygen			
	Atmospheric Pressure			
	Differential Pressure	-	No limit	
	Temperature			
	Meteorological Data			

Table 6.2 Landfill Gas Monitoring Requirements

Emission Point Reference	Parameter	Frequency of Monitoring Required	Other Specifications:
All in-waste landfill gas monitoring boreholes	Methane, Carbon Dioxide, Oxygen, Carbon Monoxide, Atmospheric Pressure, Differential Pressure, Temperature, Meteorological Data.	Fortnightly	Limit of 100ppm for Carbon Monoxide



Emission Point Reference	Parameter	Frequency of Monitoring Required	Other Specifications:
All landfill gas extraction wells	Methane, Carbon Dioxide, Oxygen, Carbon Monoxide, Atmospheric Pressure, Differential Pressure, Temperature, Meteorological Data.	Fortnightly	Limit of 5% for Oxygen

6.2 Landfill Gas Results and Discussion

As required under the permit, landfill gas monitoring has been undertaken at the borehole locations as set out in Schedule 4. The permit trigger levels for landfill gas are greater than 1.0% v/v for methane and greater than 1.5% v/v for carbon dioxide. Landfill gas has been measured in all perimeter boreholes on a monthly basis.

Table 4.20 Gas Monitoring January 2018

Monitoring Point Reference	CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂	CO	H ₂ S	Balance (%)
BH1	0.6	0.3	21.5	0	0	77.6
BH2	0.5	0.3	21.6	0	0	77.6
BH4	0.6	0.3	20.7	0	0	78.4
BH5	0.5	0.6	20.2	0	0	78.7
BH5A	0.5	0.3	20.6	0	0	78.6
BH6	0.5	0.4	20.3	0	0	78.8
BH6A	0.6	0.3	20.4	0	0	78.7
BH7A	0.5	0.3	21.3	0	0	77.9
BH8	0.5	0.3	21.2	0	0	78
BH9	0.5	0.8	20.5	0	0	78.2
BH10	0.5	0.3	21.5	0	0	77.7
BH11	-	-	-	-	-	-
BH12	5.3	6.1	16.6	0	0	72
BH13	0.5	0.3	20.9	0	0	72



Table 4.21 Gas Monitoring February 2018

Monitoring Point Reference	CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂	CO	H ₂ S	Balance (%)
BH1	0.5	0.3	21.5	0	0	77.7
BH2	0.5	0.3	21.1	0	0	77.6
BH4	0.5	0.4	21	0	0	78.1
BH5	0.5	0.3	20.9	0	0	78.3
BH5A	0.5	0.3	20.9	0	0	78.3
BH6	0.5	0.3	20.8	0	0	78.4
BH6A	0.5	0.3	20.7	0	0	78.5
BH7A	0.5	0.3	20.8	0	0	78.4
BH8	0.5	0.3	20.5	0	0	78.7
BH9	0.5	0.6	20.5	0	0	78.4
BH10	0.5	0.3	21.2	0	0	78
BH11	-	-	-	-	-	-
BH12	1.1	5.4	17	0	0	76.5
BH13	0.5	0.3	20.9	0	0	78.3

Table 4.22 Gas Monitoring March 2018

Monitoring Point Reference	CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂	CO	H ₂ S	Balance (%)
BH1	0.6	0.4	21.4	0	0	77.6
BH2	0.5	0.3	21.4	0	0	77.5
BH4	0.5	0.4	20.5	0	0	78.6
BH5	0.5	0.3	20.6	0	0	78.7
BH5A	0.5	0.3	20.7	0	0	78.5
BH6	0.5	0.7	20.3	0	0	78.5
BH6A	0.5	0.4	20.4	0	0	78.7
BH7A	0.5	0.3	21.1	0	0	78.1
BH8	0.5	0.3	21	0	0	78.2
BH9	0.5	2.7	18.5	0	0	78.3
BH10	0.5	1.6	20.7	0	0	77.2
BH11	-	-	-	-	-	-
BH12	1.7	3.8	18.7	0	0	75.8
BH13	0.5	0.3	20.9	0	0	78.3



Table 4.23 Gas Monitoring April 2018

Monitoring Point Reference	CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂	CO	H ₂ S	Balance (%)
BH1	0.9	0.5	21	0	0	77.6
BH2	0.5	0.2	21.3	0	0	77.9
BH4	0.5	1.2	18.6	0	0	79.7
BH5	0.5	0.3	19.9	1	0	79.3
BH5A	0.5	1.9	18.9	0	0	78.7
BH6	0.5	0.6	20.3	0	0	78.6
BH6A	0.6	0.3	20.5	0	0	78.7
BH7A	0.6	0.2	20.7	0	0	78.5
BH8	0.6	0.2	20.5	0	0	78.7
BH9	0.5	0.2	20.7	0	0	78.6
BH10	0.5	1.5	19.7	0	0	78.3
BH11	-	-	-	-	-	-
BH12	7.1	9.6	13.2	0	0	70.1
BH13	0.5	0.2	19.8	0	0	79.5

Table 4.24 Gas Monitoring May 2018

Monitoring Point Reference	CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂	CO	H ₂ S	Balance (%)
BH1	0.5	0.2	20.7	0	0	78.6
BH2	0.5	0.2	20.8	0	0	78.5
BH4	0.5	0.6	19.3	0	0	79.6
BH5	0.5	0.3	19.8	0	0	79.4
BH5A	0.5	0.2	19.7	0	0	79.6
BH6	0.5	0.5	20	0	0	79
BH6A	0.5	0.3	20.4	0	0	78.8
BH7A	0.5	0.2	20.1	0	0	79.2
BH8	0.5	0.3	20	0	0	79.2
BH9	0.5	0.2	20.2	0	0	79.1
BH10	0.5	0.2	20.4	0	0	78.9
BH11	-	-	-	-	-	-
BH12	2.6	2.7	19.1	0	0	75.6
BH13	0.5	0.2	19.7	0	0	79.6

Table 4.25 Gas Monitoring June 2018

Monitoring Point Reference	CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂	CO	H ₂ S	Balance (%)
BH1	0.6	0.2	20.8	0	0	78.4
BH2	0.6	0.2	20.7	0	0	78.5
BH4	0.6	0.4	20.3	0	0	78.7
BH5	0.6	0.5	19.8	0	0	79.1
BH5A	0.6	1.4	19.5	0	0	78.5
BH6	0.6	0.5	20.2	0	0	78.7
BH6A	0.6	0.3	20.5	0	0	78.6



BH7A	0.5	0.2	20.4	0	0	78.7
BH8	0.6	0.3	20.4	0	0	78.7
BH9	0.6	0.2	20.4	0	0	78.8
BH10	0.6	0.3	20.5	0	0	78.6
BH11	-	-	-	-	-	-
BH12	0.6	0.3	20.6	0	0	78.5
BH13	0.6	0.5	20.4	0	0	78.3

Table 4.26 Gas Monitoring July 2018

Monitoring Point Reference	CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂	CO	H ₂ S	Balance (%)
BH1	0	0	20	0	0	79.9
BH2	0	0.1	19.5	0	0	80.4
BH4	0	0.2	19.8	0	0	80
BH5	0	0.2	19.5	0	0	80.3
BH5A	0	0	20	0	0	80
BH6	0	0.3	19.9	0	0	79.8
BH6A	0	0.1	20.3	0	0	79.7
BH7A	-	-	-	-	-	-
BH8	0	0.1	20.6	0	0	79.3
BH9	0	0	20.5	0	0	79.5
BH10	0	2.1	17.6	0	0	80.4
BH11	-	-	-	-	-	-
BH12	0	2.8	16.5	0	0	80.7
BH13	0	0.3	20.1	0	0	79.6

Table 4.27 Gas Monitoring August 2018

Monitoring Point Reference	CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂	CO	H ₂ S	Balance (%)
BH1	0	0.1	21	0	0	78.9
BH2	0	0.1	21	0	0	78.8
BH4	0.1	0.8	19.7	0	0	79.4
BH5	0.1	0.2	20.4	0	0	79.4
BH5A	0.1	0.1	20.5	0	0	79.4
BH6	0.1	0.5	19.9	0	0	79.5
BH6A	0.1	0.1	20.6	0	0	79.2
BH7A	-	-	-	-	-	-
BH8	0	0.1	20.9	0	0	78.9
BH9	0	0.1	20.8	0	0	79.1
BH10	0	0.2	19.9	0	0	79.8
BH11	-	-	-	-	-	-
BH12	0	5.3	14.8	0	0	79.9
BH13	0.1	0.4	20.5	0	0	79



Table 4.28 Gas Monitoring September 2018

Monitoring Point Reference	CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂	CO	H ₂ S	Balance (%)
BH1	0.4	0.4	20.5	0	0	78.7
BH2	0.2	0.2	20.6	0	0	79
BH4	0.2	0.2	20.6	0	0	79
BH5	0.2	1.2	20	0	0	78.6
BH5A	0.2	1.5	19.8	0	0	78.6
BH6	0.2	0.6	20.6	0	0	78.7
BH6A	0.2	0.2	20.8	0	0	78.9
BH7A	-	-	-	-	-	-
BH8	0.2	0.2	20.9	0	0	78.8
BH9	0.2	0.1	20.8	0	0	78.9
BH10	0.2	0.2	20.7	0	0	79
BH11	-	-	-	-	-	-
BH12	0.5	6.3	14.6	0	0	78.6
BH13	0.2	0.2	20.6	0	0	79

Table 4.29 Gas Monitoring October 2018

Monitoring Point Reference	CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂	CO	H ₂ S	Balance (%)
BH1	0.4	0.1	20.9	0	0	78.6
BH2	0.4	0.1	20.9	0	0	78.6
BH4	0.4	0.2	20.5	0	0	78.9
BH5	0.4	0.2	20.5	0	0	78.9
BH5A	0.4	0.4	20.4	0	0	78.9
BH6	0.4	0.3	20.5	0	0	78.7
BH6A	0.5	0.2	20.8	0	0	78.6
BH7A	-	-	-	-	-	-
BH8	0.4	0.2	20.7	0	0	78.8
BH9	0.4	0.1	20.7	0	0	78.8
BH10	0.4	1.1	19.9	0	0	78.6
BH11	-	-	-	-	-	-
BH12	-	-	-	-	-	-
BH13	0.4	0.2	20.6	0	0	78.9

Table 4.30 Gas Monitoring November 2018

Monitoring Point Reference	CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂	CO	H ₂ S	Balance (%)
BH1	0.4	0.2	22.7	0	0	76.7
BH2	0.4	0.1	22.6	0	0	76.8
BH4	0.4	0.1	22.1	0	0	77.3
BH5	0.4	0.2	21.5	0	0	77.9
BH5A	0.4	0.9	21.3	0	0	77.4



BH6	0.4	0.3	21	0	0	78.2
BH6A	0.4	0.5	16.3	0	0	82.8
BH7A	-	-	-	-	-	-
BH8	0.4	0.1	22.7	0	0	76.1
BH9	0.4	0.5	22.1	0	0	76.9
BH10	0.4	1	21.5	0	0	77.1
BH11	-	-	-	-	-	-
BH12	-	-	-	-	-	-
BH13	0.4	0.1	22.4	0	0	77.1

Table 4.31 Gas Monitoring December 2018

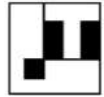
Monitoring Point Reference	CH ₄ (%v/v)	CO ₂ (%v/v)	O ₂	CO	H ₂ S	Balance (%)
BH1	1.1	2.5	18.5	0	0	77.1
BH2	0.6	0.2	20.4	0	0	78.9
BH4	0.6	0.2	20.3	0	0	78.9
BH5	0.6	0.3	20.3	0	0	78.8
BH5A	0.6	0.2	20.3	0	0	78.9
BH6	0.6	0.4	20.2	0	0	78.9
BH6A	0.7	0.2	20.6	0	0	78.5
BH7A	-	-	-	-	-	-
BH8	0.5	0.2	20.7	0	0	78.6
BH9	0.5	0.4	20.3	0	0	78.7
BH10	0.5	1.2	19.8	0	0	78.4
BH11	-	-	-	-	-	-
BH12	-	-	-	-	-	-
BH13	0.6	0.2	20.3	0	0	78.9

6.3 Landfill Gas Conclusions

Exceedances of methane were recorded in BH1 and BH12, with carbon dioxide exceeding in BH1, BH5A BH9, BH10 and BH12. All other boreholes remained within compliance limits during the monitoring period.

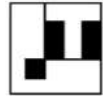
The in-waste landfill gas wells are controlled through collection and utilisation via the landfill gas engine and flare. Gas wells are monitored and balanced regularly to achieve optimum gas extraction from each well.

During gas balancing, gas well valves are adjusted accordingly in order to achieve the highest methane values possible. The results of in-waste gas monitoring can be found in Appendix C.



7 Other Conditions

Monitoring of dust, PM₁₀ and asbestos fibers will only be required to be carried out in future should the site re-open for the acceptance of waste.



8 Additional Mandatory Information

8.1 Financial Provision

“Armagh Power Generation undertook the operational liability of Lisbane Landfill site following Quinn Environmental going into administration. At the time of takeover there were significant issues with the site. Armagh Power Generation have worked tirelessly to provide ongoing financial provision to remedy these issues. Ongoing financial provision includes funds associated with the ongoing permanent capping of the site, leachate extraction and disposal, environmental monitoring and landfill gas control. The management of the site is financed on an ongoing basis by the limited revenue generation from energy production from the landfill gas engine.

Armagh Power Generation are currently in negotiations with NIEA regarding a suitable financial provision guarantee for the site given the previous investments that the company have made.”

8.2 Technically Competent Person

██████████ currently holds COTC certification and is progressing to OCC.

8.3 Nuisance Complaints

No nuisance complaints were received in 2018.

8.4 Non-Compliances

No non-compliances were recorded in 2018.

8.5 Compliance Tests

No compliance tests have been undertaken.

8.6 Schedule 6 Notifications

A total of twenty-four Schedule 6 notifications were sent to NIEA during the monitoring period



8.7 Water and Energy Usage

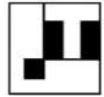
Month	Total Water Usage (m ³)	Energy Usage (kWh)
Jan-18	98	19,736.32
Feb-18		15,607.45
Mar-18		19,842.87
Apr-18		22,604.08
May-18		34,993.28
Jun-18		34,538.56
Jul-18	103	20,636.68
Aug-18		11,340.20
Sep-18		11,642.15
Oct-18		15,182.38
Nov-18		16,132.79
Dec-18		20,595.71
Total	201	242,852.47

8.8 Annual Leachate Removal

Month	Leachate Removed (m ³)
January	542.09
February	653.41
March	644.2
April	614.9
May	134.24
June	458.04
July	451.7
August	588.12
September	477.3
October	427.22
November	509.08
December	539.1
Total Leachate Removed:	6039.4

8.9 Emissions Data

- Representative Gas Flow at Engine – 215m³/hr
- Gas Control - Yes
- Flare –N/A, not in use
- Total volume of gas combusted in engine and flare during 2018 – Engine – 1,321,175m³, Flare- N/A
- % Methane Content of gas combusted in engines and flare – usually 45-50%
- Methodology used to calculate gas volumes – Estimation based on total run time and typical gas flow



Please note that the gas flare has not been in operation and therefore has not been tested. Due to repairs works needed at the engine, the emissions testing could not be undertaken, this will be carried out later in the year



9 Conclusion and Recommendations

9.1 Groundwater

An annual review of the groundwater quality at Lisbane Landfill Site throughout 2018 has been undertaken. BH5A exceeded ammoniacal nitrogen and nickel throughout the monitoring period, this monitoring point has since been removed from the Permit requirements for the site.

BH6, BH7A and BH9 recorded exceedances of ammoniacal nitrogen. BH6 also recorded exceedances of mercury, nickel and zinc. BH6A recorded exceedances of mercury and nickel, BH9 exceeded limits for nickel. All other parameters and boreholes remained within compliance limits throughout the monitoring period.

9.2 Surface Water

An annual review of surface water quality at Lisbane Landfill Site has been undertaken. It can be seen that all monitoring points recorded a slight exceedance of BOD. SW1 and SW4 also exceeded limits for suspended solids.

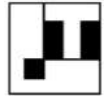
Please note, that SW3 is located upstream of SW4 and therefore may be responsible for the exceedances recorded in the monitoring location for SW4. SW1 and SW3 are both upstream monitoring points and therefore exceedances cannot be attributable to the site.

9.3 Leachate

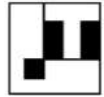
An annual review of leachate quality at Lisbane Landfill Site has been undertaken. Leachate strengths remained quite consistent throughout the monitoring period, for both raw and treated, demonstrating the LTP is effective. The site is also compliant with its effluent discharge consent from NI Water. Leachate levels returned to within compliance during the year.

9.4 Landfill Gas

An annual review of the landfill at Lisbane Landfill Site has shown that exceedances of some exceedances of methane and carbon dioxide, with the majority of boreholes and readings remaining within compliance limits.

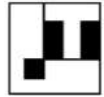


Groundwater, surface water, leachate and landfill gas levels will continue to be monitored on a monthly, quarterly and annual basis to ensure compliance with the PPC permit.



10 Next Monitoring Report

The next monitoring report will be submitted before the end of April 2019.



Appendix A

Drawings



KEY:
 SITE LOCATION

Rev.No.	AMENDMENT DETAILS	BY	DATE

CLIENT
QEL

DRAWING
Site Location

CONTRACT
Lisbane Landfill Site Closure Plan

SHEET SIZE	DATE	SCALE	DRAWN	CHECKED
A3	11.10.16	1: 25,000		

DRG No.	Rev.
15047-400	—

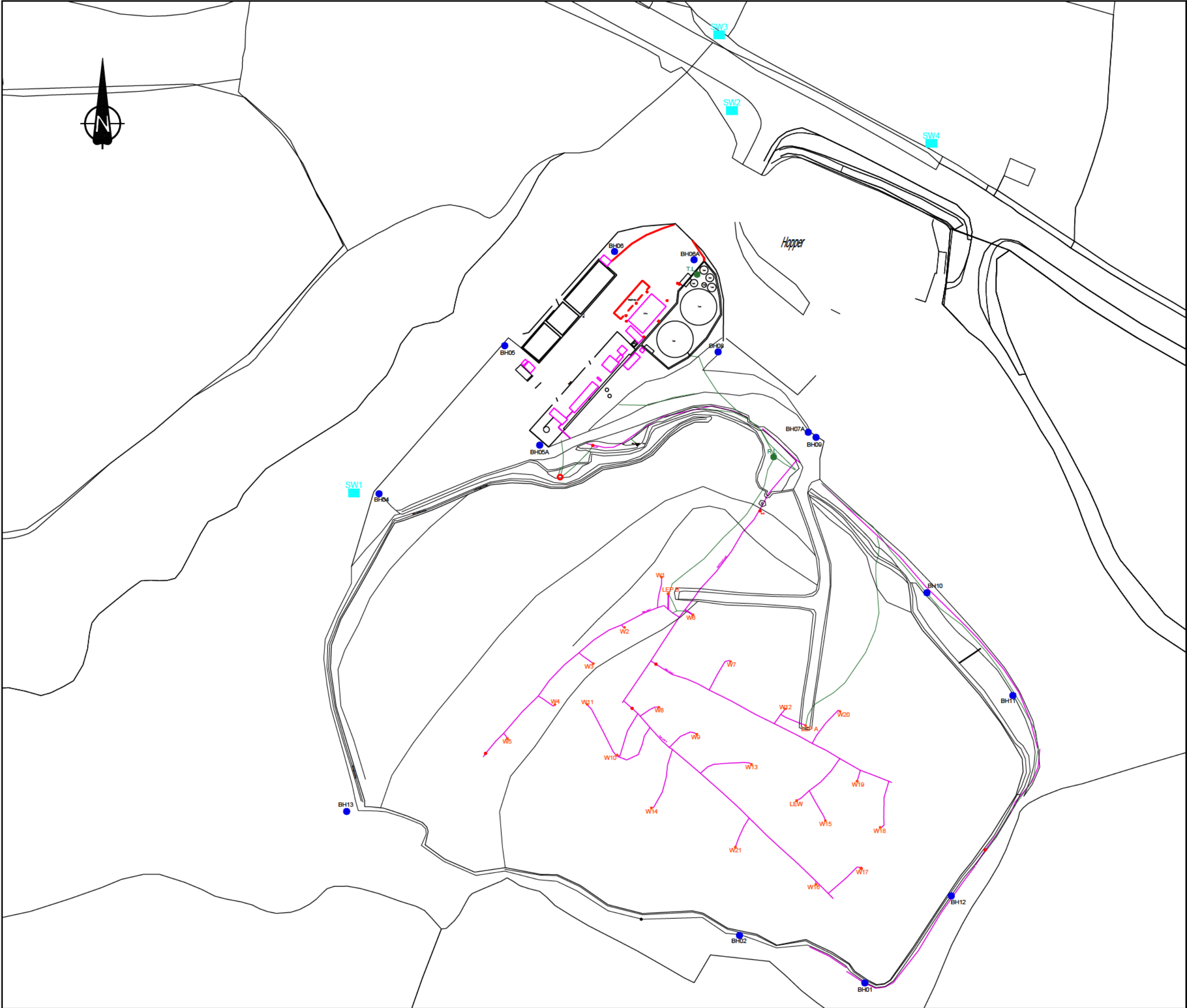
Laganwood House
Newforge Lane
Malone Road
Belfast BT9 5NX
Tel 028 9066 2121
Fax 028 9066 3162
email info@wdr-rt-taggart.com

WDR & RT TAGGART

Architects
Civil Engineers
Structural Engineers
Environmental Engineers

Landscape Architects
Town Planning Consultants
Planning Supervisors
Project Managers





KEY:

- Groundwater and Gas Monitoring Point
- Leachate Monitoring Point
- Surface Water Monitoring Point
- In-waste Gas Monitoring Point

Rev.No.	AMENDMENT DETAILS	BY	DATE
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CLIENT
QEL

DRAWING
Monitoring Locations

CONTRACT
Lisbane Landfill Site

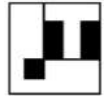
SHEET SIZE	DATE	SCALE	DRAWN	CHECKED
A3	27.04.15	1:1250		

DRG No.	Rev.
15047-003	—

Laganwood House
Newforge Lane
Malone Road
Belfast BT9 5NX
Tel 028 9066 2121
Fax 028 9066 3162
email mail@wdr-rt-taggart.com

WDR & RT TAGGART

Architects	Landscape Architects
Civil Engineers	Town Planning Consultants
Structural Engineers	Planning Supervisors
Environmental Engineers	Project Managers



Appendix B

Monitoring Certificates

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC012187

Issue No: 1

WDR & RT Taggart
Laganwood House
Newforge Lane
Malone Road
Belfast
Co Antrim
BT9 5NX

Caulside Drive
New Park Industrial Estate
Antrim
BT41 2DV
Tel: (028) 9446 6708
Fax: (028) 9442 9580

www.mcquillancompanies.com
sales@mcquillanenvirocare.com

MCQ Job No	ORD-13590
Sample Receipt Date	19/01/2018
Date Analysis Started	19/01/2018
Completion Date	02/02/2018
Turnaround Time	10
No of Samples	17
Purchase Order Number	Lisbane Monthly
McQuillan Quote Number	ECA-01916

Dear [REDACTED]

Analysis of your sample(s) is now complete and we have pleasure in enclosing the appropriate test report.

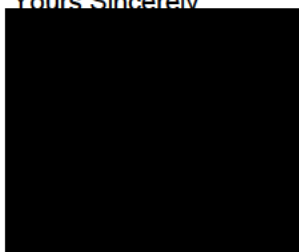
All analysis was completed within McQuillan Envirocare Analytical Laboratory (MCQ) unless otherwise specified. Any analysis that was subcontracted to a McQuillan Companies Approved Laboratory is indicated by 'S'. Please refer to the table at the end of your test certificate for explanations of sample deviations.

Results relate only to the items tested. This Test Certificate supersedes any version previously issued by the laboratory. It cannot be reproduced except in full and without written approval from McQuillan Envirocare Ltd.

Should you have any queries regarding this report(s) or any part of our service, please contact Sales on +44(0)28 9446 6708 who will be happy to discuss your requirements.

Thank you for using McQuillan Companies Analytical Services and we look forward to receiving your next samples.

Yours Sincerely



Name: [REDACTED]

Date: 2/2/2018

Title: Lab Administrator



Test Certificate

Certificate: ECTC012187

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ046457	BH1	18/01/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ		
			SAM031	Chloride as Cl	11.50	mg/l	Y	MCQ		
			SAM009	COD (Total)	<25	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	539.0	uS/cm	Y	MCQ		
			SAM004	pH	7.67	Units	Y	MCQ		
	Sample Matrix:		Ground Water	Analyst Comment:						
	MCQ046458	BH2	18/01/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	16.00	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	716.0	uS/cm	Y	MCQ	
SAM004				pH	7.46	Units	Y	MCQ		
Sample Matrix:		Ground Water	Analyst Comment:							
MCQ046459		BH4	18/01/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	18.70	mg/l	Y	MCQ	
				SAM009	COD (Total)	25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,120.0	uS/cm	Y	MCQ	
	SAM004			pH	6.74	Units	Y	MCQ		
	Sample Matrix:		Ground Water	Analyst Comment:						
	MCQ046460	BH5	18/01/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	17.90	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	469.0	uS/cm	Y	MCQ	
SAM004				pH	6.87	Units	Y	MCQ		
Sample Matrix:		Ground Water	Analyst Comment:							
MCQ046461		BH5A	18/01/2018	SAM031	Ammonia as N	6.14	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	47.50	mg/l	Y	MCQ	
				SAM009	COD (Total)	63	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,450.0	uS/cm	Y	MCQ	
	SAM004			pH	6.60	Units	Y	MCQ		
	Sample Matrix:		Ground Water	Analyst Comment:						

Test Certificate

Certificate: ECTC012187

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ046462	BH6	18/01/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ		
			SAM031	Chloride as Cl	23.80	mg/l	Y	MCQ		
			SAM009	COD (Total)	54	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	548.0	uS/cm	Y	MCQ		
			SAM004	pH	7.10	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ046463	BH6A	18/01/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	24.00	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	695.0	uS/cm	Y	MCQ	
SAM004				pH	6.67	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ046464		BH7A	18/01/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	21.30	mg/l	Y	MCQ	
				SAM009	COD (Total)	27	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	943.0	uS/cm	Y	MCQ	
	SAM004			pH	6.62	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ046465	BH8	18/01/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	22.90	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,040.0	uS/cm	Y	MCQ	
SAM004				pH	7.07	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ046466		BH9	18/01/2018	SAM031	Ammonia as N	0.55	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	56.40	mg/l	Y	MCQ	
				SAM009	COD (Total)	35	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,360.0	uS/cm	Y	MCQ	
	SAM004			pH	6.92	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							

Test Certificate

Certificate: ECTC012187

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ046467	BH12	18/01/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ		
			SAM031	Chloride as Cl	39.00	mg/l	Y	MCQ		
			SAM009	COD (Total)	33	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	819.0	uS/cm	Y	MCQ		
			SAM004	pH	6.71	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ046468	BH13	18/01/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	27.80	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	689.0	uS/cm	Y	MCQ	
SAM004				pH	7.20	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ046469		SW1	18/01/2018	SAM031	Ammonia as N	0.31	mg/l	Y	MCQ	
				SAM016	BOD (ATU)	7.38	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	19.60	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	423.0	uS/cm	Y	MCQ	
	SAM004			pH	6.94	Units	Y	MCQ		
	SAM001			Suspended Solids	14.00	mg/l	Y	MCQ		
	Sample Matrix: Surface Water			Analyst Comment:						
	MCQ046470	SW2	18/01/2018	SAM031	Ammonia as N	0.30	mg/l	Y	MCQ	
				SAM016	BOD (ATU)	7.28	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	21.30	mg/l	Y	MCQ	
SAM005				Electrical Conductivity	421.0	uS/cm	Y	MCQ		
SAM004				pH	6.98	Units	Y	MCQ		
SAM001				Suspended Solids	15.00	mg/l	Y	MCQ		
Sample Matrix: Surface Water				Analyst Comment:						
MCQ046471		SW3	18/01/2018	SAM031	Ammonia as N	0.56	mg/l	Y	MCQ	
				SAM016	BOD (ATU)	1.81	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	63.20	mg/l	Y	MCQ	
	SAM005			Electrical Conductivity	468.0	uS/cm	Y	MCQ		
	SAM004			pH	6.41	Units	Y	MCQ		
	SAM001			Suspended Solids	27.00	mg/l	Y	MCQ		
	Sample Matrix: Surface Water			Analyst Comment:						

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC012187

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ046472	SW4	18/01/2018	SAM031	Ammonia as N	0.36	mg/l	Y	MCQ	
			SAM016	BOD (ATU)	5.69	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	31.40	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	436.0	uS/cm	Y	MCQ	
			SAM004	pH	6.89	Units	Y	MCQ	
			SAM001	Suspended Solids	11.00	mg/l	Y	MCQ	

Sample Matrix: Surface Water

Analyst
Comment:

MCQ046473	Treated Leachate	18/01/2018	SAM031	Ammonia as N	0.58	mg/l	Y	MCQ	8
			SAM016	BOD (ATU)	103.00	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	196.00	mg/l	Y	MCQ	
			SAM009	COD (Total)	928	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	9,290.0	uS/cm	Y	MCQ	
			SAM004	pH	7.15	Units	Y	MCQ	
			SAM001	Suspended Solids	116.00	mg/l	Y	MCQ	

Sample Matrix: Landfill Leachate

Analyst
Comment:

Sample Deviations Legend			
Results may be compromised if the following deviations apply			
Comment	C	Incorrect Container	‡
Container with Headspace provided	8	Insufficient sample volume	È
BOD Overdiluted, therefore result indicative only	\$	BOD Underdiluted, therefore result indicative only	#
High Chloride concentration, COD could not be determined	§	Holding time exceeded due to sampled on date	@
Holding time exceeded in Lab	±	Holding time exceeded due to delayed instructions	&

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC012399

Issue No: 1

WDR & RT Taggart
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BT41 2DV
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sales@mcquillanenvirocare.com

MCQ Job No	ORD-13807
Sample Receipt Date	14/02/2018
Date Analysis Started	15/02/2018
Completion Date	28/02/2018
Turnaround Time	10
No of Samples	17
Purchase Order Number	Lisbane
McQuillan Quote Number	ECA-01916

Dear [REDACTED]

Analysis of your sample(s) is now complete and we have pleasure in enclosing the appropriate test report.

All analysis was completed within McQuillan Envirocare Analytical Laboratory (MCQ) unless otherwise specified. Any analysis that was subcontracted to a McQuillan Companies Approved Laboratory is indicated by 'S'. Please refer to the table at the end of your test certificate for explanations of sample deviations.

Results relate only to the items tested. This Test Certificate supersedes any version previously issued by the laboratory. It cannot be reproduced except in full and without written approval from McQuillan Envirocare Ltd.

Should you have any queries regarding this report(s) or any part of our service, please contact Sales on +44(0)28 9446 6708 who will be happy to discuss your requirements.

Thank you for using McQuillan Companies Analytical Services and we look forward to receiving your next samples.

Name: [REDACTED]

Date: 28/2/2018

Title: Lab Administrator



Test Certificate

Certificate: ECTC012399

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ047073	BH1	13/02/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ		
			SAM031	Chloride as Cl	11.10	mg/l	Y	MCQ		
			SAM009	COD (Total)	<25	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	523.0	uS/cm	Y	MCQ		
			SAM004	pH	7.66	Units	Y	MCQ		
	Sample Matrix:		Ground Water	Analyst Comment:						
	MCQ047074	BH4	13/02/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	18.50	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,130.0	uS/cm	Y	MCQ	
SAM004				pH	6.97	Units	Y	MCQ		
Sample Matrix:		Ground Water	Analyst Comment:							
MCQ047075		BH5	13/02/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	16.70	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	435.0	uS/cm	Y	MCQ	
	SAM004			pH	7.24	Units	Y	MCQ		
	Sample Matrix:		Ground Water	Analyst Comment:						
	MCQ047076	BH5A	13/02/2018	SAM031	Ammonia as N	7.26	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	47.70	mg/l	Y	MCQ	
				SAM009	COD (Total)	56	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,320.0	uS/cm	Y	MCQ	
SAM004				pH	6.97	Units	Y	MCQ		
Sample Matrix:		Ground Water	Analyst Comment:							
MCQ047077		BH6	13/02/2018	SAM031	Ammonia as N	0.79	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	28.40	mg/l	Y	MCQ	
				SAM009	COD (Total)	1,350	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	669.0	uS/cm	Y	MCQ	
	SAM004			pH	7.55	Units	Y	MCQ		
	Sample Matrix:		Ground Water	Analyst Comment:						

Test Certificate

Certificate: ECTC012399

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ047078	BH6A	13/02/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ		
			SAM031	Chloride as Cl	25.20	mg/l	Y	MCQ		
			SAM009	COD (Total)	<25	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	662.0	uS/cm	Y	MCQ		
			SAM004	pH	7.00	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ047079	BH7A	13/02/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	39.10	mg/l	Y	MCQ	
				SAM009	COD (Total)	32	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,080.0	uS/cm	Y	MCQ	
SAM004				pH	6.69	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ047080		BH8	13/02/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	15.60	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,010.0	uS/cm	Y	MCQ	
	SAM004			pH	7.30	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ047081	BH9	13/02/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	95.00	mg/l	Y	MCQ	
				SAM009	COD (Total)	86	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,910.0	uS/cm	Y	MCQ	
SAM004				pH	6.93	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ047082		BH12	13/02/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	37.60	mg/l	Y	MCQ	
				SAM009	COD (Total)	29	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	865.0	uS/cm	Y	MCQ	
	SAM004			pH	6.90	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							

Issue No: 1

**Analyst
Comment:**

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC012399

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ047088	Raw leachate	13/02/2018	SAM031	Ammonia as N	154.00	mg/l	Y	MCQ	8@
			SAM016	BOD (ATU)	38.10	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	200.00	mg/l	Y	MCQ	
			SAM009	COD (Total)	1,840	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	11,100.0	uS/cm	Y	MCQ	
			SAM004	pH	7.41	Units	Y	MCQ	
			SAM001	Suspended Solids	8.00	mg/l	Y	MCQ	

Sample Matrix: Landfill Leachate

Analyst
Comment:

MCQ047089	Treated Leachate	13/02/2018	SAM031	Ammonia as N	4.28	mg/l	Y	MCQ	8@
			SAM016	BOD (ATU)	5.04	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	192.00	mg/l	Y	MCQ	
			SAM009	COD (Total)	914	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	9,170.0	uS/cm	Y	MCQ	
			SAM004	pH	7.56	Units	Y	MCQ	
			SAM001	Suspended Solids	16.00	mg/l	Y	MCQ	

Sample Matrix: Landfill Leachate

Analyst
Comment:

Sample Deviations Legend			
Results may be compromised if the following deviations apply			
Comment	C	Incorrect Container	‡
Container with Headspace provided	8	Insufficient sample volume	È
BOD Overdiluted, therefore result indicative only	\$	BOD Underdiluted, therefore result indicative only	#
High Chloride concentration, COD could not be determined	§	Holding time exceeded due to sampled on date	@
Holding time exceeded in Lab	±	Holding time exceeded due to delayed instructions	&

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC012624

Issue No: 1

Armagh Power Generation Ltd
56 Craigmore Road
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Garavagh
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BT41 2DV
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sales@mcquillanenvirocare.com

MCQ Job No	ORD-14033
Sample Receipt Date	15/03/2018
Date Analysis Started	15/03/2018
Completion Date	11/05/2018
Turnaround Time	10
No of Samples	16
Purchase Order Number	Lisbane
McQuillan Quote Number	ECA-01916

Dear [REDACTED]

Analysis of your sample(s) is now complete and we have pleasure in enclosing the appropriate test report.

All analysis was completed within McQuillan Envirocare Analytical Laboratory (MCQ) unless otherwise specified. Any analysis that was subcontracted to a McQuillan Companies Approved Laboratory is indicated by 'S'. Please refer to the table at the end of your test certificate for explanations of sample deviations.

Results relate only to the items tested. This Test Certificate supersedes any version previously issued by the laboratory. It cannot be reproduced except in full and without written approval from McQuillan Envirocare Ltd.

Should you have any queries regarding this report(s) or any part of our service, please contact Sales on +44(0)28 9446 6708 who will be happy to discuss your requirements.

Thank you for using McQuillan Companies Analytical Services and we look forward to receiving your next samples.

Yours Sincerely



Name: [REDACTED]

Date: 11/5/2018

Title: Lab Administrator



McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC012624

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ047886	SW1	14/03/2018	SAM031	Alkalinity, Total	117.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium (tot.unfilt)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	90.9	mg/l	N	S	
			SAM031	Chloride as Cl	22.20	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	9.7	ug/l	Y	S	
			SAM009	COD (Total)	33	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	11.3	ug/l	Y	S	
			MCQ- DO	Dissolved Oxygen	8.53	mg/l	N	MCQ	
			SAM005	Electrical Conductivity	597.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	7.41	mg/l	N	S	
			N/A	Lead (tot.unfilt)	3.51	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	26	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	130	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	0.0284	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	20.2	ug/l	Y	S	
			SAM004	pH	7.53	Units	Y	MCQ	
			SAM029	Phenol Index	1.00	mg/l	Y	MCQ	
			N/A	Potassium (tot.unfilt)	6.58	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	16.1	mg/l	N	S	
			SAM031	Sulphate as SO4	149.00	mg/l	Y	MCQ	
			SAM001	Suspended Solids	83.00	mg/l	Y	MCQ	
			SAM034	TOC	7.00	mg/l	Y	MCQ	
			SAM031	TON as N	1.65	mg/l	Y	MCQ	
			N/A	Zinc Total (W)	24.1	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Surface Water

Analyst
Comment:

MCQ047887	SW2	14/03/2018	SAM031	Alkalinity, Total	83.70	mg/l	Y	MCQ	
			SAM031	Ammonia as N	0.24	mg/l	Y	MCQ	
			SAM016	BOD (ATU)	1.12	mg/l	Y	MCQ	
			N/A	Cadmium (tot.unfilt)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	56.1	mg/l	N	S	
			SAM031	Chloride as Cl	17.30	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	4.91	ug/l	Y	S	
			SAM009	COD (Total)	30	mg/l	Y	MCQ	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC012624

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ047887	SW2	14/03/2018	N/A	Copper (tot.unfilt)	6.72	ug/l	Y	S	
			MCQ- DO	Dissolved Oxygen	8.93	mg/l	N	MCQ	
			SAM005	Electrical Conductivity	447.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	3.91	mg/l	N	S	
			N/A	Lead (tot.unfilt)	2.25	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	17.2	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	74.1	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	0.0187	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	10.9	ug/l	Y	S	
			SAM004	pH	7.64	Units	Y	MCQ	
			SAM029	Phenol Index	0.79	mg/l	Y	MCQ	
			N/A	Potassium (tot.unfilt)	4.51	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	13.7	mg/l	N	S	
			SAM031	Sulphate as SO4	111.00	mg/l	Y	MCQ	
			SAM001	Suspended Solids	50.00	mg/l	Y	MCQ	
			SAM034	TOC	7.83	mg/l	Y	MCQ	
			SAM031	TON as N	1.44	mg/l	Y	MCQ	
			N/A	Zinc Total (W)	13.9	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Surface Water

Analyst
Comment:

MCQ047888	SW3	14/03/2018	SAM031	Alkalinity, Total	117.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			SAM016	BOD (ATU)	2.01	mg/l	Y	MCQ	
			N/A	Cadmium (tot.unfilt)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	54	mg/l	N	S	
			SAM031	Chloride as Cl	176.00	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	5.69	ug/l	Y	S	
			MCQ- DO	Dissolved Oxygen	8.46	mg/l	N	MCQ	
			SAM005	Electrical Conductivity	867.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	0.88	mg/l	N	S	
			N/A	Lead (tot.unfilt)	1.07	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	13.3	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	38.8	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.02	ug/l	N	S	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC012624

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ047888	SW3	14/03/2018	N/A	Naphthalene (aq)	0.0273	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	4.42	ug/l	Y	S	
			SAM004	pH	7.27	Units	Y	MCQ	
			SAM029	Phenol Index	0.32	mg/l	Y	MCQ	
			N/A	Potassium (tot.unfilt)	3.73	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	96	mg/l	N	S	
			SAM031	Sulphate as SO4	31.20	mg/l	Y	MCQ	
			SAM001	Suspended Solids	15.00	mg/l	Y	MCQ	
			SAM034	TOC	7.08	mg/l	Y	MCQ	
			SAM031	TON as N	2.13	mg/l	Y	MCQ	
			N/A	Zinc Total (W)	23.1	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Surface Water

Analyst
Comment:

MCQ047889	SW4	14/03/2018	SAM031	Alkalinity, Total	93.30	mg/l	Y	MCQ	
			SAM031	Ammonia as N	0.15	mg/l	Y	MCQ	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium (tot.unfilt)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	56.4	mg/l	N	S	
			SAM031	Chloride as Cl	57.50	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	4.38	ug/l	Y	S	
			SAM009	COD (Total)	26	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	6.84	ug/l	Y	S	
			MCQ- DO	Dissolved Oxygen	8.86	mg/l	N	MCQ	
			SAM005	Electrical Conductivity	447.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	3.27	mg/l	N	S	
			N/A	Lead (tot.unfilt)	1.89	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	16.5	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	79.2	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	0.0284	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	9.61	ug/l	Y	S	
			SAM004	pH	7.55	Units	Y	MCQ	
			SAM029	Phenol Index	0.55	mg/l	Y	MCQ	
			N/A	Potassium (tot.unfilt)	4.43	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	38.2	mg/l	N	S	
			SAM031	Sulphate as SO4	91.40	mg/l	Y	MCQ	
			SAM001	Suspended Solids	48.00	mg/l	Y	MCQ	

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Certificate: ECTC012624

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ047889	SW4	14/03/2018	SAM034	TOC	8.09	mg/l	Y	MCQ	
			SAM031	TON as N	1.60	mg/l	Y	MCQ	
			N/A	Zinc Total (W)	16.6	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Surface Water

Analyst
Comment:

MCQ047896	Raw leachate	14/03/2018	SAM031	Alkalinity, Total	4,440.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	802.00	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	21.2	ug/l	Y	S	
			SAM016	BOD (ATU)	31.70	mg/l	Y	MCQ	\$
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	134	mg/l	N	S	
			SAM031	Chloride as Cl	996.00	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	119	ug/l	Y	S	
			SAM009	COD (Total)	946	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	11,100.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	7.27	mg/l	N	S	
			N/A	Lead (tot.unfilt)	1.93	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	63.9	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	1020	ug/l	Y	S	
			N/A	Mecoprop (MCP)	22.1	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	0.106	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	93.4	ug/l	Y	S	
			SAM004	pH	7.41	Units	Y	MCQ	
			SAM029	Phenol Index	13.60	mg/l	Y	MCQ	
			N/A	Potassium (tot.unfilt)	396	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	833	mg/l	N	S	
			SAM031	Sulphate as SO4	47.90	mg/l	Y	MCQ	
			SAM001	Suspended Solids	21.00	mg/l	Y	MCQ	
			Temperature Probe	Temperature	21.4	°C	N	MCQ	
			SAM034	TOC	366.00	mg/l	Y	MCQ	
			SAM031	TON as N	1.15	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	49	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.015	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.03	mg/l	Y	S	
			N/A	Cresols	<0.03	mg/l	Y	S	
			N/A	Phenol	<0.01	mg/l	Y	S	

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ047896	Raw leachate	14/03/2018	N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.04	mg/l	Y	S	

Sample Matrix: Landfill Leachate

Analyst
Comment:

MCQ047897	Treated Leachate	14/03/2018	SAM031	Alkalinity, Total	415.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	13.20	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	18.2	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	\$
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	43	mg/l	N	S	
			SAM031	Chloride as Cl	950.00	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	202	ug/l	Y	S	
			SAM009	COD (Total)	975	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	9,440.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	9.46	mg/l	N	S	
			N/A	Lead (tot.unfilt)	4.24	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	16.4	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	398	ug/l	Y	S	
			N/A	Mecoprop (MCP)	0.41	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	112	ug/l	Y	S	
			SAM004	pH	8.27	Units	Y	MCQ	
			SAM029	Phenol Index	11.80	mg/l	Y	MCQ	
			N/A	Potassium (tot.unfilt)	450	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	1810	mg/l	N	S	
			SAM031	Sulphate as SO4	17.20	mg/l	Y	MCQ	
			SAM001	Suspended Solids	100.00	mg/l	Y	MCQ	
			Temperature Probe	Temperature	21.4	°C	N	MCQ	
			SAM034	TOC	362.00	mg/l	Y	MCQ	
			SAM031	TON as N	860.00	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	285	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Landfill Leachate

Analyst
Comment:

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MCQ047899	BH4	14/03/2018	SAM031	Alkalinity, Total	338.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	<2	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	211	mg/l	N	S	
			SAM031	Chloride as Cl	22.50	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	4.06	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	1,130.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	2.49	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<1	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	53	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	193	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.02	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	5.42	ug/l	Y	S	
			SAM004	pH	7.10	Units	Y	MCQ	
			SAM029	Phenol Index	0.52	mg/l	Y	MCQ	
			N/A	Potassium (tot.unfilt)	4.74	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	20.3	mg/l	N	S	
			SAM031	Sulphate as SO4	281.00	mg/l	Y	MCQ	
			SAM034	TOC	1.72	mg/l	Y	MCQ	
			SAM031	TON as N	< 0.08	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	6.48	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ047900	Bh5	14/03/2018	SAM031	Alkalinity, Total	165.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	<2	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	\$
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	131	mg/l	N	S	
			SAM031	Chloride as Cl	45.40	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	3.02	ug/l	Y	S	
			SAM009	COD (Total)	35	mg/l	Y	MCQ	

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ047900	Bh5	14/03/2018	SAM005	Electrical Conductivity	807.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	1.95	mg/l	N	S	
			N/A	Lead (tot.unfilt)	2.04	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	23	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	148	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.02	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	11.5	ug/l	Y	S	
			SAM004	pH	7.08	Units	Y	MCQ	
			SAM029	Phenol Index	0.34	mg/l	Y	MCQ	
			N/A	Potassium (tot.unfilt)	8.5	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	31	mg/l	N	S	
			SAM031	Sulphate as SO4	172.00	mg/l	Y	MCQ	
			SAM034	TOC	13.50	mg/l	Y	MCQ	
			SAM031	TON as N	4.77	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	10.9	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ047901	BH5a	14/03/2018	SAM031	Alkalinity, Total	579.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	12.90	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	<2	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	\$
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	225	mg/l	N	S	
			SAM031	Chloride as Cl	100.00	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	4.05	ug/l	Y	S	
			SAM009	COD (Total)	36	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	1,670.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	1.62	mg/l	N	S	
			N/A	Lead (tot.unfilt)	1.2	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	55.1	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	857	ug/l	Y	S	
			N/A	Mecoprop (MCP)	0.9	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	48	ug/l	Y	S	

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MCQ047901	BH5a	14/03/2018	SAM004	pH	7.17	Units	Y	MCQ	
			SAM029	Phenol Index	0.67	mg/l	Y	MCQ	
			N/A	Potassium (tot.unfilt)	25.3	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	93.5	mg/l	N	S	
			SAM031	Sulphate as SO4	173.00	mg/l	Y	MCQ	
			SAM034	TOC	11.10	mg/l	Y	MCQ	
			SAM031	TON as N	3.07	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	14.8	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	
Sample Matrix: Ground Water			Analyst Comment:						
MCQ047902	BH6	14/03/2018	SAM031	Alkalinity, Total	131.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	1.01	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	41.5	ug/l	Y	S	
			SAM016	BOD (ATU)	37.70	mg/l	Y	MCQ	\$
			N/A	Cadmium Total (W)	<3	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	157	mg/l	N	S	
			SAM031	Chloride as Cl	25.50	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	217	ug/l	Y	S	
			SAM009	COD (Total)	NR	mg/l	Y	MCQ	C
			SAM005	Electrical Conductivity	638.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	167	mg/l	N	S	
			N/A	Lead (tot.unfilt)	112	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	92.4	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	8330	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.02	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	0.014	ug/l	N	S	
			N/A	Nickel Total (W)	386	ug/l	Y	S	
			SAM004	pH	7.54	Units	Y	MCQ	
			SAM029	Phenol Index	24.90	mg/l	Y	MCQ	
			N/A	Potassium (tot.unfilt)	12.1	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	18.6	mg/l	N	S	
			SAM031	Sulphate as SO4	152.00	mg/l	Y	MCQ	
			SAM034	TOC	235.00	mg/l	Y	MCQ	
			SAM031	TON as N	1.23	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	606	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	

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MCQ047902	BH6	14/03/2018	N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst Comment: COD - no result due to high suspended solids in sample.

MCQ047903	BH6A	14/03/2018	SAM031	Alkalinity, Total	128.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	8.62	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	\$
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	110	mg/l	N	S	
			SAM031	Chloride as Cl	27.10	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	70.4	ug/l	Y	S	
			SAM009	COD (Total)	<50	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	626.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	38.1	mg/l	N	S	
			N/A	Lead (tot.unfilt)	49.7	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	21.6	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	884	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.02	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	0.138	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	46.4	ug/l	Y	S	
			SAM004	pH	7.14	Units	Y	MCQ	
			SAM029	Phenol Index	14.90	mg/l	Y	MCQ	
			N/A	Potassium (tot.unfilt)	6.61	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	23.4	mg/l	N	S	
			SAM031	Sulphate as SO4	150.00	mg/l	Y	MCQ	
			SAM034	TOC	6.19	mg/l	Y	MCQ	
			SAM031	TON as N	2.00	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	214	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst Comment:

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ047904	BH7A	14/03/2018	SAM031	Alkalinity, Total	128.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	<2	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	233	mg/l	N	S	
			SAM031	Chloride as Cl	39.80	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S	
			SAM009	COD (Total)	36	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	1,380.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	0.334	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<1	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	53.8	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	30	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.02	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	0.0101	ug/l	N	S	
			N/A	Nickel Total (W)	3.93	ug/l	Y	S	
			SAM004	pH	6.71	Units	Y	MCQ	
			SAM029	Phenol Index	0.18	mg/l	Y	MCQ	
			N/A	Potassium (tot.unfilt)	27.1	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	36.3	mg/l	N	S	
			SAM031	Sulphate as SO4	515.00	mg/l	Y	MCQ	
			SAM034	TOC	13.90	mg/l	Y	MCQ	
			SAM031	TON as N	18.60	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	9.17	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ047905	BH8	14/03/2018	SAM031	Alkalinity, Total	147.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	<2	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	191	mg/l	N	S	
			SAM031	Chloride as Cl	14.90	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC012624

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ047905	BH8	14/03/2018	SAM005	Electrical Conductivity	869.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	0.818	mg/l	N	S	
			N/A	Lead (tot.unfilt)	1.1	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	48.1	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	3170	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.02	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	8.42	ug/l	Y	S	
			SAM004	pH	7.41	Units	Y	MCQ	
			SAM029	Phenol Index	0.21	mg/l	Y	MCQ	
			N/A	Potassium (tot.unfilt)	1.86	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	22.3	mg/l	N	S	
			SAM031	Sulphate as SO4	287.00	mg/l	Y	MCQ	
			SAM034	TOC	4.18	mg/l	Y	MCQ	
			SAM031	TON as N	0.23	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	16.1	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ047906	BH9	14/03/2018	SAM031	Alkalinity, Total	319.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	0.77	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	4.05	ug/l	Y	S	
			SAM016	BOD (ATU)	<2.00	mg/l	Y	MCQ	\$
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	246	mg/l	N	S	
			SAM031	Chloride as Cl	66.10	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	18.3	ug/l	Y	S	
			SAM009	COD (Total)	66	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	1,610.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	13.4	mg/l	N	S	
			N/A	Lead (tot.unfilt)	5.72	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	61	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	535	ug/l	Y	S	
			N/A	Mecoprop (MCP)	0.14	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	31.2	ug/l	Y	S	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC012624

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ047906	BH9	14/03/2018	SAM004	pH	6.87	Units	Y	MCQ	
			SAM029	Phenol Index	1.39	mg/l	Y	MCQ	
			N/A	Potassium (tot.unfilt)	15.7	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	63.7	mg/l	N	S	
			SAM031	Sulphate as SO4	466.00	mg/l	Y	MCQ	
			SAM034	TOC	19.80	mg/l	Y	MCQ	
			SAM031	TON as N	13.00	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	20.7	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	
				Sample Matrix: Ground Water		Analyst Comment:			
MCQ047907	BH12	14/03/2018	SAM031	Alkalinity, Total	344.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	<2	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	144	mg/l	N	S	
			SAM031	Chloride as Cl	35.00	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	858.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	1.28	mg/l	N	S	
			N/A	Lead (tot.unfilt)	1.11	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	38.2	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	41.5	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.02	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	0.0226	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	3.48	ug/l	Y	S	
			SAM004	pH	7.07	Units	Y	MCQ	
			SAM029	Phenol Index	0.28	mg/l	Y	MCQ	
			N/A	Potassium (tot.unfilt)	2.47	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	23.9	mg/l	N	S	
			SAM031	Sulphate as SO4	86.80	mg/l	Y	MCQ	
			SAM034	TOC	9.09	mg/l	Y	MCQ	
			SAM031	TON as N	1.00	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	6.58	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC012624

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ047907	BH12	14/03/2018	N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ047908	BH13	14/03/2018	SAM031	Alkalinity, Total	195.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	6.24	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	91.8	mg/l	N	S	
			SAM031	Chloride as Cl	27.00	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	691.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	0.285	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<1	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	37.7	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	217	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.02	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	0.0107	ug/l	N	S	
			N/A	Nickel Total (W)	1.07	ug/l	Y	S	
			SAM004	pH	7.76	Units	Y	MCQ	
			SAM029	Phenol Index	0.10	mg/l	Y	MCQ	
			N/A	Potassium (tot.unfilt)	1.19	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	21.2	mg/l	N	S	
			SAM031	Sulphate as SO4	146.00	mg/l	Y	MCQ	
			SAM034	TOC	3.31	mg/l	Y	MCQ	
			SAM031	TON as N	0.08	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	<5	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

Sample Deviations Legend

Results may be compromised if the following deviations apply

McQuillan Envirocare Ltd
Analytical Services

Test Certificate

Certificate: ECTC012624

Issue No: 1

Comment	C	Incorrect Container	‡
Container with Headspace provided	8	Insufficient sample volume	È
BOD Overdiluted, therefore result indicative only	\$	BOD Underdiluted, therefore result indicative only	#
High Chloride concentration, COD could not be determined	§	Holding time exceeded due to sampled on date	@
Holding time exceeded in Lab	±	Holding time exceeded due to delayed instructions	&

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC012939

Issue No: 1

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MCQ Job No	ORD-14351
Sample Receipt Date	01/05/2018
Date Analysis Started	01/05/2018
Completion Date	15/05/2018
Turnaround Time	10
No of Samples	17
Purchase Order Number	Lisbane
McQuillan Quote Number	ECA-01916

Dear [REDACTED]

Analysis of your sample(s) is now complete and we have pleasure in enclosing the appropriate test report.

All analysis was completed within McQuillan Envirocare Analytical Laboratory (MCQ) unless otherwise specified. Any analysis that was subcontracted to a McQuillan Companies Approved Laboratory is indicated by 'S'. Please refer to the table at the end of your test certificate for explanations of sample deviations.

Results relate only to the items tested. This Test Certificate supersedes any version previously issued by the laboratory. It cannot be reproduced except in full and without written approval from McQuillan Envirocare Ltd.

Should you have any queries regarding this report(s) or any part of our service, please contact Sales on +44(0)28 9446 6708 who will be happy to discuss your requirements.

Thank you for using McQuillan Companies Analytical Services and we look forward to receiving your next samples.

Yours Sincerely

Name: [REDACTED]

Date: 15/5/2018

Title: Lab Administrator



Test Certificate

Certificate: ECTC012939

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ048969	BH1	30/04/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ		
			SAM031	Chloride as Cl	10.10	mg/l	Y	MCQ		
			SAM009	COD (Total)	51	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	523.0	uS/cm	Y	MCQ		
			SAM004	pH	7.75	Units	Y	MCQ		
	Sample Matrix:		Ground Water	Analyst Comment:						
	MCQ048970	BH2	30/04/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	17.60	mg/l	Y	MCQ	
				SAM009	COD (Total)	45	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	725.0	uS/cm	Y	MCQ	
SAM004				pH	7.24	Units	Y	MCQ		
Sample Matrix:		Ground Water	Analyst Comment:							
MCQ048971		BH4	30/04/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	18.00	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,120.0	uS/cm	Y	MCQ	
	SAM004			pH	6.83	Units	Y	MCQ		
	Sample Matrix:		Ground Water	Analyst Comment:						
	MCQ048972	BH5	30/04/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	51.90	mg/l	Y	MCQ	
				SAM009	COD (Total)	49	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	915.0	uS/cm	Y	MCQ	
SAM004				pH	7.04	Units	Y	MCQ		
Sample Matrix:		Ground Water	Analyst Comment:							
MCQ048973		BH5A	30/04/2018	SAM031	Ammonia as N	14.70	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	106.00	mg/l	Y	MCQ	
				SAM009	COD (Total)	55	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,730.0	uS/cm	Y	MCQ	
	SAM004			pH	6.94	Units	Y	MCQ		
	Sample Matrix:		Ground Water	Analyst Comment:						

Test Certificate

Certificate: ECTC012939

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ048974	BH6	30/04/2018	SAM031	Ammonia as N	0.40	mg/l	Y	MCQ		
			SAM031	Chloride as Cl	25.70	mg/l	Y	MCQ		
			SAM009	COD (Total)	61	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	1,030.0	uS/cm	Y	MCQ		
			SAM004	pH	7.33	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ048975	BH6A	30/04/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	26.90	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	638.0	uS/cm	Y	MCQ	
SAM004				pH	6.95	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ048976		BH7A	30/04/2018	SAM031	Ammonia as N	1.23	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	51.40	mg/l	Y	MCQ	
				SAM009	COD (Total)	85	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,580.0	uS/cm	Y	MCQ	
	SAM004			pH	6.87	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ048977	BH8	30/04/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	5.92	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	717.0	uS/cm	Y	MCQ	
SAM004				pH	7.60	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ048978		BH9	30/04/2018	SAM031	Ammonia as N	1.49	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	66.60	mg/l	Y	MCQ	
				SAM009	COD (Total)	74	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,550.0	uS/cm	Y	MCQ	
	SAM004			pH	6.91	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							

Test Certificate

Certificate: ECTC012939

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ048979	BH12	30/04/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ		
			SAM031	Chloride as Cl	34.60	mg/l	Y	MCQ		
			SAM009	COD (Total)	37	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	864.0	uS/cm	Y	MCQ		
			SAM004	pH	7.09	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ048980	BH13	30/04/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y		MCQ
				SAM031	Chloride as Cl	28.30	mg/l	Y		MCQ
				SAM009	COD (Total)	<25	mg/l	Y		MCQ
				SAM005	Electrical Conductivity	708.0	uS/cm	Y		MCQ
SAM004				pH	7.60	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ048981		SW1	30/04/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	@
				SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	25.50	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,090.0	uS/cm	Y	MCQ	
	SAM004			pH	7.60	Units	Y	MCQ		
	SAM001			Suspended Solids	8.00	mg/l	Y	MCQ		
	Sample Matrix: Surface Water			Analyst Comment:						
	MCQ048982	SW2	30/04/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	@
				SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	25.50	mg/l	Y	MCQ	
SAM005				Electrical Conductivity	1,100.0	uS/cm	Y	MCQ		
SAM004				pH	7.65	Units	Y	MCQ		
SAM001				Suspended Solids	8.00	mg/l	Y	MCQ		
Sample Matrix: Surface Water		Analyst Comment:								
MCQ048983		SW3	30/04/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	@
				SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	50.80	mg/l	Y	MCQ	
	SAM005			Electrical Conductivity	527.0	uS/cm	Y	MCQ		
	SAM004			pH	7.15	Units	Y	MCQ		
	SAM001			Suspended Solids	<3.00	mg/l	Y	MCQ		
	Sample Matrix: Surface Water		Analyst Comment:							

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC012939

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ048984	SW4	30/04/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	@
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	37.40	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	855.0	uS/cm	Y	MCQ	
			SAM004	pH	7.72	Units	Y	MCQ	
			SAM001	Suspended Solids	7.00	mg/l	Y	MCQ	

Sample Matrix: Surface Water

Analyst
Comment:

MCQ048985	Treated Leachate	30/04/2018	SAM031	Ammonia as N	54.60	mg/l	Y	MCQ	8@
			SAM016	BOD (ATU)	46.80	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	963.00	mg/l	Y	MCQ	
			SAM009	COD (Total)	1,500	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	10,200.0	uS/cm	Y	MCQ	
			SAM004	pH	9.00	Units	Y	MCQ	
			SAM001	Suspended Solids	892.00	mg/l	Y	MCQ	

Sample Matrix: Landfill Leachate

Analyst
Comment:

Sample Deviations Legend			
Results may be compromised if the following deviations apply			
Comment	C	Incorrect Container	‡
Container with Headspace provided	8	Insufficient sample volume	È
BOD Overdiluted, therefore result indicative only	\$	BOD Underdiluted, therefore result indicative only	#
High Chloride concentration, COD could not be determined	§	Holding time exceeded due to sampled on date	@
Holding time exceeded in Lab	±	Holding time exceeded due to delayed instructions	&

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC013062

Issue No: 1

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sales@mcquillanenvirocare.com

MCQ Job No	ORD-14474
Sample Receipt Date	17/05/2018
Date Analysis Started	17/05/2018
Completion Date	05/06/2018
Turnaround Time	10
No of Samples	17
Purchase Order Number	Lisbane
McQuillan Quote Number	ECA-01916

Dear [REDACTED]

Analysis of your sample(s) is now complete and we have pleasure in enclosing the appropriate test report.

All analysis was completed within McQuillan Envirocare Analytical Laboratory (MCQ) unless otherwise specified. Any analysis that was subcontracted to a McQuillan Companies Approved Laboratory is indicated by 'S'. Please refer to the table at the end of your test certificate for explanations of sample deviations.

Results relate only to the items tested. This Test Certificate supersedes any version previously issued by the laboratory. It cannot be reproduced except in full and without written approval from McQuillan Envirocare Ltd.

Should you have any queries regarding this report(s) or any part of our service, please contact Sales on +44(0)28 9446 6708 who will be happy to discuss your requirements.

Thank you for using McQuillan Companies Analytical Services and we look forward to receiving your next samples.

Yours Sincerely

Name: [REDACTED]

Date: 5/6/2018

Title: Lab Administrator



Test Certificate

Certificate: ECTC013062

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ049346	BH1	15/05/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S		
			N/A	Chloride	9.45	mg/l	Y	S		
			SAM009	COD (Total)	118	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	521.0	uS/cm	Y	MCQ		
			SAM004	pH	7.53	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ049347	BH2	15/05/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S	
				N/A	Chloride	15.5	mg/l	Y	S	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	706.0	uS/cm	Y	MCQ	
SAM004				pH	7.44	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ049348		BH4	15/05/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S	
				N/A	Chloride	15.8	mg/l	Y	S	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,100.0	uS/cm	Y	MCQ	
	SAM004			pH	6.90	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ049349	BH5	15/05/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S	
				N/A	Chloride	60.4	mg/l	Y	S	
				SAM009	COD (Total)	42	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	965.0	uS/cm	Y	MCQ	
SAM004				pH	7.00	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ049350		BH5A	15/05/2018	N/A	Ammoniacal Nitrogen as N	15	mg/l	Y	S	
				N/A	Chloride	96.5	mg/l	Y	S	
				SAM009	COD (Total)	48	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,640.0	uS/cm	Y	MCQ	
	SAM004			pH	6.98	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							

Test Certificate

Certificate: ECTC013062

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ049351	BH6	15/05/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S		
			N/A	Chloride	22.9	mg/l	Y	S		
			SAM009	COD (Total)	81	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	1,040.0	uS/cm	Y	MCQ		
			SAM004	pH	7.23	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ049352	BH6A	15/05/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S	
				N/A	Chloride	32	mg/l	Y	S	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	758.0	uS/cm	Y	MCQ	
SAM004				pH	6.99	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ049353		BH7A	15/05/2018	N/A	Ammoniacal Nitrogen as N	1.36	mg/l	Y	S	
				N/A	Chloride	71.2	mg/l	Y	S	
				SAM009	COD (Total)	71	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,600.0	uS/cm	Y	MCQ	
	SAM004			pH	6.75	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ049354	BH8	15/05/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S	
				N/A	Chloride	20.8	mg/l	Y	S	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,060.0	uS/cm	Y	MCQ	
SAM004				pH	7.17	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ049355		BH9	15/05/2018	N/A	Ammoniacal Nitrogen as N	2.08	mg/l	Y	S	
				N/A	Chloride	73.7	mg/l	Y	S	
				SAM009	COD (Total)	62	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,610.0	uS/cm	Y	MCQ	
	SAM004			pH	6.82	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ049356	BH12	15/05/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S	
			N/A	Chloride	37.1	mg/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	945.0	uS/cm	Y	MCQ	
			SAM004	pH	6.98	Units	Y	MCQ	
	Sample Matrix: Ground Water		Analyst Comment:						
	BH13	15/05/2018	N/A	Ammoniacal Nitrogen as N	0.249	mg/l	Y	S	
			N/A	Chloride	26.2	mg/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	709.0	uS/cm	Y	MCQ	
SAM004			pH	7.51	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:							
MCQ049358	SW1	15/05/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S	@
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Chloride	25.4	mg/l	Y	S	
			SAM005	Electrical Conductivity	1,140.0	uS/cm	Y	MCQ	
			SAM004	pH	7.61	Units	Y	MCQ	
			SAM001	Suspended Solids	3.00	mg/l	Y	MCQ	
	Sample Matrix: Surface Water		Analyst Comment:						
MCQ049359	SW2	15/05/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S	@
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Chloride	25.6	mg/l	Y	S	
			SAM005	Electrical Conductivity	1,150.0	uS/cm	Y	MCQ	
			SAM004	pH	7.68	Units	Y	MCQ	
			SAM001	Suspended Solids	3.00	mg/l	Y	MCQ	
	Sample Matrix: Surface Water		Analyst Comment:						
MCQ049360	SW3	15/05/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S	@
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Chloride	53.5	mg/l	Y	S	
			SAM005	Electrical Conductivity	553.0	uS/cm	Y	MCQ	
			SAM004	pH	7.12	Units	Y	MCQ	
			SAM001	Suspended Solids	4.00	mg/l	Y	MCQ	
	Sample Matrix: Surface Water		Analyst Comment:						

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC013062

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ049361	SW4	15/05/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	@
			N/A	Chloride	38.3	mg/l	Y	S	
			SAM005	Electrical Conductivity	902.0	uS/cm	Y	MCQ	
			SAM004	pH	7.67	Units	Y	MCQ	
			SAM001	Suspended Solids	6.00	mg/l	Y	MCQ	

Sample Matrix: Surface Water

Analyst
Comment:

MCQ049362	Treated Leachate	15/05/2018	N/A	Ammoniacal Nitrogen as N	27.6	mg/l	Y	S	
			SAM016	BOD (ATU)	15.30	mg/l	Y	MCQ	@
			N/A	Chloride	970	mg/l	Y	S	
			SAM009	COD (Total)	1,270	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	9,740.0	uS/cm	Y	MCQ	
			SAM004	pH	8.94	Units	Y	MCQ	
			SAM001	Suspended Solids	264.00	mg/l	Y	MCQ	

Sample Matrix: Landfill Leachate

Analyst
Comment:

Sample Deviations Legend			
Results may be compromised if the following deviations apply			
Comment	C	Incorrect Container	‡
Container with Headspace provided	8	Insufficient sample volume	È
BOD Overdiluted, therefore result indicative only	\$	BOD Underdiluted, therefore result indicative only	#
High Chloride concentration, COD could not be determined	§	Holding time exceeded due to sampled on date	@
Holding time exceeded in Lab	±	Holding time exceeded due to delayed instructions	&

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC013318

Issue No: 1

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MCQ Job No	ORD-14732
Sample Receipt Date	20/06/2018
Date Analysis Started	20/06/2018
Completion Date	10/07/2018
Turnaround Time	10
No of Samples	17
Purchase Order Number	Lisbane
McQuillan Quote Number	ECA-01916

Dear [REDACTED]

Analysis of your sample(s) is now complete and we have pleasure in enclosing the appropriate test report.

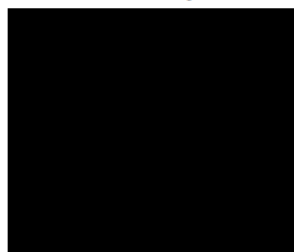
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Should you have any queries regarding this report(s) or any part of our service, please contact Sales on +44(0)28 9446 6708 who will be happy to discuss your requirements.

Thank you for using McQuillan Companies Analytical Services and we look forward to receiving your next samples.

Yours Sincerely



Name: [REDACTED]

Date: 10/7/2018

Title: Lab Administrator



McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC013318

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ050037	SW1	19/06/2018	SAM031	Alkalinity, Total	231.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium (tot.unfilt)	<0.08	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	171	mg/l	N	S	
			SAM031	Chloride as Cl	27.40	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<1	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	1.24	ug/l	Y	S	
			MCQ- DO	Dissolved Oxygen	8.94	mg/l	N	MCQ	
			SAM005	Electrical Conductivity	1,290.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	<0.019	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<0.2	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	60.5	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	40	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	5.11	ug/l	Y	S	
			SAM004	pH	7.74	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	6.29	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	32.4	mg/l	N	S	
			SAM031	Sulphate as SO4	471.00	mg/l	Y	MCQ	
			SAM001	Suspended Solids	3.00	mg/l	Y	MCQ	
			SAM034	TOC	3.04	mg/l	Y	MCQ	
			SAM031	TON as N	0.22	mg/l	Y	MCQ	
			MCQ- VOG	Visible Oil and Grease	<1.0	%	N	MCQ	
			N/A	Zinc Total (W)	1.56	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Surface Water

Analyst
Comment:

MCQ050038	SW2	19/06/2018	SAM031	Alkalinity, Total	224.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	0.15	mg/l	Y	MCQ	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium (tot.unfilt)	<0.08	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	175	mg/l	N	S	
			SAM031	Chloride as Cl	27.00	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<1	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC013318

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ050038	SW2	19/06/2018	N/A	Copper (tot.unfilt)	1	ug/l	Y	S	
			MCQ- DO	Dissolved Oxygen	9.06	mg/l	N	MCQ	
			SAM005	Electrical Conductivity	1,290.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	<0.019	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<0.2	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	62.3	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	29.9	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	4.28	ug/l	Y	S	
			SAM004	pH	7.81	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	6.27	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	31.6	mg/l	N	S	
			SAM031	Sulphate as SO4	470.00	mg/l	Y	MCQ	
			SAM001	Suspended Solids	<3.00	mg/l	Y	MCQ	
			SAM034	TOC	2.58	mg/l	Y	MCQ	
			SAM031	TON as N	< 0.08	mg/l	Y	MCQ	
			MCQ- VOG	Visible Oil and Grease	<1.0	%	N	MCQ	
			N/A	Zinc Total (W)	2.02	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Surface Water

Analyst
Comment:

MCQ050039	SW3	19/06/2018	SAM031	Alkalinity, Total	169.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	0.11	mg/l	Y	MCQ	
			SAM016	BOD (ATU)	1.93	mg/l	Y	MCQ	
			N/A	Cadmium (tot.unfilt)	<0.08	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	63.9	mg/l	N	S	
			SAM031	Chloride as Cl	49.90	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<1	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	<0.3	ug/l	Y	S	
			MCQ- DO	Dissolved Oxygen	6.17	mg/l	N	MCQ	
			SAM005	Electrical Conductivity	563.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	0.0463	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<0.2	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	17.9	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	73.7	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC013318

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ050039	SW3	19/06/2018	N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	1.16	ug/l	Y	S	
			SAM004	pH	6.89	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	2.4	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	26.1	mg/l	N	S	
			SAM031	Sulphate as SO4	35.70	mg/l	Y	MCQ	
			SAM001	Suspended Solids	25.00	mg/l	Y	MCQ	
			SAM034	TOC	4.18	mg/l	Y	MCQ	
			SAM031	TON as N	< 0.08	mg/l	Y	MCQ	
			MCQ- VOG	Visible Oil and Grease	<1.0	%	N	MCQ	
			N/A	Zinc Total (W)	<1	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Surface Water

Analyst
Comment:

MCQ050040	SW4	19/06/2018	SAM031	Alkalinity, Total	210.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium (tot.unfilt)	<0.08	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	129	mg/l	N	S	
			SAM031	Chloride as Cl	36.10	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<1	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	0.9	ug/l	Y	S	
			MCQ- DO	Dissolved Oxygen	9.01	mg/l	N	MCQ	
			SAM005	Electrical Conductivity	1,020.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	<0.019	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<0.2	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	49.3	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	9.4	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	2.46	ug/l	Y	S	
			SAM004	pH	7.79	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	4.89	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	29.2	mg/l	N	S	
			SAM031	Sulphate as SO4	285.00	mg/l	Y	MCQ	
			SAM001	Suspended Solids	6.00	mg/l	Y	MCQ	
			SAM034	TOC	3.63	mg/l	Y	MCQ	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC013318

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ050040	SW4	19/06/2018	SAM031	TON as N	0.41	mg/l	Y	MCQ	
			MCQ- VOG	Visible Oil and Grease	<1.0	%	N	MCQ	
			N/A	Zinc Total (W)	4.73	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Surface Water

Analyst
Comment:

MCQ050041	BH1	19/06/2018	SAM031	Alkalinity, Total	214.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	1.56	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.08	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	62.2	mg/l	N	S	
			SAM031	Chloride as Cl	14.20	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<1	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	517.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	<0.019	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<0.2	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	24.4	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	<3	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.01	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	<0.4	ug/l	Y	S	
			SAM004	pH	7.61	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	1.17	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	16.5	mg/l	N	S	
			SAM031	Sulphate as SO4	84.00	mg/l	Y	MCQ	
			SAM034	TOC	4.70	mg/l	Y	MCQ	
			SAM031	TON as N	0.59	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	<1	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

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Test Certificate

Certificate: ECTC013318

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
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MCQ050041

Sample Matrix: Ground Water

Analyst
Comment:

MCQ050042	BH2	19/06/2018	SAM031	Alkalinity, Total	181.00	mg/l	Y	MCQ
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ
			N/A	Arsenic (tot.unfilt)	60.9	ug/l	Y	S
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ
			N/A	Cadmium Total (W)	<0.08	ug/l	Y	S
			N/A	Calcium (tot.unfilt)	76.3	mg/l	N	S
			SAM031	Chloride as Cl	16.00	mg/l	Y	MCQ
			N/A	Chromium (tot.unfilt)	<1	ug/l	Y	S
			SAM009	COD (Total)	<25	mg/l	Y	MCQ
			SAM005	Electrical Conductivity	671.0	uS/cm	Y	MCQ
			N/A	Iron (tot.unfilt)	<0.019	mg/l	N	S
			N/A	Lead (tot.unfilt)	<0.2	ug/l	Y	S
			N/A	Magnesium (tot.unfilt)	34	mg/l	N	S
			N/A	Manganese (tot.unfilt)	18.8	ug/l	Y	S
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S
			N/A	Mercury (tot.unfilt)	<0.01	ug/l	N	S
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S
			N/A	Nickel Total (W)	1.85	ug/l	Y	S
			SAM004	pH	7.37	Units	Y	MCQ
			N/A	Potassium (tot.unfilt)	3.49	mg/l	N	S
			N/A	Sodium (tot.unfilt)	20.2	mg/l	N	S
			SAM031	Sulphate as SO4	152.00	mg/l	Y	MCQ
			SAM034	TOC	4.70	mg/l	Y	MCQ
			SAM031	TON as N	0.12	mg/l	Y	MCQ
			N/A	Zinc (tot.unfilt)	2.12	ug/l	Y	S
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S
			N/A	Cresols	<0.006	mg/l	Y	S
			N/A	Phenol	<0.002	mg/l	Y	S
			N/A	Phenol 5 Speciated				
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S
			N/A	Xylenols	<0.008	mg/l	Y	S

Sample Matrix: Ground Water

Analyst
Comment:

MCQ050043	BH4	19/06/2018	SAM031	Alkalinity, Total	329.00	mg/l	Y	MCQ
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ
			N/A	Arsenic (tot.unfilt)	0.768	ug/l	Y	S
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ
			N/A	Cadmium Total (W)	<0.08	ug/l	Y	S
			N/A	Calcium (tot.unfilt)	147	mg/l	N	S

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MCQ050043	BH4	19/06/2018	SAM031	Chloride as Cl	16.80	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<1	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	1,080.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	<0.019	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<0.2	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	52.4	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	315	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.01	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	3.05	ug/l	Y	S	
			SAM004	pH	6.92	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	4.11	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	22.7	mg/l	N	S	
			SAM031	Sulphate as SO4	247.00	mg/l	Y	MCQ	
			SAM034	TOC	3.36	mg/l	Y	MCQ	
			SAM031	TON as N	0.08	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	1.38	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ050044	BH5	19/06/2018	SAM031	Alkalinity, Total	182.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	0.593	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	8
			N/A	Cadmium Total (W)	<0.08	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	101	mg/l	N	S	
			SAM031	Chloride as Cl	40.30	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<1	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	859.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	<0.019	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<0.2	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	26.9	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	7.89	ug/l	Y	S	
			N/A	Mecoprop (MCP)	0.013	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.01	ug/l	N	S	

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ050044	BH5	19/06/2018	N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	6.64	ug/l	Y	S	
			SAM004	pH	7.07	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	7.99	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	30.6	mg/l	N	S	
			SAM031	Sulphate as SO4	191.00	mg/l	Y	MCQ	
			SAM034	TOC	6.71	mg/l	Y	MCQ	
			SAM031	TON as N	3.76	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	2.37	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ050045	BH5A	19/06/2018	SAM031	Alkalinity, Total	484.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	16.60	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	<0.5	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	0.121	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	136	mg/l	N	S	
			SAM031	Chloride as Cl	70.40	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<1	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	537.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	<0.019	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<0.2	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	43.5	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	895	ug/l	Y	S	
			N/A	Mecoprop (MCP)	0.353	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.01	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	35	ug/l	Y	S	
			SAM004	pH	6.93	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	25.4	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	81.3	mg/l	N	S	
			SAM031	Sulphate as SO4	215.00	mg/l	Y	MCQ	
			SAM034	TOC	4.83	mg/l	Y	MCQ	
			SAM031	TON as N	2.53	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	3.38	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ050045	BH5A	19/06/2018	N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ050046	BH6	19/06/2018	SAM031	Alkalinity, Total	218.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	0.72	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	7.12	ug/l	Y	S	
			SAM016	BOD (ATU)	127.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.08	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	163	mg/l	N	S	
			SAM031	Chloride as Cl	28.90	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<1	ug/l	Y	S	
			SAM009	COD (Total)	NR	mg/l	Y	MCQ	C
			SAM005	Electrical Conductivity	1,270.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	0.0879	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<0.2	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	54.4	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	6200	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.01	ug/l	N	S	
			N/A	Naphthalene (aq)	0.0591	ug/l	N	S	
			N/A	Nickel Total (W)	11.3	ug/l	Y	S	
			SAM004	pH	7.37	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	8.94	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	27.8	mg/l	N	S	
			SAM031	Sulphate as SO4	455.00	mg/l	Y	MCQ	
			SAM034	TOC	435.00	mg/l	Y	MCQ	
			SAM031	TON as N	0.29	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	<1	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment: Sample not suitable for COD due to very high solid concentration.

MCQ050047	BH6A	19/06/2018	SAM031	Alkalinity, Total	208.00	mg/l	Y	MCQ	
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Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ050047	BH6A	19/06/2018	SAM031	Ammonia as N	0.36	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	<0.5	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.08	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	118	mg/l	N	S	
			SAM031	Chloride as Cl	43.50	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<1	ug/l	Y	S	
			SAM009	COD (Total)	44	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	969.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	<0.019	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<0.2	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	30.7	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	593	ug/l	Y	S	
			N/A	Mecoprop (MCP)	0.148	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.01	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	7.99	ug/l	Y	S	
			SAM004	pH	6.81	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	5.55	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	37.6	mg/l	N	S	
			SAM031	Sulphate as SO4	209.00	mg/l	Y	MCQ	
			SAM034	TOC	7.78	mg/l	Y	MCQ	
			SAM031	TON as N	4.29	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	3.83	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ050048	BH8	19/06/2018	SAM031	Alkalinity, Total	396.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	0.765	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.08	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	176	mg/l	N	S	
			SAM031	Chloride as Cl	76.20	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<1	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	1,390.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	<0.019	mg/l	N	S	

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ050048	BH8	19/06/2018	N/A	Lead (tot.unfilt)	<0.2	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	54.4	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	<3	ug/l	Y	S	
			N/A	Mecoprop (MCP)	0.143	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.01	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	9.46	ug/l	Y	S	
			SAM004	pH	7.05	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	1.98	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	31.1	mg/l	N	S	
			SAM031	Sulphate as SO4	277.00	mg/l	Y	MCQ	
			SAM034	TOC	2.93	mg/l	Y	MCQ	
			SAM031	TON as N	< 0.08	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	1.21	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ050049	BH9	19/06/2018	SAM031	Alkalinity, Total	434.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	3.78	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	<0.5	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.08	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	169	mg/l	N	S	
			SAM031	Chloride as Cl	97.40	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<1	ug/l	Y	S	
			SAM009	COD (Total)	48	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	1,670.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	<0.019	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<0.2	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	57.1	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	396	ug/l	Y	S	
			N/A	Mecoprop (MCP)	0.135	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.01	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	20.1	ug/l	Y	S	
			SAM004	pH	6.86	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	19.9	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	81.6	mg/l	N	S	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

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Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ050049	BH9	19/06/2018	SAM031	Sulphate as SO4	248.00	mg/l	Y	MCQ	
			SAM034	TOC	10.50	mg/l	Y	MCQ	
			SAM031	TON as N	12.10	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	1.15	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ050050	BH12	19/06/2018	SAM031	Alkalinity, Total	427.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	<0.5	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.08	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	144	mg/l	N	S	
			SAM031	Chloride as Cl	46.50	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<1	ug/l	Y	S	
			SAM009	COD (Total)	26	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	1,160.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	<0.019	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<0.2	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	53.2	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	36.7	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.01	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	<0.4	ug/l	Y	S	
			SAM004	pH	6.90	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	2.76	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	31	mg/l	N	S	
			SAM031	Sulphate as SO4	156.00	mg/l	Y	MCQ	
			SAM034	TOC	2.94	mg/l	Y	MCQ	
			SAM031	TON as N	< 0.08	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	<1	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC013318

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
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MCQ050050	BH12	19/06/2018	N/A	Xylenols	<0.008	mg/l	Y	S	
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Sample Matrix: Ground Water

Analyst
Comment:

MCQ050051	BH13	19/06/2018	SAM031	Alkalinity, Total	187.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	3.85	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.08	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	61.6	mg/l	N	S	
			SAM031	Chloride as Cl	28.10	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<1	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	721.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	<0.019	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<0.2	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	36.8	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	<3	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.01	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	<0.4	ug/l	Y	S	
			SAM004	pH	7.45	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	1.27	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	21.3	mg/l	N	S	
			SAM031	Sulphate as SO4	156.00	mg/l	Y	MCQ	
			SAM034	TOC	<1.00	mg/l	Y	MCQ	
			SAM031	TON as N	< 0.08	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	2.27	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ050052	Raw Leachate	19/06/2018	SAM031	Alkalinity, Total	4,810.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	990.00	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	21.2	ug/l	Y	S	
			SAM016	BOD (ATU)	50.50	mg/l	Y	MCQ	#
			N/A	Cadmium Total (W)	<0.08	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	101	mg/l	N	S	

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Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ050052	Raw Leachate	19/06/2018	SAM031	Chloride as Cl	1,260.00	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	87.7	ug/l	Y	S	
			SAM009	COD (Total)	1,450	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	13,500.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	6.27	mg/l	N	S	
			N/A	Lead (tot.unfilt)	1.58	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	61	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	998	ug/l	Y	S	
			N/A	Mecoprop (MCP)	27.8	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.01	ug/l	N	S	
			N/A	Naphthalene (aq)	1.59	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	90.7	ug/l	Y	S	
			SAM004	pH	7.48	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	320	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	626	mg/l	N	S	
			SAM031	Sulphate as SO4	44.60	mg/l	Y	MCQ	
			SAM001	Suspended Solids	12.00	mg/l	Y	MCQ	
			SAM034	TOC	477.00	mg/l	Y	MCQ	
			SAM031	TON as N	0.38	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	38.7	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.015	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.03	mg/l	Y	S	
			N/A	Cresols	<0.03	mg/l	Y	S	
			N/A	Phenol	<0.01	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.04	mg/l	Y	S	

Sample Matrix: Landfill Leachate

Analyst
Comment:

MCQ050053	Treated Leachate	19/06/2018	SAM031	Alkalinity, Total	1,440.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	7.67	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	27.5	ug/l	Y	S	
			SAM016	BOD (ATU)	10.50	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	0.28	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	54.6	mg/l	N	S	
			SAM031	Chloride as Cl	944.00	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	156	ug/l	Y	S	
			SAM009	COD (Total)	1,290	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	11,000.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	8.74	mg/l	N	S	
			N/A	Lead (tot.unfilt)	3.83	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	18.5	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	169	ug/l	Y	S	
			N/A	Mecoprop (MCP)	1.58	ug/l	N	S	

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Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ050053	Treated Leachate	19/06/2018	N/A	Mercury (tot.unfilt)	<0.01	ug/l	N	S	
			N/A	Naphthalene (aq)	0.0295	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	114	ug/l	Y	S	
			SAM004	pH	8.93	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	422	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	2270	mg/l	N	S	
			SAM031	Sulphate as SO4	85.60	mg/l	Y	MCQ	
			SAM001	Suspended Solids	31.00	mg/l	Y	MCQ	
			SAM034	TOC	464.00	mg/l	Y	MCQ	
			SAM031	TON as N	682.00	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	133	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.015	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.03	mg/l	Y	S	
			N/A	Cresols	<0.03	mg/l	Y	S	
			N/A	Phenol	<0.01	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.04	mg/l	Y	S	

Sample Matrix: Landfill Leachate

Analyst
Comment:

Sample Deviations Legend			
Results may be compromised if the following deviations apply			
Comment	C	Incorrect Container	‡
Container with Headspace provided	8	Insufficient sample volume	È
BOD Overdiluted, therefore result indicative only	\$	BOD Underdiluted, therefore result indicative only	#
High Chloride concentration, COD could not be determined	§	Holding time exceeded due to sampled on date	@
Holding time exceeded in Lab	±	Holding time exceeded due to delayed instructions	&

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC013633

Issue No: 1

WDR & RT Taggart
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MCQ Job No	ORD-15050
Sample Receipt Date	26/07/2018
Date Analysis Started	26/07/2018
Completion Date	09/08/2018
Turnaround Time	10
No of Samples	16
Purchase Order Number	Lisbane
McQuillan Quote Number	ECA-01916

Dear [REDACTED]

Analysis of your sample(s) is now complete and we have pleasure in enclosing the appropriate test report.

All analysis was completed within McQuillan Envirocare Analytical Laboratory (MCQ) unless otherwise specified. Any analysis that was subcontracted to a McQuillan Companies Approved Laboratory is indicated by 'S'. Please refer to the table at the end of your test certificate for explanations of sample deviations.

Results relate only to the items tested. This Test Certificate supersedes any version previously issued by the laboratory. It cannot be reproduced except in full and without written approval from McQuillan Envirocare Ltd.

Should you have any queries regarding this report(s) or any part of our service, please contact Sales on +44(0)28 9446 6708 who will be happy to discuss your requirements.

Thank you for using McQuillan Companies Analytical Services and we look forward to receiving your next samples.

Yours Sincerely

Name: [REDACTED]

Date: 9/8/2018

Title: Lab Administrator



Test Certificate

Certificate: ECTC013633

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ050969	BH1	25/07/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ		
			SAM031	Chloride as Cl	35.90	mg/l	Y	MCQ		
			SAM009	COD (Total)	59	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	917.0	uS/cm	Y	MCQ		
			SAM004	pH	7.05	Units	Y	MCQ		
	Sample Matrix:		Ground Water	Analyst Comment:						
	MCQ050970	BH2	25/07/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	16.80	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	667.0	uS/cm	Y	MCQ	
SAM004				pH	7.36	Units	Y	MCQ		
Sample Matrix:		Ground Water	Analyst Comment:							
MCQ050971		BH14	25/07/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	19.10	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,010.0	uS/cm	Y	MCQ	
	SAM004			pH	6.95	Units	Y	MCQ		
	Sample Matrix:		Ground Water	Analyst Comment:						
	MCQ050972	BH5	25/07/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	86.60	mg/l	Y	MCQ	
				SAM009	COD (Total)	42	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,170.0	uS/cm	Y	MCQ	
SAM004				pH	6.96	Units	Y	MCQ		
Sample Matrix:		Ground Water	Analyst Comment:							
MCQ050973		BH5A	25/07/2018	SAM031	Ammonia as N	14.50	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	61.90	mg/l	Y	MCQ	
				SAM009	COD (Total)	48	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,460.0	uS/cm	Y	MCQ	
	SAM004			pH	6.93	Units	Y	MCQ		
	Sample Matrix:		Ground Water	Analyst Comment:						

Test Certificate

Certificate: ECTC013633

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ050974	BH6	25/07/2018	SAM031	Ammonia as N	3.03	mg/l	Y	MCQ		
			SAM031	Chloride as Cl	35.40	mg/l	Y	MCQ		
			SAM009	COD (Total)	85	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	1,250.0	uS/cm	Y	MCQ		
			SAM004	pH	7.19	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ050975	BH6A	25/07/2018	SAM031	Ammonia as N	0.18	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	44.20	mg/l	Y	MCQ	
				SAM009	COD (Total)	31	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	953.0	uS/cm	Y	MCQ	
SAM004				pH	7.01	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ050976		BH8	25/07/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	60.90	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,260.0	uS/cm	Y	MCQ	
	SAM004			pH	7.11	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ050977	BH9	25/07/2018	SAM031	Ammonia as N	2.83	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	107.00	mg/l	Y	MCQ	
				SAM009	COD (Total)	34	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,650.0	uS/cm	Y	MCQ	
SAM004				pH	6.86	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ050978		BH12	25/07/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	11.00	mg/l	Y	MCQ	
				SAM009	COD (Total)	36	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	412.0	uS/cm	Y	MCQ	
	SAM004			pH	8.02	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							

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Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ050979	BH13	25/07/2018	SAM031	Ammonia as N	0.86	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	28.80	mg/l	Y	MCQ	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	739.0	uS/cm	Y	MCQ	
			SAM004	pH	7.40	Units	Y	MCQ	
Sample Matrix: Ground Water			Analyst Comment:						
MCQ050980	SW1	25/07/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			SAM016	BOD (ATU)	1.25	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	28.90	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	1,290.0	uS/cm	Y	MCQ	
			SAM004	pH	7.66	Units	Y	MCQ	
			SAM001	Suspended Solids	28.00	mg/l	Y	MCQ	
Sample Matrix: Surface Water			Analyst Comment:						
MCQ050981	SW3	25/07/2018	SAM031	Ammonia as N	0.25	mg/l	Y	MCQ	\$
			SAM016	BOD (ATU)	2.98	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	52.00	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	574.0	uS/cm	Y	MCQ	
			SAM004	pH	7.24	Units	Y	MCQ	
			SAM001	Suspended Solids	22.00	mg/l	Y	MCQ	
Sample Matrix: Surface Water			Analyst Comment:						
MCQ050982	SW4	25/07/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	37.50	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	1,030.0	uS/cm	Y	MCQ	
			SAM004	pH	7.97	Units	Y	MCQ	
			SAM001	Suspended Solids	55.00	mg/l	Y	MCQ	
Sample Matrix: Surface Water			Analyst Comment:						
MCQ050983	Raw Leachate	25/07/2018	SAM031	Ammonia as N	579.00	mg/l	Y	MCQ	#
			SAM016	BOD (ATU)	58.90	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	1,050.00	mg/l	Y	MCQ	
			SAM009	COD (Total)	1,210	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	10,400.0	uS/cm	Y	MCQ	
			SAM004	pH	8.01	Units	Y	MCQ	
			SAM001	Suspended Solids	24.00	mg/l	Y	MCQ	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC013633

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
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MCQ050983 Sample Matrix: Landfill Leachate Analyst Comment:

MCQ050984	Treated Leachate	25/07/2018	SAM031	Ammonia as N	0.55	mg/l	Y	MCQ	
			SAM016	BOD (ATU)	6.32	mg/l	Y	MCQ	\$
			SAM031	Chloride as Cl	1,100.00	mg/l	Y	MCQ	
			SAM009	COD (Total)	1,210	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	11,600.0	uS/cm	Y	MCQ	
			SAM004	pH	8.59	Units	Y	MCQ	
			SAM001	Suspended Solids	58.00	mg/l	Y	MCQ	

Sample Matrix: Landfill Leachate Analyst Comment:

Sample Deviations Legend			
Results may be compromised if the following deviations apply			
Comment	C	Incorrect Container	‡
Container with Headspace provided	8	Insufficient sample volume	È
BOD Overdiluted, therefore result indicative only	\$	BOD Underdiluted, therefore result indicative only	#
High Chloride concentration, COD could not be determined	§	Holding time exceeded due to sampled on date	@
Holding time exceeded in Lab	±	Holding time exceeded due to delayed instructions	&

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC013908

Issue No: 1

Armagh Power Generation Ltd
56 Craigmore Road
Ringsend
Garavagh
Co Londonderry
BT62 1QW

Caulside Drive
New Park Industrial Estate
Antrim
BT41 2DV
Tel: (028) 9446 6708
Fax: (028) 9442 9580

www.mcquillancompanies.com
sales@mcquillanenvirocare.com

MCQ Job No	ORD-15327
Sample Receipt Date	23/08/2018
Date Analysis Started	24/08/2018
Completion Date	06/09/2018
Turnaround Time	10
No of Samples	15
Purchase Order Number	Lisbane
McQuillan Quote Number	ECA-01916

Dear [REDACTED]

Analysis of your sample(s) is now complete and we have pleasure in enclosing the appropriate test report.

All analysis was completed within McQuillan Envirocare Analytical Laboratory (MCQ) unless otherwise specified. Any analysis that was subcontracted to a McQuillan Companies Approved Laboratory is indicated by 'S'. Please refer to the table at the end of your test certificate for explanations of sample deviations.

Results relate only to the items tested. This Test Certificate supersedes any version previously issued by the laboratory. It cannot be reproduced except in full and without written approval from McQuillan Envirocare Ltd.

Should you have any queries regarding this report(s) or any part of our service, please contact Sales on +44(0)28 9446 6708 who will be happy to discuss your requirements.

Thank you for using McQuillan Companies Analytical Services and we look forward to receiving your next samples.

Yours Sincerely



Name: [REDACTED]

Date: 6/9/2018

Title: Lab Administrator



Test Certificate

Certificate: ECTC013908

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ051802	BH1	21/08/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ		
			SAM031	Chloride as Cl	11.00	mg/l	Y	MCQ		
			SAM009	COD (Total)	31	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	518.0	uS/cm	Y	MCQ		
			SAM004	pH	7.61	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ051803	BH2	21/08/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	16.30	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	669.0	uS/cm	Y	MCQ	
SAM004				pH	7.45	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ051804		BH4	21/08/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	19.40	mg/l	Y	MCQ	
				SAM009	COD (Total)	32	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,010.0	uS/cm	Y	MCQ	
	SAM004			pH	7.02	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ051805	BH5	21/08/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	20.90	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	851.0	uS/cm	Y	MCQ	
SAM004				pH	7.01	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ051806		BH6	21/08/2018	SAM031	Ammonia as N	2.38	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	26.10	mg/l	Y	MCQ	
				SAM009	COD (Total)	72	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,240.0	uS/cm	Y	MCQ	
	SAM004			pH	7.10	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC013908

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ051807	BH6A	21/08/2018	SAM031	Ammonia as N	0.43	mg/l	Y	MCQ		
			SAM031	Chloride as Cl	42.00	mg/l	Y	MCQ		
			SAM009	COD (Total)	145	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	1,020.0	uS/cm	Y	MCQ		
			SAM004	pH	7.06	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ051808	BH9	21/08/2018	SAM031	Ammonia as N	2.23	mg/l	Y		MCQ
				SAM031	Chloride as Cl	69.40	mg/l	Y		MCQ
				SAM009	COD (Total)	127	mg/l	Y		MCQ
				SAM005	Electrical Conductivity	1,820.0	uS/cm	Y		MCQ
SAM004				pH	6.70	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ051809		BH12	21/08/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	36.40	mg/l	Y	MCQ	
				SAM009	COD (Total)	55	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	919.0	uS/cm	Y	MCQ	
	SAM004			pH	6.95	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ051810	BH13	21/08/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	28.80	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	729.0	uS/cm	Y	MCQ	
SAM004				pH	7.43	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ051811		SW1	21/08/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	25.70	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,010.0	uS/cm	Y	MCQ	
	SAM004			pH	7.45	Units	Y	MCQ		
	SAM001			Suspended Solids	7.00	mg/l	Y	MCQ		
	Sample Matrix: Surface Water		Analyst Comment:							

@

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC013908

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ051812	SW2	21/08/2018	SAM031	Ammonia as N	0.42	mg/l	Y	MCQ	@
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	26.70	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	992.0	uS/cm	Y	MCQ	
			SAM004	pH	7.58	Units	Y	MCQ	
			SAM001	Suspended Solids	3.00	mg/l	Y	MCQ	
			Sample Matrix: Surface Water		Analyst Comment:				
MCQ051813	SW3	21/08/2018	SAM031	Ammonia as N	0.15	mg/l	Y	MCQ	8@
			SAM016	BOD (ATU)	2.01	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	45.00	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	489.0	uS/cm	Y	MCQ	
			SAM004	pH	7.02	Units	Y	MCQ	
			SAM001	Suspended Solids	15.00	mg/l	Y	MCQ	
			Sample Matrix: Surface Water		Analyst Comment:				
MCQ051814	SW4	21/08/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	@
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	29.80	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	897.0	uS/cm	Y	MCQ	
			SAM004	pH	7.73	Units	Y	MCQ	
			SAM001	Suspended Solids	7.00	mg/l	Y	MCQ	
			Sample Matrix: Surface Water		Analyst Comment:				
MCQ051815	Raw Leachate	21/08/2018	SAM031	Ammonia as N	511.00	mg/l	Y	MCQ	@
			SAM016	BOD (ATU)	42.00	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	970.00	mg/l	Y	MCQ	
			SAM009	COD (Total)	1,030	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	8,730.0	uS/cm	Y	MCQ	
			SAM004	pH	7.98	Units	Y	MCQ	
			SAM001	Suspended Solids	50.00	mg/l	Y	MCQ	
Sample Matrix: Landfill Leachate		Analyst Comment:							
MCQ051816	Treated Leachate	21/08/2018	SAM031	Ammonia as N	0.20	mg/l	Y	MCQ	\$@
			SAM016	BOD (ATU)	3.08	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	1,170.00	mg/l	Y	MCQ	
			SAM009	COD (Total)	1,200	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	11,500.0	uS/cm	Y	MCQ	
			SAM004	pH	8.46	Units	Y	MCQ	
			SAM001	Suspended Solids	35.00	mg/l	Y	MCQ	

McQuillan Envirocare Ltd
Analytical Services

Test Certificate

Certificate: ECTC013908

Issue No: 1

MCQ051816

Sample Matrix: Landfill Leachate

Analyst
Comment:

Sample Deviations Legend			
Results may be compromised if the following deviations apply			
Comment	C	Incorrect Container	‡
Container with Headspace provided	8	Insufficient sample volume	È
BOD Overdiluted, therefore result indicative only	\$	BOD Underdiluted, therefore result indicative only	#
High Chloride concentration, COD could not be determined	§	Holding time exceeded due to sampled on date	@
Holding time exceeded in Lab	±	Holding time exceeded due to delayed instructions	&

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC014157

Issue No: 1

WDR & RT Taggart
Laganwood House
Newforge Lane
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Caulside Drive
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BT41 2DV
Tel: (028) 9446 6708
Fax: (028) 9442 9580

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sales@mcquillanenvirocare.com

MCQ Job No	ORD-15579
Sample Receipt Date	21/09/2018
Date Analysis Started	21/09/2018
Completion Date	16/10/2018
Turnaround Time	10
No of Samples	15
Purchase Order Number	Lisbane
McQuillan Quote Number	ECA-01484

Dear [REDACTED]

Analysis of your sample(s) is now complete and we have pleasure in enclosing the appropriate test report.

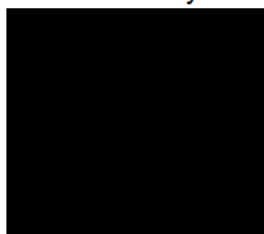
All analysis was completed within McQuillan Envirocare Analytical Laboratory (MCQ) unless otherwise specified. Any analysis that was subcontracted to a McQuillan Companies Approved Laboratory is indicated by 'S'. Please refer to the table at the end of your test certificate for explanations of sample deviations.

Results relate only to the items tested. This Test Certificate supersedes any version previously issued by the laboratory. It cannot be reproduced except in full and without written approval from McQuillan Envirocare Ltd.

Should you have any queries regarding this report(s) or any part of our service, please contact Sales on +44(0)28 9446 6708 who will be happy to discuss your requirements.

Thank you for using McQuillan Companies Analytical Services and we look forward to receiving your next samples.

Yours Sincerely



Name: [REDACTED]

Date: 16/10/2018

Title: Lab Administrator



McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC014157

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ052868	BH1	21/09/2018	SAM031	Alkalinity, Total	212.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	4.63	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	60.8	mg/l	N	S	
			SAM031	Chloride as Cl	10.80	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	5.28	ug/l	Y	S	
			SAM009	COD (Total)	51	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	2.76	ug/l	Y	S	
			SAM005	Electrical Conductivity	518.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	4.13	mg/l	N	S	
			N/A	Lead (tot.unfilt)	1.72	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	22.6	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	63.7	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	6.33	ug/l	Y	S	
			SAM004	pH	7.56	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	1.46	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	13.8	mg/l	N	S	
			SAM031	Sulphate as SO4	66.20	mg/l	Y	MCQ	
			SAM034	TOC	2.79	mg/l	Y	MCQ	
			SAM031	TON as N	0.63	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	9.7	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ052869	BH2	21/09/2018	SAM031	Alkalinity, Total	192.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	87.4	ug/l	Y	S	
			SAM016	BOD (ATU)	1.18	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	84.4	mg/l	N	S	
			SAM031	Chloride as Cl	15.80	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC014157

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ052869	BH2	21/09/2018	N/A	Copper (tot.unfilt)	5.24	ug/l	Y	S	
			SAM005	Electrical Conductivity	656.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	1.78	mg/l	N	S	
			N/A	Lead (tot.unfilt)	2.39	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	29.5	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	76.7	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	4.6	ug/l	Y	S	
			SAM004	pH	7.30	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	2.99	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	16.8	mg/l	N	S	
			SAM031	Sulphate as SO4	127.00	mg/l	Y	MCQ	
			SAM034	TOC	4.52	mg/l	Y	MCQ	
			SAM031	TON as N	0.23	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	8.31	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ052870	BH4	21/09/2018	SAM031	Alkalinity, Total	288.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	<2	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	160	mg/l	N	S	
			SAM031	Chloride as Cl	19.90	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	4.27	ug/l	Y	S	
			SAM009	COD (Total)	31	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	2.57	ug/l	Y	S	
			SAM005	Electrical Conductivity	1,050.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	3.18	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<1	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	40.9	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	264	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	0.0135	ug/l	N	S	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC014157

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ052870	BH4	21/09/2018	N/A	Nickel Total (W)	6.37	ug/l	Y	S	
			SAM004	pH	6.88	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	4.54	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	15	mg/l	N	S	
			SAM031	Sulphate as SO4	268.00	mg/l	Y	MCQ	
			SAM034	TOC	3.21	mg/l	Y	MCQ	
			SAM031	TON as N	< 0.08	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	7.41	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	
Sample Matrix: Ground Water			Analyst Comment:						
MCQ052871	BH5	21/09/2018	SAM031	Alkalinity, Total	178.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	<2	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	148	mg/l	N	S	
			SAM031	Chloride as Cl	32.90	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	3.94	ug/l	Y	S	
			SAM009	COD (Total)	48	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	9.5	ug/l	Y	S	
			SAM005	Electrical Conductivity	1,040.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	2.7	mg/l	N	S	
			N/A	Lead (tot.unfilt)	2.12	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	33.4	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	252	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	0.0549	ug/l	N	S	
			N/A	Nickel Total (W)	15.6	ug/l	Y	S	
			SAM004	pH	7.13	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	11.1	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	33.5	mg/l	N	S	
			SAM031	Sulphate as SO4	306.00	mg/l	Y	MCQ	
			SAM034	TOC	15.70	mg/l	Y	MCQ	
			SAM031	TON as N	4.84	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	13.1	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC014157

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ052871	BH5	21/09/2018	N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ052872	BH6	21/09/2018	SAM031	Alkalinity, Total	223.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	0.71	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	136	ug/l	Y	S	
			SAM016	BOD (ATU)	31.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<5.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	351	mg/l	N	S	
			SAM031	Chloride as Cl	29.00	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	194	ug/l	Y	S	
			SAM009	COD (Total)	38	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	651	ug/l	Y	S	
			SAM005	Electrical Conductivity	1,310.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	103	mg/l	N	S	
			N/A	Lead (tot.unfilt)	345	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	254	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	24700	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	0.34	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.1	ug/l	N	S	
			N/A	Nickel Total (W)	1660	ug/l	Y	S	
			SAM004	pH	7.35	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	20.7	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	22.1	mg/l	N	S	
			SAM031	Sulphate as SO4	538.00	mg/l	Y	MCQ	
			SAM034	TOC	501.00	mg/l	Y	MCQ	
			SAM031	TON as N	0.57	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	1750	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

McQuillan Envirocare Ltd

Analytical Services

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Certificate: ECTC014157

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ052873	BH6A	21/09/2018	SAM031	Alkalinity, Total	225.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	0.16	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	2.94	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	133	mg/l	N	S	
			SAM031	Chloride as Cl	34.20	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	56.5	ug/l	Y	S	
			SAM009	COD (Total)	254	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	15.1	ug/l	Y	S	
			SAM005	Electrical Conductivity	954.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	24.8	mg/l	N	S	
			N/A	Lead (tot.unfilt)	7.51	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	27.7	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	220	ug/l	Y	S	
			N/A	Mecoprop (MCP)	0.084	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	0.0203	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	34	ug/l	Y	S	
			SAM004	pH	7.11	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	6.31	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	33.9	mg/l	N	S	
			SAM031	Sulphate as SO4	203.00	mg/l	Y	MCQ	
			SAM034	TOC	7.61	mg/l	Y	MCQ	
			SAM031	TON as N	2.71	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	30.5	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ052874	BH9	21/09/2018	SAM031	Alkalinity, Total	331.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	2.85	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	<2	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	213	mg/l	N	S	
			SAM031	Chloride as Cl	62.70	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	4.16	ug/l	Y	S	
			SAM009	COD (Total)	41	mg/l	Y	MCQ	

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ052874	BH9	21/09/2018	N/A	Copper (tot.unfilt)	11.4	ug/l	Y	S	
			SAM005	Electrical Conductivity	1,640.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	2.93	mg/l	N	S	
			N/A	Lead (tot.unfilt)	1.91	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	56.4	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	465	ug/l	Y	S	
			N/A	Mecoprop (MCP)	0.165	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	0.0329	ug/l	N	S	
			N/A	Nickel Total (W)	19	ug/l	Y	S	
			SAM004	pH	6.97	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	16.9	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	65.9	mg/l	N	S	
			SAM031	Sulphate as SO4	447.00	mg/l	Y	MCQ	
			SAM034	TOC	9.21	mg/l	Y	MCQ	
			SAM031	TON as N	9.64	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	6.68	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ052875	BH12	21/09/2018	SAM031	Alkalinity, Total	299.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	<2	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	114	mg/l	N	S	
			SAM031	Chloride as Cl	31.30	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	8.3	ug/l	Y	S	
			SAM009	COD (Total)	59	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	8.82	ug/l	Y	S	
			SAM005	Electrical Conductivity	836.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	7.24	mg/l	N	S	
			N/A	Lead (tot.unfilt)	3.48	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	35.6	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	184	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	0.0502	ug/l	N	S	

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ052875	BH12	21/09/2018	N/A	Nickel Total (W)	9.95	ug/l	Y	S	
			SAM004	pH	7.08	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	2.34	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	21.9	mg/l	N	S	
			SAM031	Sulphate as SO4	114.00	mg/l	Y	MCQ	
			SAM034	TOC	11.80	mg/l	Y	MCQ	
			SAM031	TON as N	0.45	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	17	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ052876	BH13	21/09/2018	SAM031	Alkalinity, Total	187.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	4.9	ug/l	Y	S	
			SAM016	BOD (ATU)	2.54	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	83.7	mg/l	N	S	
			SAM031	Chloride as Cl	27.60	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	<1	ug/l	Y	S	
			SAM005	Electrical Conductivity	734.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	0.34	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<1	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	35.3	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	459	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	0.103	ug/l	N	S	
			N/A	Nickel Total (W)	1.64	ug/l	Y	S	
			SAM004	pH	7.57	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	1.11	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	19.1	mg/l	N	S	
			SAM031	Sulphate as SO4	154.00	mg/l	Y	MCQ	
			SAM034	TOC	1.62	mg/l	Y	MCQ	
			SAM031	TON as N	< 0.08	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	32.3	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ052876	BH13	21/09/2018	N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ052877	SW1	20/09/2018	SAM031	Alkalinity, Total	225.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	2.01	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium (tot.unfilt)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	204	mg/l	N	S	
			SAM031	Chloride as Cl	27.60	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	1.54	ug/l	Y	S	
			MCQ- DO	Dissolved Oxygen	8.2	mg/l	N	MCQ	
			SAM005	Electrical Conductivity	1,380.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	0.102	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<1	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	63	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	41.9	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	5.06	ug/l	Y	S	
			SAM004	pH	7.51	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	6.46	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	27.6	mg/l	N	S	
			SAM031	Sulphate as SO4	511.00	mg/l	Y	MCQ	
			SAM001	Suspended Solids	4.00	mg/l	Y	MCQ	
			SAM034	TOC	3.64	mg/l	Y	MCQ	
			SAM031	TON as N	< 0.08	mg/l	Y	MCQ	
			N/A	Zinc Total (W)	<5	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
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MCQ052877 **Sample Matrix:** Surface Water **Analyst Comment:**

MCQ052878	SW2	20/09/2018	SAM031	Alkalinity, Total	224.00	mg/l	Y	MCQ
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ
			N/A	Arsenic (tot.unfilt)	2.28	ug/l	Y	S
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ
			N/A	Cadmium (tot.unfilt)	<0.5	ug/l	Y	S
			N/A	Calcium (tot.unfilt)	201	mg/l	N	S
			SAM031	Chloride as Cl	27.90	mg/l	Y	MCQ
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S
			SAM009	COD (Total)	<25	mg/l	Y	MCQ
			N/A	Copper (tot.unfilt)	2.96	ug/l	Y	S
			MCQ- DO	Dissolved Oxygen	8.97	mg/l	N	MCQ
			SAM005	Electrical Conductivity	1,370.0	uS/cm	Y	MCQ
			N/A	Iron (tot.unfilt)	0.923	mg/l	N	S
			N/A	Lead (tot.unfilt)	<1	ug/l	Y	S
			N/A	Magnesium (tot.unfilt)	61.8	mg/l	N	S
			N/A	Manganese (tot.unfilt)	56.8	ug/l	Y	S
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S
			N/A	Nickel (tot.unfilt)	6.34	ug/l	Y	S
			SAM004	pH	7.74	Units	Y	MCQ
			N/A	Potassium (tot.unfilt)	6.57	mg/l	N	S
			N/A	Sodium (tot.unfilt)	27.9	mg/l	N	S
			SAM031	Sulphate as SO4	506.00	mg/l	Y	MCQ
			SAM001	Suspended Solids	12.00	mg/l	Y	MCQ
			SAM034	TOC	4.33	mg/l	Y	MCQ
			SAM031	TON as N	< 0.08	mg/l	Y	MCQ
			N/A	Zinc Total (W)	6.05	ug/l	Y	S
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S
			N/A	Cresols	<0.006	mg/l	Y	S
			N/A	Phenol	<0.002	mg/l	Y	S
			N/A	Phenol 5 Speciated				
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S
			N/A	Xylenols	<0.008	mg/l	Y	S

Sample Matrix: Surface Water **Analyst Comment:**

MCQ052879	SW3	20/09/2018	SAM031	Alkalinity, Total	185.00	mg/l	Y	MCQ
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ
			N/A	Arsenic (tot.unfilt)	<2	ug/l	Y	S

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ052879	SW3	20/09/2018	SAM016	BOD (ATU)	>14.74	mg/l	Y	MCQ	#
			N/A	Cadmium (tot.unfilt)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	76.3	mg/l	N	S	
			SAM031	Chloride as Cl	48.80	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S	
			SAM009	COD (Total)	48	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	1.92	ug/l	Y	S	
			MCQ- DO	Dissolved Oxygen	4.45	mg/l	N	MCQ	
			SAM005	Electrical Conductivity	595.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	1.75	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<1	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	17.2	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	788	ug/l	Y	S	
			N/A	Mecoprop (MCP)	0.015	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	3.23	ug/l	Y	S	
			SAM004	pH	6.92	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	7.26	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	24.8	mg/l	N	S	
			SAM031	Sulphate as SO4	56.70	mg/l	Y	MCQ	
			SAM001	Suspended Solids	37.00	mg/l	Y	MCQ	
			SAM034	TOC	14.60	mg/l	Y	MCQ	
			SAM031	TON as N	< 0.08	mg/l	Y	MCQ	
			N/A	Zinc Total (W)	14.5	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Surface Water

Analyst
Comment:

MCQ052880	SW4	20/09/2018	SAM031	Alkalinity, Total	207.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	<2	ug/l	Y	S	
			SAM016	BOD (ATU)	1.22	mg/l	Y	MCQ	
			N/A	Cadmium (tot.unfilt)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	153	mg/l	N	S	
			SAM031	Chloride as Cl	34.40	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	1.47	ug/l	Y	S	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC014157

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ052880	SW4	20/09/2018	MCQ- DO	Dissolved Oxygen	9	mg/l	N	MCQ	
			SAM005	Electrical Conductivity	1,100.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	0.175	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<1	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	46.4	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	26	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.01	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	2.91	ug/l	Y	S	
			SAM004	pH	7.72	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	5.44	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	25.5	mg/l	N	S	
			SAM031	Sulphate as SO4	347.00	mg/l	Y	MCQ	
			SAM001	Suspended Solids	8.00	mg/l	Y	MCQ	
			SAM034	TOC	5.21	mg/l	Y	MCQ	
			SAM031	TON as N	0.27	mg/l	Y	MCQ	
			N/A	Zinc Total (W)	<5	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Surface Water

Analyst
Comment:

MCQ052881	Treated Leachate	20/09/2018	SAM031	Alkalinity, Total	301.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	0.45	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	22.5	ug/l	Y	S	
			SAM016	BOD (ATU)	4.06	mg/l	Y	MCQ	\$
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	92.7	mg/l	N	S	
			SAM031	Chloride as Cl	1,160.00	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	215	ug/l	Y	S	
			SAM009	COD (Total)	1,100	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	29.5	ug/l	Y	S	
			SAM005	Electrical Conductivity	11,500.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	9.38	mg/l	N	S	
			N/A	Lead (tot.unfilt)	4.05	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	43.4	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	63	ug/l	Y	S	
			N/A	Mecoprop (MCP)	0.129	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC014157

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ052881	Treated Leachate	20/09/2018	N/A	Naphthalene (aq)	<0.5	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	123	ug/l	Y	S	
			SAM004	pH	7.09	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	471	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	1670	mg/l	N	S	
			SAM031	Sulphate as SO4	120.00	mg/l	Y	MCQ	
			SAM001	Suspended Solids	38.00	mg/l	Y	MCQ	
			SAM034	TOC	414.00	mg/l	Y	MCQ	
			SAM031	TON as N	2.40	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	205	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Landfill Leachate

Analyst
Comment:

MCQ052882	Raw Leachate	20/09/2018	SAM031	Alkalinity, Total	3,000.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	393.00	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	16.9	ug/l	Y	S	
			SAM016	BOD (ATU)	37.30	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	146	mg/l	N	S	
			SAM031	Chloride as Cl	848.00	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	113	ug/l	Y	S	
			SAM009	COD (Total)	864	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	2.41	ug/l	Y	S	
			SAM005	Electrical Conductivity	7,820.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	5.96	mg/l	N	S	
			N/A	Lead (tot.unfilt)	1.03	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	54.4	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	759	ug/l	Y	S	
			N/A	Mecoprop (MCP)	0.489	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.5	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	78.4	ug/l	Y	S	
			SAM004	pH	8.26	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	372	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	651	mg/l	N	S	
			SAM031	Sulphate as SO4	13.00	mg/l	Y	MCQ	
			SAM001	Suspended Solids	55.00	mg/l	Y	MCQ	
			SAM034	TOC	333.00	mg/l	Y	MCQ	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC014157

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ052882	Raw Leachate	20/09/2018	SAM031	TON as N	1.53	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	65.6	ug/l	Y	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Landfill Leachate

Analyst
Comment:

Sample Deviations Legend			
Results may be compromised if the following deviations apply			
Comment	C	Incorrect Container	‡
Container with Headspace provided	8	Insufficient sample volume	È
BOD Overdiluted, therefore result indicative only	\$	BOD Underdiluted, therefore result indicative only	#
High Chloride concentration, COD could not be determined	§	Holding time exceeded due to sampled on date	@
Holding time exceeded in Lab	±	Holding time exceeded due to delayed instructions	&

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC014353

Issue No: 1

WDR & RT Taggart
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sales@mcquillanenvirocare.com

MCQ Job No	ORD-15774
Sample Receipt Date	17/10/2018
Date Analysis Started	18/10/2018
Completion Date	01/11/2018
Turnaround Time	10
No of Samples	15
Purchase Order Number	Lisbane
McQuillan Quote Number	ECA-01916

Dear [REDACTED]

Analysis of your sample(s) is now complete and we have pleasure in enclosing the appropriate test report.

All analysis was completed within McQuillan Envirocare Analytical Laboratory (MCQ) unless otherwise specified. Any analysis that was subcontracted to a McQuillan Companies Approved Laboratory is indicated by 'S'. Please refer to the table at the end of your test certificate for explanations of sample deviations.

Results relate only to the items tested. This Test Certificate supersedes any version previously issued by the laboratory. It cannot be reproduced except in full and without written approval from McQuillan Envirocare Ltd.

Should you have any queries regarding this report(s) or any part of our service, please contact Sales on +44(0)28 9446 6708 who will be happy to discuss your requirements.

Thank you for using McQuillan Companies Analytical Services and we look forward to receiving your next samples.

Yours Sincerely

Name: [REDACTED]

Date: 1/11/2018

Title: Lab Administrator



Test Certificate

Certificate: ECTC014353

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ053755	BH1	16/10/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ		
			SAM031	Chloride as Cl	34.60	mg/l	Y	MCQ		
			SAM009	COD (Total)	50	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	828.0	uS/cm	Y	MCQ		
			SAM004	pH	7.27	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ053756	BH2	16/10/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	16.20	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	639.0	uS/cm	Y	MCQ	
SAM004				pH	7.35	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ053757		BH4	16/10/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	15.30	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,040.0	uS/cm	Y	MCQ	
	SAM004			pH	6.96	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ053758	BH5	16/10/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	25.30	mg/l	Y	MCQ	
				SAM009	COD (Total)	33	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	874.0	uS/cm	Y	MCQ	
SAM004				pH	7.02	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ053759		BH6	16/10/2018	SAM031	Ammonia as N	0.21	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	28.00	mg/l	Y	MCQ	
				SAM009	COD (Total)	46	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,280.0	uS/cm	Y	MCQ	
	SAM004			pH	7.15	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC014353

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ053760	BH6A	16/10/2018	SAM031	Ammonia as N	0.15	mg/l	Y	MCQ		
			SAM031	Chloride as Cl	34.20	mg/l	Y	MCQ		
			SAM009	COD (Total)	61	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	930.0	uS/cm	Y	MCQ		
			SAM004	pH	6.98	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ053761	BH8	16/10/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	33.60	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	998.0	uS/cm	Y	MCQ	
SAM004				pH	7.26	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ053762		BH9	16/10/2018	SAM031	Ammonia as N	1.69	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	84.40	mg/l	Y	MCQ	
				SAM009	COD (Total)	59	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,810.0	uS/cm	Y	MCQ	
	SAM004			pH	6.75	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	MCQ053763	BH13	16/10/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	28.70	mg/l	Y	MCQ	
				SAM009	COD (Total)	<25	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	726.0	uS/cm	Y	MCQ	
SAM004				pH	7.48	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ053764		SW1	16/10/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
				SAM016	BOD (ATU)	3.68	mg/l	Y	MCQ	
				SAM031	Chloride as Cl	27.60	mg/l	Y	MCQ	
				SAM005	Electrical Conductivity	1,170.0	uS/cm	Y	MCQ	
	SAM004			pH	7.26	Units	Y	MCQ		
	SAM001			Suspended Solids	403.00	mg/l	Y	MCQ		
	Sample Matrix: Surface Water		Analyst Comment:							

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC014353

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ053765	SW2	16/10/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			SAM016	BOD (ATU)	1.34	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	27.80	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	1,150.0	uS/cm	Y	MCQ	
			SAM004	pH	7.56	Units	Y	MCQ	
			SAM001	Suspended Solids	5.00	mg/l	Y	MCQ	
			Sample Matrix: Surface Water		Analyst Comment:				
MCQ053766	SW3	16/10/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	\$
			SAM016	BOD (ATU)	5.02	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	50.50	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	619.0	uS/cm	Y	MCQ	
			SAM004	pH	6.87	Units	Y	MCQ	
			SAM001	Suspended Solids	24.00	mg/l	Y	MCQ	
			Sample Matrix: Surface Water		Analyst Comment:				
MCQ053767	SW4	16/10/2018	SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			SAM016	BOD (ATU)	2.27	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	33.20	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	1,020.0	uS/cm	Y	MCQ	
			SAM004	pH	7.62	Units	Y	MCQ	
			SAM001	Suspended Solids	8.00	mg/l	Y	MCQ	
			Sample Matrix: Surface Water		Analyst Comment:				
MCQ053775	Raw Leachate	16/10/2018	SAM031	Ammonia as N	463.00	mg/l	Y	MCQ	\$
			SAM016	BOD (ATU)	31.10	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	851.00	mg/l	Y	MCQ	
			SAM009	COD (Total)	953	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	8,290.0	uS/cm	Y	MCQ	
			SAM004	pH	8.15	Units	Y	MCQ	
			SAM001	Suspended Solids	50.00	mg/l	Y	MCQ	
Sample Matrix: Landfill Leachate		Analyst Comment:							
MCQ053776	Treated Leachate	16/10/2018	SAM031	Ammonia as N	0.58	mg/l	Y	MCQ	8\$
			SAM016	BOD (ATU)	3.46	mg/l	Y	MCQ	
			SAM031	Chloride as Cl	1,190.00	mg/l	Y	MCQ	
			SAM009	COD (Total)	1,090	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	11,200.0	uS/cm	Y	MCQ	
			SAM004	pH	6.53	Units	Y	MCQ	
			SAM001	Suspended Solids	11.00	mg/l	Y	MCQ	

McQuillan Envirocare Ltd
Analytical Services

Test Certificate

Certificate: ECTC014353

Issue No: 1

MCQ053776

Sample Matrix: Landfill Leachate

Analyst
Comment:

Sample Deviations Legend			
Results may be compromised if the following deviations apply			
Comment	C	Incorrect Container	‡
Container with Headspace provided	8	Insufficient sample volume	È
BOD Overdiluted, therefore result indicative only	\$	BOD Underdiluted, therefore result indicative only	#
High Chloride concentration, COD could not be determined	§	Holding time exceeded due to sampled on date	@
Holding time exceeded in Lab	±	Holding time exceeded due to delayed instructions	&

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC014677

Issue No: 1

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sales@mcquillanenvirocare.com

MCQ Job No	ORD-16103
Sample Receipt Date	23/11/2018
Date Analysis Started	23/11/2018
Completion Date	07/01/2019
Turnaround Time	10
No of Samples	14
Purchase Order Number	Lisbane
McQuillan Quote Number	ECA-01916

Dear [REDACTED]

Analysis of your sample(s) is now complete and we have pleasure in enclosing the appropriate test report.

All analysis was completed within McQuillan Envirocare Analytical Laboratory (MCQ) unless otherwise specified. Any analysis that was subcontracted to a McQuillan Companies Approved Laboratory is indicated by 'S'. Please refer to the table at the end of your test certificate for explanations of sample deviations.

Results relate only to the items tested. This Test Certificate supersedes any version previously issued by the laboratory. It cannot be reproduced except in full and without written approval from McQuillan Envirocare Ltd.

Should you have any queries regarding this report(s) or any part of our service, please contact Sales on +44(0)28 9446 6708 who will be happy to discuss your requirements.

Thank you for using McQuillan Companies Analytical Services and we look forward to receiving your next samples.

Yours Sincerely

Name: [REDACTED]

Date: 8/1/2019

Title: Lab Administrator



McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC014677

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ055111	SW1	22/11/2018	SAM031	Alkalinity, Total	138.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			SAM016	BOD (ATU)	1.14	mg/l	Y	MCQ	
			N/A	Cadmium (tot.unfilt)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	133	mg/l	N	S	
			SAM031	Chloride as Cl	26.90	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			N/A	Copper (tot.unfilt)	5.15	ug/l	Y	S	
			MCQ- DO	Dissolved Oxygen	9.13	mg/l	N	MCQ	
			SAM005	Electrical Conductivity	991.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	0.924	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<1	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	45.4	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	23.1	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.04	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	7.61	ug/l	Y	S	
			SAM004	pH	7.45	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	7.97	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	21.3	mg/l	N	S	
			SAM031	Sulphate as SO4	357.00	mg/l	Y	MCQ	
			SAM001	Suspended Solids	19.00	mg/l	Y	MCQ	
			SAM034	TOC	6.74	mg/l	Y	MCQ	
			SAM031	TON as N	3.35	mg/l	Y	MCQ	
			MCQ- VOG	Visible Oil and Grease	<1.0	%	N	MCQ	
			N/A	Zinc Total (W)	7.55	ug/l	Y	S	
			N/A	1,1,1,2-Tetrachloroethane	< 2.0	ug/l	N	S	
			N/A	1,1,1-Trichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1,2-Trichloroethane	< 10	ug/l	N	S	
			N/A	1,1-Dichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloropropene	< 1.0	ug/l	N	S	
			N/A	1,2,3-Trichlorobenzene	< 2.0	ug/l	N	S	
			N/A	1,2,3-Trichloropropane	< 50	ug/l	N	S	
			N/A	1,2,4-Trichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2,4-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,2-Dibromo-3-Chloropropane	< 50	ug/l	N	S	
			N/A	1,2-Dibromoethane	< 5.0	ug/l	N	S	
			N/A	1,2-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2-Dichloroethane	< 2.0	ug/l	N	S	
			N/A	1,2-Dichloropropane	< 1.0	ug/l	N	S	
			N/A	1,3,5-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,3-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,3-Dichloropropane	< 2.0	ug/l	N	S	
			N/A	1,4-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	2,3,4,5-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4-Trichlorophenol	< 0.20	ug/l	N	S	

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MCQ055111	SW1	22/11/2018	N/A	2,3,5,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,5-T	< 0.50	ug/l	N	S	
			N/A	2,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-D	< 0.50	ug/l	N	S	
			N/A	2,4-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dimethylphenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2,6-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,6-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2-Chloronaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Chlorophenol	< 0.20	ug/l	N	S	
			N/A	2-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	2-Methyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Methylnaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Methylphenol (o-Cresol)	< 0.20	ug/l	N	S	
			N/A	2-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	2-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Sec-Butyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	3,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	3-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4,4- DDD	< 0.20	ug/l	N	S	
			N/A	4,4- DDE	< 0.20	ug/l	N	S	
			N/A	4,4- DDT	< 0.20	ug/l	N	S	
			N/A	4-Bromophenylphenyl Ether	< 0.50	ug/l	N	S	
			N/A	4-Chloro-3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Chloroaniline	< 0.50	ug/l	N	S	
			N/A	4-Chlorophenylphenylether	< 0.50	ug/l	N	S	
			N/A	4-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	4-Isopropyltoluene	< 1.0	ug/l	N	S	
			N/A	4-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	Acenaphthene	< 0.50	ug/l	N	S	
			N/A	Acenaphthylene	< 0.50	ug/l	N	S	
			N/A	Aldrin	< 0.20	ug/l	N	S	
			N/A	Alpha-Chlordane	< 0.20	ug/l	N	S	
			N/A	Alpha-HCH	< 0.20	ug/l	N	S	
			N/A	Ametryn	< 0.20	ug/l	N	S	
			N/A	Anthracene	< 0.50	ug/l	N	S	
			N/A	Atraton	< 0.20	ug/l	N	S	
			N/A	Atrazine	< 0.20	ug/l	N	S	
			N/A	Azinphos-ethyl	< 0.20	ug/l	N	S	
			N/A	Azinphos-Methyl	< 0.20	ug/l	N	S	
			N/A	Azobenzene	< 0.50	ug/l	N	S	
			N/A	Benzene	< 1.0	ug/l	Y	S	
			N/A	Benzo[a]anthracene	< 0.50	ug/l	N	S	

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MCQ055111	SW1	22/11/2018	N/A	Benzo[a]pyrene	< 0.50	ug/l	N	S	
			N/A	Benzo[b]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Benzo[g,h,i]perylene	< 0.50	ug/l	N	S	
			N/A	Benzo[k]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Beta-HCH	< 0.20	ug/l	N	S	
			N/A	Bis(2-Chloroethoxy)Methane	< 0.50	ug/l	N	S	
			N/A	Bis-(2-Chloroethyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Chloroisopropyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Ethylhexyl)Phthalate	< 0.50	ug/l	N	S	
			N/A	Bromobenzene	< 1.0	ug/l	N	S	
			N/A	Bromochloromethane	< 5.0	ug/l	N	S	
			N/A	Bromodichloromethane	< 5.0	ug/l	N	S	
			N/A	Bromomethane	< 5.0	ug/l	N	S	
			N/A	Bromoxynil	<0.04	ug/l	N	S	
			N/A	Butylbenzyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Cadmium (Total)	< 0.080	ug/l	N	S	
			N/A	Carbazole	< 0.50	ug/l	N	S	
			N/A	Carbon Tetrachloride	< 10	ug/l	N	S	
			N/A	Carbophenothion	< 0.50	ug/l	N	S	
			N/A	Chlorfenvinphos	< 0.20	ug/l	N	S	
			N/A	Chlorobenzene	< 1.0	ug/l	N	S	
			N/A	Chloroethane	< 2.0	ug/l	N	S	
			N/A	Chloroform	< 10	ug/l	N	S	
			N/A	Chloromethane	< 1.0	ug/l	N	S	
			N/A	Chlorothalonil	< 0.50	ug/l	N	S	
			N/A	Chlorpynifos	< 0.50	ug/l	N	S	
			N/A	Chlorpyrifos-methyl	< 0.20	ug/l	N	S	
			N/A	Chrysene	< 0.50	ug/l	N	S	
			N/A	cis 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	cis-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Coumaphos	< 0.20	ug/l	N	S	
			N/A	Delta-HCH	< 0.20	ug/l	N	S	
			N/A	Demeton-O	< 0.20	ug/l	N	S	
			N/A	Demeton-S	< 0.20	ug/l	N	S	
			N/A	Diazinon	< 0.50	ug/l	N	S	
			N/A	Dibenz(a,h)Anthracene	< 0.50	ug/l	N	S	
			N/A	Dibenzofuran	< 0.50	ug/l	N	S	
			N/A	Dibromochloromethane	< 10	ug/l	N	S	
			N/A	Dibromomethane	< 10	ug/l	N	S	
			N/A	Dibutyl Tin	< 0.050	ug/l	N	S	
			N/A	Dichlorodifluoromethane	< 1.0	ug/l	N	S	
			N/A	Dichlorprop	<0.1	ug/l	N	S	
			N/A	Dichlorvos	< 0.50	ug/l	N	S	
			N/A	Dieldrin	< 0.20	ug/l	N	S	
			N/A	Diethyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dimethoate	< 0.20	ug/l	N	S	
			N/A	Dimethylphthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Butyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Octyl Phthalate	< 0.50	ug/l	N	S	

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			N/A	Disulfoton	< 1.0	ug/l	N	S	
			N/A	Endosulfan I	< 0.20	ug/l	N	S	
			N/A	Endosulfan II	< 0.20	ug/l	N	S	
			N/A	Endosulfan Sulphate	< 0.20	ug/l	N	S	
			N/A	Endrin	< 0.20	ug/l	N	S	
			N/A	Endrin Aldehyde	< 0.20	ug/l	N	S	
			N/A	Endrin Ketone	< 0.20	ug/l	N	S	
			N/A	Ethion	< 0.50	ug/l	N	S	
			N/A	Ethylbenzene	< 1.0	ug/l	Y	S	
			N/A	Etrimphos	< 0.20	ug/l	N	S	
			N/A	Fenitrothion	< 0.20	ug/l	N	S	
			N/A	Fensulphothion	< 0.20	ug/l	N	S	
			N/A	Fenthion	< 0.20	ug/l	N	S	
			N/A	Fluoranthene	< 0.50	ug/l	N	S	
			N/A	Fluorene	< 0.50	ug/l	N	S	
			N/A	Gamma-Chlordane	< 0.20	ug/l	N	S	
			N/A	Gamma-Lindane	< 0.20	ug/l	N	S	
			N/A	Heptachlor	< 0.20	ug/l	N	S	
			N/A	Heptachlor Epoxide	< 0.20	ug/l	N	S	
			N/A	Hexachlorobenzene	< 0.50	ug/l	N	S	
			N/A	Hexachlorobutadiene	< 0.50	ug/l	N	S	
			N/A	Hexachlorocyclopentadiene	< 0.50	ug/l	N	S	
			N/A	Hexachloroethane	< 0.50	ug/l	N	S	
			N/A	Indeno(1,2,3-c,d)Pyrene	< 0.50	ug/l	N	S	
			N/A	Ioxynil	< 0.05	ug/l	N	S	
			N/A	Isophorone	< 0.50	ug/l	N	S	
			N/A	Isopropylbenzene	< 1.0	ug/l	N	S	
			N/A	List 1 CT Jan 2016					
			N/A	m & p-Xylene	< 1.0	ug/l	N	S	
			N/A	Malathion	< 0.20	ug/l	N	S	
			N/A	MCPA	< 0.05	ug/l	N	S	
			N/A	MCPB	< 0.05	ug/l	N	S	
			N/A	Mercury (Total)	< 0.50	ug/l	N	S	
			N/A	Methoxychlor	< 0.20	ug/l	N	S	
			N/A	Methyl parathion	< 1.0	ug/l	N	S	
			N/A	Methyl Tert-Butyl Ether	< 1.0	ug/l	N	S	
			N/A	Mevinphos	< 0.20	ug/l	N	S	
			N/A	Mineral Oil	< 10	ug/l	N	S	
			N/A	Naphthalene	< 0.50	ug/l	N	S	
			N/A	N-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Nitrobenzene	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodimethylamine	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodi-n-propylamine	< 0.50	ug/l	N	S	
			N/A	N-Propylbenzene	< 1.0	ug/l	N	S	
			N/A	o-Xylene	< 1.0	ug/l	Y	S	
			N/A	Parathion	< 0.20	ug/l	N	S	
			N/A	Pendimethalin	< 5.0	ug/l	N	S	
			N/A	Pentachlorophenol	< 0.04	ug/l	N	S	

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MCQ055111	SW1	22/11/2018	N/A	Permethrin	< 0.50	mg/l	N	S	
			N/A	Phenanthrene	< 0.50	ug/l	N	S	
			N/A	Phorate	< 0.20	ug/l	N	S	
			N/A	Phosalone	< 0.20	ug/l	N	S	
			N/A	Prometon	< 0.20	ug/l	N	S	
			N/A	Prometryn	< 0.20	ug/l	N	S	
			N/A	Propazine	< 0.20	ug/l	N	S	
			N/A	Propetamphos	< 0.20	ug/l	N	S	
			N/A	Prothiofos	< 0.20	ug/l	N	S	
			N/A	Pyrene	< 0.50	ug/l	N	S	
			N/A	Qunitozene	< 5.0	ug/l	N	S	
			N/A	Secbumeton	< 0.20	ug/l	N	S	
			N/A	Sec-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Simazine	< 0.20	ug/l	N	S	
			N/A	Simetryn	< 0.20	ug/l	N	S	
			N/A	Styrene	< 1.0	ug/l	N	S	
			N/A	Sulprofos	< 0.20	ug/l	N	S	
			N/A	Tecnazene	< 5.0	ug/l	N	S	
			N/A	Terbuthylazine	< 0.20	ug/l	N	S	
			N/A	Terbutryn	< 0.20	ug/l	N	S	
			N/A	Tert-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Tetrachloroethene	< 1.0	ug/l	N	S	
			N/A	Tetrachloromethane	< 1.0	ug/l	N	S	
			N/A	Toluene	< 1.0	ug/l	Y	S	
			N/A	Total Phenols	< 5.0	ug/l	Y	S	
			N/A	Trans 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	Trans-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Triallate	< 0.20	ug/l	N	S	
			N/A	Triazophos	< 0.20	ug/l	N	S	
			N/A	Tribromomethane	< 1.0	ug/l	N	S	
			N/A	Tributyl Tin	< 0.050	ug/l	N	S	
			N/A	Trichloroethene	< 1.0	ug/l	N	S	
			N/A	Trichlorofluoromethane	< 1.0	ug/l	N	S	
			N/A	Trichloromethane	< 1.0	ug/l	N	S	
			N/A	Trichloronate	< 0.20	ug/l	N	S	
			N/A	Trifluralin	< 0.20	ug/l	N	S	
			N/A	Triphenyl Tin	< 0.050	ug/l	N	S	
			N/A	Vinyl Chloride	< 1.0	ug/l	N	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Surface Water

Analyst
Comment:

MCQ055112	SW2	22/11/2018	SAM031	Alkalinity, Total	127.00	mg/l	Y	MCQ
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SAM031	Ammonia as N	0.79	mg/l	Y	MCQ
SAM016	BOD (ATU)	1.47	mg/l	Y	MCQ
N/A	Cadmium (tot.unfilt)	<0.5	ug/l	Y	S
N/A	Calcium (tot.unfilt)	116	mg/l	N	S
SAM031	Chloride as Cl	26.80	mg/l	Y	MCQ
N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S
SAM009	COD (Total)	<25	mg/l	Y	MCQ
N/A	Copper (tot.unfilt)	5.59	ug/l	Y	S
MCQ- DO	Dissolved Oxygen	9.28	mg/l	N	MCQ
SAM005	Electrical Conductivity	893.0	uS/cm	Y	MCQ
N/A	Iron (tot.unfilt)	0.882	mg/l	N	S
N/A	Lead (tot.unfilt)	<1	ug/l	Y	S
N/A	Magnesium (tot.unfilt)	39.1	mg/l	N	S
N/A	Manganese (tot.unfilt)	31.5	ug/l	Y	S
N/A	Mecoprop (MCP)	<0.04	ug/l	N	S
N/A	Naphthalene (aq)	<0.01	ug/l	N	S
N/A	Nickel (tot.unfilt)	6.8	ug/l	Y	S
SAM004	pH	7.46	Units	Y	MCQ
N/A	Potassium (tot.unfilt)	7.16	mg/l	N	S
N/A	Sodium (tot.unfilt)	20.3	mg/l	N	S
SAM031	Sulphate as SO4	299.00	mg/l	Y	MCQ
SAM001	Suspended Solids	13.00	mg/l	Y	MCQ
SAM034	TOC	10.50	mg/l	Y	MCQ
SAM031	TON as N	3.26	mg/l	Y	MCQ
MCQ- VOG	Visible Oil and Grease	<1.0	%	N	MCQ
N/A	Zinc Total (W)	10.1	ug/l	Y	S
N/A	1,1,1,2-Tetrachloroethane	< 2.0	ug/l	N	S
N/A	1,1,1-Trichloroethane	< 1.0	ug/l	N	S
N/A	1,1,2-Trichloroethane	< 10	ug/l	N	S
N/A	1,1-Dichloroethane	< 1.0	ug/l	N	S
N/A	1,1-Dichloroethene	< 1.0	ug/l	N	S
N/A	1,1-Dichloropropene	< 1.0	ug/l	N	S
N/A	1,2,3-Trichlorobenzene	< 2.0	ug/l	N	S
N/A	1,2,3-Trichloropropane	< 50	ug/l	N	S
N/A	1,2,4-Trichlorobenzene	< 0.50	ug/l	N	S
N/A	1,2,4-Trimethylbenzene	< 1.0	ug/l	N	S
N/A	1,2-Dibromo-3-Chloropropane	< 50	ug/l	N	S
N/A	1,2-Dibromoethane	< 5.0	ug/l	N	S
N/A	1,2-Dichlorobenzene	< 0.50	ug/l	N	S
N/A	1,2-Dichloroethane	< 2.0	ug/l	N	S
N/A	1,2-Dichloropropane	< 1.0	ug/l	N	S
N/A	1,3,5-Trimethylbenzene	< 1.0	ug/l	N	S
N/A	1,3-Dichlorobenzene	< 0.50	ug/l	N	S
N/A	1,3-Dichloropropane	< 2.0	ug/l	N	S
N/A	1,4-Dichlorobenzene	< 0.50	ug/l	N	S
N/A	2,3,4,5-Tetrachlorophenol	< 0.20	ug/l	N	S
N/A	2,3,4,6-Tetrachlorophenol	< 0.20	ug/l	N	S
N/A	2,3,4-Trichlorophenol	< 0.20	ug/l	N	S
N/A	2,3,5,6-Tetrachlorophenol	< 0.20	ug/l	N	S
N/A	2,3,5-Trichlorophenol	< 0.20	ug/l	N	S
N/A	2,4,5-T	< 0.50	ug/l	N	S
N/A	2,4,5-Trichlorophenol	< 0.20	ug/l	N	S

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N/A	2,4,6-Trichlorophenol	< 0.20	ug/l	N	S
N/A	2,4-D	< 0.50	ug/l	N	S
N/A	2,4-Dichlorophenol	< 0.20	ug/l	N	S
N/A	2,4-Dimethylphenol	< 0.20	ug/l	N	S
N/A	2,4-Dinitrotoluene	< 0.50	ug/l	N	S
N/A	2,6-Dichlorophenol	< 0.20	ug/l	N	S
N/A	2,6-Dinitrotoluene	< 0.50	ug/l	N	S
N/A	2-Chloronaphthalene	< 0.50	ug/l	N	S
N/A	2-Chlorophenol	< 0.20	ug/l	N	S
N/A	2-Chlorotoluene	< 1.0	ug/l	N	S
N/A	2-Methyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S
N/A	2-Methylnaphthalene	< 0.50	ug/l	N	S
N/A	2-Methylphenol (o-Cresol)	< 0.20	ug/l	N	S
N/A	2-Nitroaniline	< 0.50	ug/l	N	S
N/A	2-Nitrophenol	< 0.20	ug/l	N	S
N/A	2-Sec-Butyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S
N/A	3,4,5-Trichlorophenol	< 0.20	ug/l	N	S
N/A	3-Methylphenol	< 0.20	ug/l	N	S
N/A	3-Nitroaniline	< 0.50	ug/l	N	S
N/A	4,4-DDD	< 0.20	ug/l	N	S
N/A	4,4-DDE	< 0.20	ug/l	N	S
N/A	4,4-DDT	< 0.20	ug/l	N	S
N/A	4-Bromophenylphenyl Ether	< 0.50	ug/l	N	S
N/A	4-Chloro-3-Methylphenol	< 0.20	ug/l	N	S
N/A	4-Chloroaniline	< 0.50	ug/l	N	S
N/A	4-Chlorophenylphenylether	< 0.50	ug/l	N	S
N/A	4-Chlorotoluene	< 1.0	ug/l	N	S
N/A	4-Isopropyltoluene	< 1.0	ug/l	N	S
N/A	4-Methylphenol	< 0.20	ug/l	N	S
N/A	4-Nitroaniline	< 0.50	ug/l	N	S
N/A	4-Nitrophenol	< 0.20	ug/l	N	S
N/A	Acenaphthene	< 0.50	ug/l	N	S
N/A	Acenaphthylene	< 0.50	ug/l	N	S
N/A	Aldrin	< 0.20	ug/l	N	S
N/A	Alpha-Chlordane	< 0.20	ug/l	N	S
N/A	Alpha-HCH	< 0.20	ug/l	N	S
N/A	Ametryn	< 0.20	ug/l	N	S
N/A	Anthracene	< 0.50	ug/l	N	S
N/A	Atraton	< 0.20	ug/l	N	S
N/A	Atrazine	< 0.20	ug/l	N	S
N/A	Azinphos-ethyl	< 0.20	ug/l	N	S
N/A	Azinphos-Methyl	< 0.20	ug/l	N	S
N/A	Azobenzene	< 0.50	ug/l	N	S
N/A	Benzene	< 1.0	ug/l	Y	S
N/A	Benzo[a]anthracene	< 0.50	ug/l	N	S
N/A	Benzo[a]pyrene	< 0.50	ug/l	N	S
N/A	Benzo[b]fluoranthene	< 0.50	ug/l	N	S
N/A	Benzo[g,h,i]perylene	< 0.50	ug/l	N	S
N/A	Benzo[k]fluoranthene	< 0.50	ug/l	N	S
N/A	Beta-HCH	< 0.20	ug/l	N	S
N/A	Bis(2-Chloroethoxy)Methane	< 0.50	ug/l	N	S
N/A	Bis-(2-Chloroethyl)Ether	< 0.50	ug/l	N	S

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N/A	Bis(2-Chloroisopropyl)Ether	< 0.50	ug/l	N	S
N/A	Bis(2-Ethylhexyl)Phthalate	< 0.50	ug/l	N	S
N/A	Bromobenzene	< 1.0	ug/l	N	S
N/A	Bromochloromethane	< 5.0	ug/l	N	S
N/A	Bromodichloromethane	< 5.0	ug/l	N	S
N/A	Bromomethane	< 5.0	ug/l	N	S
N/A	Bromoxynil	<0.04	ug/l	N	S
N/A	Butylbenzyl Phthalate	< 0.50	ug/l	N	S
N/A	Cadmium (Total)	< 0.080	ug/l	N	S
N/A	Carbazole	< 0.50	ug/l	N	S
N/A	Carbon Tetrachloride	< 10	ug/l	N	S
N/A	Carbophenothion	< 0.50	ug/l	N	S
N/A	Chlorfenvinphos	< 0.20	ug/l	N	S
N/A	Chlorobenzene	< 1.0	ug/l	N	S
N/A	Chloroethane	< 2.0	ug/l	N	S
N/A	Chloroform	< 10	ug/l	N	S
N/A	Chloromethane	< 1.0	ug/l	N	S
N/A	Chlorothalonil	< 0.50	ug/l	N	S
N/A	Chlorpyrifos	< 0.50	ug/l	N	S
N/A	Chlorpyrifos-methyl	< 0.20	ug/l	N	S
N/A	Chrysene	< 0.50	ug/l	N	S
N/A	cis 1,2-Dichloroethene	< 1.0	ug/l	N	S
N/A	cis-1,3-Dichloropropene	< 10	ug/l	N	S
N/A	Coumaphos	< 0.20	ug/l	N	S
N/A	Delta-HCH	< 0.20	ug/l	N	S
N/A	Demeton-O	< 0.20	ug/l	N	S
N/A	Demeton-S	< 0.20	ug/l	N	S
N/A	Diazinon	< 0.50	ug/l	N	S
N/A	Dibenz(a,h)Anthracene	< 0.50	ug/l	N	S
N/A	Dibenzofuran	< 0.50	ug/l	N	S
N/A	Dibromochloromethane	< 10	ug/l	N	S
N/A	Dibromomethane	< 10	ug/l	N	S
N/A	Dibutyl Tin	< 0.050	ug/l	N	S
N/A	Dichlorodifluoromethane	< 1.0	ug/l	N	S
N/A	Dichlorprop	<0.1	ug/l	N	S
N/A	Dichlorvos	< 0.50	ug/l	N	S
N/A	Dieldrin	< 0.20	ug/l	N	S
N/A	Diethyl Phthalate	< 0.50	ug/l	N	S
N/A	Dimethoate	< 0.20	ug/l	N	S
N/A	Dimethylphthalate	< 0.50	ug/l	N	S
N/A	Di-N-Butyl Phthalate	< 0.50	ug/l	N	S
N/A	Di-N-Octyl Phthalate	< 0.50	ug/l	N	S
N/A	Dinoseb	< 1.0	ug/l	N	S
N/A	Disulfoton	< 1.0	ug/l	N	S
N/A	Endosulfan I	< 0.20	ug/l	N	S
N/A	Endosulfan II	< 0.20	ug/l	N	S
N/A	Endosulfan Sulphate	< 0.20	ug/l	N	S
N/A	Endrin	< 0.20	ug/l	N	S
N/A	Endrin Aldehyde	< 0.20	ug/l	N	S
N/A	Endrin Ketone	< 0.20	ug/l	N	S
N/A	Ethion	< 0.50	ug/l	N	S
N/A	Ethylbenzene	< 1.0	ug/l	Y	S

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N/A	Etrimpfos	< 0.20	ug/l	N	S
N/A	Fenitrothion	< 0.20	ug/l	N	S
N/A	Fensulphothion	< 0.20	ug/l	N	S
N/A	Fenthion	< 0.20	ug/l	N	S
N/A	Fluoranthene	< 0.50	ug/l	N	S
N/A	Fluorene	< 0.50	ug/l	N	S
N/A	Gamma-Chlordane	< 0.20	ug/l	N	S
N/A	Gamma-Lindane	< 0.20	ug/l	N	S
N/A	Heptachlor	< 0.20	ug/l	N	S
N/A	Heptachlor Epoxide	< 0.20	ug/l	N	S
N/A	Hexachlorobenzene	< 0.50	ug/l	N	S
N/A	Hexachlorobutadiene	< 0.50	ug/l	N	S
N/A	Hexachlorocyclopentadiene	< 0.50	ug/l	N	S
N/A	Hexachloroethane	< 0.50	ug/l	N	S
N/A	Indeno(1,2,3-c,d)Pyrene	< 0.50	ug/l	N	S
N/A	Ioxynil	<0.05	ug/l	N	S
N/A	Isophorone	< 0.50	ug/l	N	S
N/A	Isopropylbenzene	< 1.0	ug/l	N	S
N/A	List 1 CT Jan 2016				
N/A	m & p-Xylene	< 1.0	ug/l	N	S
N/A	Malathion	< 0.20	ug/l	N	S
N/A	MCPA	<0.05	ug/l	N	S
N/A	MCPB	<0.05	ug/l	N	S
N/A	Mercury (Total)	< 0.50	ug/l	N	S
N/A	Methoxychlor	< 0.20	ug/l	N	S
N/A	Methyl parathion	< 1.0	ug/l	N	S
N/A	Methyl Tert-Butyl Ether	< 1.0	ug/l	N	S
N/A	Mevinphos	< 0.20	ug/l	N	S
N/A	Mineral Oil	< 10	ug/l	N	S
N/A	Naphthalene	< 0.50	ug/l	N	S
N/A	N-Butylbenzene	< 1.0	ug/l	N	S
N/A	Nitrobenzene	< 0.50	ug/l	N	S
N/A	N-Nitrosodimethylamine	< 0.50	ug/l	N	S
N/A	N-Nitrosodi-n-propylamine	< 0.50	ug/l	N	S
N/A	N-Propylbenzene	< 1.0	ug/l	N	S
N/A	o-Xylene	< 1.0	ug/l	Y	S
N/A	Parathion	< 0.20	ug/l	N	S
N/A	Pendimethalin	< 5.0	ug/l	N	S
N/A	Pentachlorophenol	<0.04	ug/l	N	S
N/A	Permethrin	< 0.50	mg/l	N	S
N/A	Phenanthrene	< 0.50	ug/l	N	S
N/A	Phorate	< 0.20	ug/l	N	S
N/A	Phosalone	< 0.20	ug/l	N	S
N/A	Prometon	< 0.20	ug/l	N	S
N/A	Prometryn	< 0.20	ug/l	N	S
N/A	Propazine	< 0.20	ug/l	N	S
N/A	Propetamphos	< 0.20	ug/l	N	S
N/A	Prothiofos	< 0.20	ug/l	N	S
N/A	Pyrene	< 0.50	ug/l	N	S
N/A	Qunitozene	< 5.0	ug/l	N	S
N/A	Secbumeton	< 0.20	ug/l	N	S
N/A	Sec-Butylbenzene	< 1.0	ug/l	N	S

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N/A	Simazine	< 0.20	ug/l	N	S
N/A	Simetryn	< 0.20	ug/l	N	S
N/A	Styrene	< 1.0	ug/l	N	S
N/A	Sulprofos	< 0.20	ug/l	N	S
N/A	Tecnazene	< 5.0	ug/l	N	S
N/A	Terbuthylazine	< 0.20	ug/l	N	S
N/A	Terbutryn	< 0.20	ug/l	N	S
N/A	Tert-Butylbenzene	< 1.0	ug/l	N	S
N/A	Tetrachloroethene	< 1.0	ug/l	N	S
N/A	Tetrachloromethane	< 1.0	ug/l	N	S
N/A	Toluene	< 1.0	ug/l	Y	S
N/A	Total Phenols	< 5.0	ug/l	Y	S
N/A	Trans 1,2-Dichloroethene	< 1.0	ug/l	N	S
N/A	Trans-1,3-Dichloropropene	< 10	ug/l	N	S
N/A	Triallate	< 0.20	ug/l	N	S
N/A	Triazophos	< 0.20	ug/l	N	S
N/A	Tribromomethane	< 1.0	ug/l	N	S
N/A	Tributyl Tin	< 0.050	ug/l	N	S
N/A	Trichloroethene	< 1.0	ug/l	N	S
N/A	Trichlorofluoromethane	< 1.0	ug/l	N	S
N/A	Trichloromethane	2.2	ug/l	N	S
N/A	Trichloronate	< 0.20	ug/l	N	S
N/A	Trifluralin	< 0.20	ug/l	N	S
N/A	Triphenyl Tin	< 0.050	ug/l	N	S
N/A	Vinyl Chloride	< 1.0	ug/l	N	S
N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S
N/A	2-Isopropylphenol	<0.006	mg/l	Y	S
N/A	Cresols	<0.006	mg/l	Y	S
N/A	Phenol	<0.002	mg/l	Y	S
N/A	Phenol 5 Speciated				
N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S
N/A	Xylenols	<0.008	mg/l	Y	S

Sample Matrix: Surface Water

Analyst
Comment:

MCQ055113	SW3	22/11/2018	SAM031	Alkalinity, Total	142.00	mg/l	Y	MCQ
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ
			SAM016	BOD (ATU)	3.27	mg/l	Y	MCQ
			N/A	Cadmium (tot.unfilt)	<0.5	ug/l	Y	S
			N/A	Calcium (tot.unfilt)	70.7	mg/l	N	S
			SAM031	Chloride as Cl	49.80	mg/l	Y	MCQ
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S
			SAM009	COD (Total)	<25	mg/l	Y	MCQ
			N/A	Copper (tot.unfilt)	6.02	ug/l	Y	S
			MCQ- DO	Dissolved Oxygen	7.05	mg/l	N	MCQ
			SAM005	Electrical Conductivity	587.0	uS/cm	Y	MCQ
			N/A	Iron (tot.unfilt)	1.65	mg/l	N	S
			N/A	Lead (tot.unfilt)	<1	ug/l	Y	S
			N/A	Magnesium (tot.unfilt)	18.8	mg/l	N	S
			N/A	Manganese (tot.unfilt)	755	ug/l	Y	S
			N/A	Mecoprop (MCP)	<0.04	ug/l	N	S

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ055113	SW3	22/11/2018	N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	7.92	ug/l	Y	S	
			SAM004	pH	6.98	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	7.24	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	29.1	mg/l	N	S	
			SAM031	Sulphate as SO4	62.40	mg/l	Y	MCQ	
			SAM001	Suspended Solids	48.00	mg/l	Y	MCQ	
			SAM034	TOC	7.31	mg/l	Y	MCQ	
			SAM031	TON as N	3.60	mg/l	Y	MCQ	
			MCQ- VOG	Visible Oil and Grease	1.0	%	N	MCQ	
			N/A	Zinc Total (W)	69	ug/l	Y	S	
			N/A	1,1,1,2-Tetrachloroethane	< 2.0	ug/l	N	S	
			N/A	1,1,1-Trichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1,2-Trichloroethane	< 10	ug/l	N	S	
			N/A	1,1-Dichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloropropene	< 1.0	ug/l	N	S	
			N/A	1,2,3-Trichlorobenzene	< 2.0	ug/l	N	S	
			N/A	1,2,3-Trichloropropane	< 50	ug/l	N	S	
			N/A	1,2,4-Trichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2,4-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,2-Dibromo-3-Chloropropane	< 50	ug/l	N	S	
			N/A	1,2-Dibromoethane	< 5.0	ug/l	N	S	
			N/A	1,2-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2-Dichloroethane	< 2.0	ug/l	N	S	
			N/A	1,2-Dichloropropane	< 1.0	ug/l	N	S	
			N/A	1,3,5-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,3-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,3-Dichloropropane	< 2.0	ug/l	N	S	
			N/A	1,4-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	2,3,4,5-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,5-T	< 0.50	ug/l	N	S	
			N/A	2,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-D	< 0.50	ug/l	N	S	
			N/A	2,4-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dimethylphenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2,6-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,6-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2-Chloronaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Chlorophenol	< 0.20	ug/l	N	S	
			N/A	2-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	2-Methyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Methylnaphthalene	< 0.50	ug/l	N	S	

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MCQ055113	SW3	22/11/2018	N/A	2-Methylphenol (o-Cresol)	< 0.20	ug/l	N	S	
			N/A	2-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	2-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Sec-Butyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	3,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	3-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4,4-DDD	< 0.20	ug/l	N	S	
			N/A	4,4-DDE	< 0.20	ug/l	N	S	
			N/A	4,4-DDT	< 0.20	ug/l	N	S	
			N/A	4-Bromophenylphenyl Ether	< 0.50	ug/l	N	S	
			N/A	4-Chloro-3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Chloroaniline	< 0.50	ug/l	N	S	
			N/A	4-Chlorophenylphenylether	< 0.50	ug/l	N	S	
			N/A	4-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	4-Isopropyltoluene	< 1.0	ug/l	N	S	
			N/A	4-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	Acenaphthene	< 0.50	ug/l	N	S	
			N/A	Acenaphthylene	< 0.50	ug/l	N	S	
			N/A	Aldrin	< 0.20	ug/l	N	S	
			N/A	Alpha-Chlordane	< 0.20	ug/l	N	S	
			N/A	Alpha-HCH	< 0.20	ug/l	N	S	
			N/A	Ametryn	< 0.20	ug/l	N	S	
			N/A	Anthracene	< 0.50	ug/l	N	S	
			N/A	Atraton	< 0.20	ug/l	N	S	
			N/A	Atrazine	< 0.20	ug/l	N	S	
			N/A	Azinphos-ethyl	< 0.20	ug/l	N	S	
			N/A	Azinphos-Methyl	< 0.20	ug/l	N	S	
			N/A	Azobenzene	< 0.50	ug/l	N	S	
			N/A	Benzene	< 1.0	ug/l	Y	S	
			N/A	Benzo[a]anthracene	< 0.50	ug/l	N	S	
			N/A	Benzo[a]pyrene	< 0.50	ug/l	N	S	
			N/A	Benzo[b]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Benzo[g,h,i]perylene	< 0.50	ug/l	N	S	
			N/A	Benzo[k]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Beta-HCH	< 0.20	ug/l	N	S	
			N/A	Bis(2-Chloroethoxy)Methane	< 0.50	ug/l	N	S	
			N/A	Bis-(2-Chloroethyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Chloroisopropyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Ethylhexyl)Phthalate	< 0.50	ug/l	N	S	
			N/A	Bromobenzene	< 1.0	ug/l	N	S	
			N/A	Bromochloromethane	< 5.0	ug/l	N	S	
			N/A	Bromodichloromethane	< 5.0	ug/l	N	S	
			N/A	Bromomethane	< 5.0	ug/l	N	S	
			N/A	Bromoxynil	<0.04	ug/l	N	S	
			N/A	Butylbenzyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Cadmium (Total)	< 0.080	ug/l	N	S	

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MCQ055113	SW3	22/11/2018	N/A	Carbazole	< 0.50	ug/l	N	S	
			N/A	Carbon Tetrachloride	< 10	ug/l	N	S	
			N/A	Carbophenothion	< 0.50	ug/l	N	S	
			N/A	Chlorfenvinphos	< 0.20	ug/l	N	S	
			N/A	Chlorobenzene	< 1.0	ug/l	N	S	
			N/A	Chloroethane	< 2.0	ug/l	N	S	
			N/A	Chloroform	< 10	ug/l	N	S	
			N/A	Chloromethane	< 1.0	ug/l	N	S	
			N/A	Chlorothalonil	< 0.50	ug/l	N	S	
			N/A	Chlorpynifos	< 0.50	ug/l	N	S	
			N/A	Chlorpyrifos-methyl	< 0.20	ug/l	N	S	
			N/A	Chrysene	< 0.50	ug/l	N	S	
			N/A	cis 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	cis-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Coumaphos	< 0.20	ug/l	N	S	
			N/A	Delta-HCH	< 0.20	ug/l	N	S	
			N/A	Demeton-O	< 0.20	ug/l	N	S	
			N/A	Demeton-S	< 0.20	ug/l	N	S	
			N/A	Diazinon	< 0.50	ug/l	N	S	
			N/A	Dibenz(a,h)Anthracene	< 0.50	ug/l	N	S	
			N/A	Dibenzofuran	< 0.50	ug/l	N	S	
			N/A	Dibromochloromethane	< 10	ug/l	N	S	
			N/A	Dibromomethane	< 10	ug/l	N	S	
			N/A	Dibutyl Tin	< 0.050	ug/l	N	S	
			N/A	Dichlorodifluoromethane	< 1.0	ug/l	N	S	
			N/A	Dichlorprop	< 0.1	ug/l	N	S	
			N/A	Dichlorvos	< 0.50	ug/l	N	S	
			N/A	Dieldrin	< 0.20	ug/l	N	S	
			N/A	Diethyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dimethoate	< 0.20	ug/l	N	S	
			N/A	Dimethylphthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Butyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Octyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dinoseb	< 1.0	ug/l	N	S	
			N/A	Disulfoton	< 1.0	ug/l	N	S	
			N/A	Endosulfan I	< 0.20	ug/l	N	S	
			N/A	Endosulfan II	< 0.20	ug/l	N	S	
			N/A	Endosulfan Sulphate	< 0.20	ug/l	N	S	
			N/A	Endrin	< 0.20	ug/l	N	S	
			N/A	Endrin Aldehyde	< 0.20	ug/l	N	S	
			N/A	Endrin Ketone	< 0.20	ug/l	N	S	
			N/A	Ethion	< 0.50	ug/l	N	S	
			N/A	Ethylbenzene	< 1.0	ug/l	Y	S	
			N/A	Etrimphos	< 0.20	ug/l	N	S	
			N/A	Fenitrothion	< 0.20	ug/l	N	S	
			N/A	Fensulphothion	< 0.20	ug/l	N	S	
			N/A	Fenthion	< 0.20	ug/l	N	S	
			N/A	Fluoranthene	< 0.50	ug/l	N	S	
			N/A	Fluorene	< 0.50	ug/l	N	S	

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MCQ055113	SW3	22/11/2018	N/A	Gamma-Chlordane	< 0.20	ug/l	N	S	
			N/A	Gamma-Lindane	< 0.20	ug/l	N	S	
			N/A	Heptachlor	< 0.20	ug/l	N	S	
			N/A	Heptachlor Epoxide	< 0.20	ug/l	N	S	
			N/A	Hexachlorobenzene	< 0.50	ug/l	N	S	
			N/A	Hexachlorobutadiene	< 0.50	ug/l	N	S	
			N/A	Hexachlorocyclopentadiene	< 0.50	ug/l	N	S	
			N/A	Hexachloroethane	< 0.50	ug/l	N	S	
			N/A	Indeno(1,2,3-c,d)Pyrene	< 0.50	ug/l	N	S	
			N/A	Ioxynil	<0.05	ug/l	N	S	
			N/A	Isophorone	< 0.50	ug/l	N	S	
			N/A	Isopropylbenzene	< 1.0	ug/l	N	S	
			N/A	List 1 CT Jan 2016					
			N/A	m & p-Xylene	< 1.0	ug/l	N	S	
			N/A	Malathion	< 0.20	ug/l	N	S	
			N/A	MCPA	<0.05	ug/l	N	S	
			N/A	MCPB	<0.05	ug/l	N	S	
			N/A	Mercury (Total)	< 0.50	ug/l	N	S	
			N/A	Methoxychlor	< 0.20	ug/l	N	S	
			N/A	Methyl parathion	< 1.0	ug/l	N	S	
			N/A	Methyl Tert-Butyl Ether	< 1.0	ug/l	N	S	
			N/A	Mevinphos	< 0.20	ug/l	N	S	
			N/A	Mineral Oil	< 10	ug/l	N	S	
			N/A	Naphthalene	< 0.50	ug/l	N	S	
			N/A	N-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Nitrobenzene	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodimethylamine	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodi-n-propylamine	< 0.50	ug/l	N	S	
			N/A	N-Propylbenzene	< 1.0	ug/l	N	S	
			N/A	o-Xylene	< 1.0	ug/l	Y	S	
			N/A	Parathion	< 0.20	ug/l	N	S	
			N/A	Pendimethalin	< 5.0	ug/l	N	S	
			N/A	Pentachlorophenol	<0.04	ug/l	N	S	
			N/A	Permethrin	< 0.50	mg/l	N	S	
			N/A	Phenanthrene	< 0.50	ug/l	N	S	
			N/A	Phorate	< 0.20	ug/l	N	S	
			N/A	Phosalone	< 0.20	ug/l	N	S	
			N/A	Prometon	< 0.20	ug/l	N	S	
			N/A	Prometryn	< 0.20	ug/l	N	S	
			N/A	Propazine	< 0.20	ug/l	N	S	
			N/A	Propetamphos	< 0.20	ug/l	N	S	
			N/A	Prothiofos	< 0.20	ug/l	N	S	
			N/A	Pyrene	< 0.50	ug/l	N	S	
			N/A	Qunitozene	< 5.0	ug/l	N	S	
			N/A	Secbumeton	< 0.20	ug/l	N	S	
			N/A	Sec-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Simazine	< 0.20	ug/l	N	S	
			N/A	Simetryn	< 0.20	ug/l	N	S	
			N/A	Styrene	< 1.0	ug/l	N	S	

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MCQ055113	SW3	22/11/2018	N/A	Sulprofos	< 0.20	ug/l	N	S	
			N/A	Tecnazene	< 5.0	ug/l	N	S	
			N/A	Terbutylazine	< 0.20	ug/l	N	S	
			N/A	Terbutryn	< 0.20	ug/l	N	S	
			N/A	Tert-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Tetrachloroethene	< 1.0	ug/l	N	S	
			N/A	Tetrachloromethane	< 1.0	ug/l	N	S	
			N/A	Toluene	< 1.0	ug/l	Y	S	
			N/A	Total Phenols	< 5.0	ug/l	Y	S	
			N/A	Trans 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	Trans-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Triallate	< 0.20	ug/l	N	S	
			N/A	Triazophos	< 0.20	ug/l	N	S	
			N/A	Tribromomethane	< 1.0	ug/l	N	S	
			N/A	Tributyl Tin	< 0.050	ug/l	N	S	
			N/A	Trichloroethene	< 1.0	ug/l	N	S	
			N/A	Trichlorofluoromethane	< 1.0	ug/l	N	S	
			N/A	Trichloromethane	< 1.0	ug/l	N	S	
			N/A	Trichloronate	< 0.20	ug/l	N	S	
			N/A	Trifluralin	< 0.20	ug/l	N	S	
			N/A	Triphenyl Tin	< 0.050	ug/l	N	S	
			N/A	Vinyl Chloride	< 1.0	ug/l	N	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Surface Water

Analyst
Comment:

MCQ055114	SW4	22/11/2018	SAM031	Alkalinity, Total	127.00	mg/l	Y	MCQ
			SAM031	Ammonia as N	0.44	mg/l	Y	MCQ
			SAM016	BOD (ATU)	1.53	mg/l	Y	MCQ
			N/A	Cadmium (tot.unfilt)	<0.5	ug/l	Y	S
			N/A	Calcium (tot.unfilt)	104	mg/l	N	S
			SAM031	Chloride as Cl	32.50	mg/l	Y	MCQ
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S
			SAM009	COD (Total)	<25	mg/l	Y	MCQ
			N/A	Copper (tot.unfilt)	3.31	ug/l	Y	S
			MCQ- DO	Dissolved Oxygen	9.3	mg/l	N	MCQ
			SAM005	Electrical Conductivity	815.0	uS/cm	Y	MCQ
			N/A	Iron (tot.unfilt)	0.312	mg/l	N	S
			N/A	Lead (tot.unfilt)	<1	ug/l	Y	S

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MCQ055114	SW4	22/11/2018	N/A	Magnesium (tot.unfilt)	33.2	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	15.1	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.04	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	4.51	ug/l	Y	S	
			SAM004	pH	7.47	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	6.16	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	22.5	mg/l	N	S	
			SAM031	Sulphate as SO4	228.00	mg/l	Y	MCQ	
			SAM001	Suspended Solids	6.00	mg/l	Y	MCQ	
			SAM034	TOC	8.89	mg/l	Y	MCQ	
			SAM031	TON as N	3.59	mg/l	Y	MCQ	
			MCQ- VOG	Visible Oil and Grease	<1.0	%	N	MCQ	
			N/A	Zinc Total (W)	5.63	ug/l	Y	S	
			N/A	1,1,1,2-Tetrachloroethane	< 2.0	ug/l	N	S	
			N/A	1,1,1-Trichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1,2-Trichloroethane	< 10	ug/l	N	S	
			N/A	1,1-Dichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloropropene	< 1.0	ug/l	N	S	
			N/A	1,2,3-Trichlorobenzene	< 2.0	ug/l	N	S	
			N/A	1,2,3-Trichloropropane	< 50	ug/l	N	S	
			N/A	1,2,4-Trichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2,4-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,2-Dibromo-3-Chloropropane	< 50	ug/l	N	S	
			N/A	1,2-Dibromoethane	< 5.0	ug/l	N	S	
			N/A	1,2-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2-Dichloroethane	< 2.0	ug/l	N	S	
			N/A	1,2-Dichloropropane	< 1.0	ug/l	N	S	
			N/A	1,3,5-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,3-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,3-Dichloropropane	< 2.0	ug/l	N	S	
			N/A	1,4-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	2,3,4,5-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,5-T	< 0.50	ug/l	N	S	
			N/A	2,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-D	< 0.50	ug/l	N	S	
			N/A	2,4-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dimethylphenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2,6-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,6-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2-Chloronaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Chlorophenol	< 0.20	ug/l	N	S	

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MCQ055114	SW4	22/11/2018	N/A	2-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	2-Methyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Methylnaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Methylphenol (o-Cresol)	< 0.20	ug/l	N	S	
			N/A	2-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	2-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Sec-Butyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	3,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	3-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4,4-DDD	< 0.20	ug/l	N	S	
			N/A	4,4-DDE	< 0.20	ug/l	N	S	
			N/A	4,4-DDT	< 0.20	ug/l	N	S	
			N/A	4-Bromophenylphenyl Ether	< 0.50	ug/l	N	S	
			N/A	4-Chloro-3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Chloroaniline	< 0.50	ug/l	N	S	
			N/A	4-Chlorophenylphenylether	< 0.50	ug/l	N	S	
			N/A	4-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	4-Isopropyltoluene	< 1.0	ug/l	N	S	
			N/A	4-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	Acenaphthene	< 0.50	ug/l	N	S	
			N/A	Acenaphthylene	< 0.50	ug/l	N	S	
			N/A	Aldrin	< 0.20	ug/l	N	S	
			N/A	Alpha-Chlordane	< 0.20	ug/l	N	S	
			N/A	Alpha-HCH	< 0.20	ug/l	N	S	
			N/A	Ametryn	< 0.20	ug/l	N	S	
			N/A	Anthracene	< 0.50	ug/l	N	S	
			N/A	Atraton	< 0.20	ug/l	N	S	
			N/A	Atrazine	< 0.20	ug/l	N	S	
			N/A	Azinphos-ethyl	< 0.20	ug/l	N	S	
			N/A	Azinphos-Methyl	< 0.20	ug/l	N	S	
			N/A	Azobenzene	< 0.50	ug/l	N	S	
			N/A	Benzene	< 1.0	ug/l	Y	S	
			N/A	Benzo[a]anthracene	< 0.50	ug/l	N	S	
			N/A	Benzo[a]pyrene	< 0.50	ug/l	N	S	
			N/A	Benzo[b]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Benzo[g,h,i]perylene	< 0.50	ug/l	N	S	
			N/A	Benzo[k]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Beta-HCH	< 0.20	ug/l	N	S	
			N/A	Bis(2-Chloroethoxy)Methane	< 0.50	ug/l	N	S	
			N/A	Bis-(2-Chloroethyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Chloroisopropyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Ethylhexyl)Phthalate	< 0.50	ug/l	N	S	
			N/A	Bromobenzene	< 1.0	ug/l	N	S	
			N/A	Bromochloromethane	< 5.0	ug/l	N	S	
			N/A	Bromodichloromethane	< 5.0	ug/l	N	S	
			N/A	Bromomethane	< 5.0	ug/l	N	S	

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MCQ055114	SW4	22/11/2018	N/A	Bromoxynil	<0.04	ug/l	N	S	
			N/A	Butylbenzyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Cadmium (Total)	< 0.080	ug/l	N	S	
			N/A	Carbazole	< 0.50	ug/l	N	S	
			N/A	Carbon Tetrachloride	< 10	ug/l	N	S	
			N/A	Carbophenothion	< 0.50	ug/l	N	S	
			N/A	Chlorfenvinphos	< 0.20	ug/l	N	S	
			N/A	Chlorobenzene	< 1.0	ug/l	N	S	
			N/A	Chloroethane	< 2.0	ug/l	N	S	
			N/A	Chloroform	< 10	ug/l	N	S	
			N/A	Chloromethane	< 1.0	ug/l	N	S	
			N/A	Chloroethalonil	< 0.50	ug/l	N	S	
			N/A	Chlorpyrifos	< 0.50	ug/l	N	S	
			N/A	Chlorpyrifos-methyl	< 0.20	ug/l	N	S	
			N/A	Chrysene	< 0.50	ug/l	N	S	
			N/A	cis 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	cis-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Coumaphos	< 0.20	ug/l	N	S	
			N/A	Delta-HCH	< 0.20	ug/l	N	S	
			N/A	Demeton-O	< 0.20	ug/l	N	S	
			N/A	Demeton-S	< 0.20	ug/l	N	S	
			N/A	Diazinon	< 0.50	ug/l	N	S	
			N/A	Dibenz(a,h)Anthracene	< 0.50	ug/l	N	S	
			N/A	Dibenzofuran	< 0.50	ug/l	N	S	
			N/A	Dibromochloromethane	< 10	ug/l	N	S	
			N/A	Dibromomethane	< 10	ug/l	N	S	
			N/A	Dibutyl Tin	< 0.050	ug/l	N	S	
			N/A	Dichlorodifluoromethane	< 1.0	ug/l	N	S	
			N/A	Dichlorprop	<0.1	ug/l	N	S	
			N/A	Dichlorvos	< 0.50	ug/l	N	S	
			N/A	Dieldrin	< 0.20	ug/l	N	S	
			N/A	Diethyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dimethoate	< 0.20	ug/l	N	S	
			N/A	Dimethylphthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Butyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Octyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dinoseb	< 1.0	ug/l	N	S	
			N/A	Disulfoton	< 1.0	ug/l	N	S	
			N/A	Endosulfan I	< 0.20	ug/l	N	S	
			N/A	Endosulfan II	< 0.20	ug/l	N	S	
			N/A	Endosulfan Sulphate	< 0.20	ug/l	N	S	
			N/A	Endrin	< 0.20	ug/l	N	S	
			N/A	Endrin Aldehyde	< 0.20	ug/l	N	S	
			N/A	Endrin Ketone	< 0.20	ug/l	N	S	
			N/A	Ethion	< 0.50	ug/l	N	S	
			N/A	Ethylbenzene	< 1.0	ug/l	Y	S	
			N/A	Etrimphos	< 0.20	ug/l	N	S	
			N/A	Fenitrothion	< 0.20	ug/l	N	S	
			N/A	Fensulphothion	< 0.20	ug/l	N	S	

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MCQ055114	SW4	22/11/2018	N/A	Fenthion	< 0.20	ug/l	N	S	
			N/A	Fluoranthene	< 0.50	ug/l	N	S	
			N/A	Fluorene	< 0.50	ug/l	N	S	
			N/A	Gamma-Chlordane	< 0.20	ug/l	N	S	
			N/A	Gamma-Lindane	< 0.20	ug/l	N	S	
			N/A	Heptachlor	< 0.20	ug/l	N	S	
			N/A	Heptachlor Epoxide	< 0.20	ug/l	N	S	
			N/A	Hexachlorobenzene	< 0.50	ug/l	N	S	
			N/A	Hexachlorobutadiene	< 0.50	ug/l	N	S	
			N/A	Hexachlorocyclopentadiene	< 0.50	ug/l	N	S	
			N/A	Hexachloroethane	< 0.50	ug/l	N	S	
			N/A	Indeno(1,2,3-c,d)Pyrene	< 0.50	ug/l	N	S	
			N/A	Ioxynil	< 0.05	ug/l	N	S	
			N/A	Isophorone	< 0.50	ug/l	N	S	
			N/A	Isopropylbenzene	< 1.0	ug/l	N	S	
			N/A	List 1 CT Jan 2016					
			N/A	m & p-Xylene	< 1.0	ug/l	N	S	
			N/A	Malathion	< 0.20	ug/l	N	S	
			N/A	MCPA	< 0.05	ug/l	N	S	
			N/A	MCPB	< 0.05	ug/l	N	S	
			N/A	Mercury (Total)	< 0.50	ug/l	N	S	
			N/A	Methoxychlor	< 0.20	ug/l	N	S	
			N/A	Methyl parathion	< 1.0	ug/l	N	S	
			N/A	Methyl Tert-Butyl Ether	< 1.0	ug/l	N	S	
			N/A	Mevinphos	< 0.20	ug/l	N	S	
			N/A	Mineral Oil	< 10	ug/l	N	S	
			N/A	Naphthalene	< 0.50	ug/l	N	S	
			N/A	N-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Nitrobenzene	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodimethylamine	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodi-n-propylamine	< 0.50	ug/l	N	S	
			N/A	N-Propylbenzene	< 1.0	ug/l	N	S	
			N/A	o-Xylene	< 1.0	ug/l	Y	S	
			N/A	Parathion	< 0.20	ug/l	N	S	
			N/A	Pendimethalin	< 5.0	ug/l	N	S	
			N/A	Pentachlorophenol	< 0.04	ug/l	N	S	
			N/A	Permethrin	< 0.50	mg/l	N	S	
			N/A	Phenanthrene	< 0.50	ug/l	N	S	
			N/A	Phorate	< 0.20	ug/l	N	S	
			N/A	Phosalone	< 0.20	ug/l	N	S	
			N/A	Prometon	< 0.20	ug/l	N	S	
			N/A	Prometryn	< 0.20	ug/l	N	S	
			N/A	Propazine	< 0.20	ug/l	N	S	
			N/A	Propetamphos	< 0.20	ug/l	N	S	
			N/A	Prothiofos	< 0.20	ug/l	N	S	
			N/A	Pyrene	< 0.50	ug/l	N	S	
			N/A	Qunitozene	< 5.0	ug/l	N	S	
			N/A	Secbumeton	< 0.20	ug/l	N	S	
			N/A	Sec-Butylbenzene	< 1.0	ug/l	N	S	

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ055114	SW4	22/11/2018	N/A	Simazine	< 0.20	ug/l	N	S	
			N/A	Simetryn	< 0.20	ug/l	N	S	
			N/A	Styrene	< 1.0	ug/l	N	S	
			N/A	Sulprofos	< 0.20	ug/l	N	S	
			N/A	Tecnazene	< 5.0	ug/l	N	S	
			N/A	Terbuthylazine	< 0.20	ug/l	N	S	
			N/A	Terbutryn	< 0.20	ug/l	N	S	
			N/A	Tert-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Tetrachloroethene	< 1.0	ug/l	N	S	
			N/A	Tetrachloromethane	< 1.0	ug/l	N	S	
			N/A	Toluene	< 1.0	ug/l	Y	S	
			N/A	Total Phenols	< 5.0	ug/l	Y	S	
			N/A	Trans 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	Trans-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Triallate	< 0.20	ug/l	N	S	
			N/A	Triazophos	< 0.20	ug/l	N	S	
			N/A	Tribromomethane	< 1.0	ug/l	N	S	
			N/A	Tributyl Tin	< 0.050	ug/l	N	S	
			N/A	Trichloroethene	< 1.0	ug/l	N	S	
			N/A	Trichlorofluoromethane	< 1.0	ug/l	N	S	
			N/A	Trichloromethane	< 1.0	ug/l	N	S	
			N/A	Trichloronate	< 0.20	ug/l	N	S	
			N/A	Trifluralin	< 0.20	ug/l	N	S	
			N/A	Triphenyl Tin	< 0.050	ug/l	N	S	
			N/A	Vinyl Chloride	< 1.0	ug/l	N	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Surface Water

Analyst
Comment:

MCQ055115	BH1	22/11/2018	SAM031	Alkalinity, Total	212.00	mg/l	Y	MCQ
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ
			N/A	Arsenic (tot.unfilt)	4.5	ug/l	Y	S
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S
			N/A	Calcium (tot.unfilt)	62.3	mg/l	N	S
			SAM031	Chloride as Cl	10.80	mg/l	Y	MCQ
			N/A	Chromium (tot.unfilt)	7.05	ug/l	Y	S
			SAM009	COD (Total)	<25	mg/l	Y	MCQ
			SAM005	Electrical Conductivity	511.0	uS/cm	Y	MCQ

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MCQ055115	BH1	22/11/2018	N/A	Iron (tot.unfilt)	4.59	mg/l	N	S	
			N/A	Lead (tot.unfilt)	2.89	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	26.7	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	78.8	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.04	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	0.0357	ug/l	N	S	
			N/A	Naphthalene (aq)	0.0186	ug/l	N	S	
			N/A	Nickel Total (W)	7.6	ug/l	Y	S	
			SAM004	pH	7.53	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	1.96	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	15.4	mg/l	N	S	
			SAM031	Sulphate as SO4	48.70	mg/l	Y	MCQ	
			SAM034	TOC	1.39	mg/l	Y	MCQ	
			SAM031	TON as N	0.33	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	18	ug/l	Y	S	
			N/A	1,1,1,2-Tetrachloroethane	< 2.0	ug/l	N	S	
			N/A	1,1,1-Trichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1,2-Trichloroethane	< 10	ug/l	N	S	
			N/A	1,1-Dichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloropropene	< 1.0	ug/l	N	S	
			N/A	1,2,3-Trichlorobenzene	< 2.0	ug/l	N	S	
			N/A	1,2,3-Trichloropropane	< 50	ug/l	N	S	
			N/A	1,2,4-Trichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2,4-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,2-Dibromo-3-Chloropropane	< 50	ug/l	N	S	
			N/A	1,2-Dibromoethane	< 5.0	ug/l	N	S	
			N/A	1,2-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2-Dichloroethane	< 2.0	ug/l	N	S	
			N/A	1,2-Dichloropropane	< 1.0	ug/l	N	S	
			N/A	1,3,5-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,3-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,3-Dichloropropane	< 2.0	ug/l	N	S	
			N/A	1,4-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	2,3,4,5-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,5-T	< 0.50	ug/l	N	S	
			N/A	2,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-D	< 0.50	ug/l	N	S	
			N/A	2,4-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dimethylphenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2,6-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,6-Dinitrotoluene	< 0.50	ug/l	N	S	

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MCQ055115	BH1	22/11/2018	N/A	2-Chloronaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Chlorophenol	< 0.20	ug/l	N	S	
			N/A	2-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	2-Methyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Methylnaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Methylphenol (o-Cresol)	< 0.20	ug/l	N	S	
			N/A	2-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	2-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Sec-Butyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	3,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	3-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4,4-DDD	< 0.20	ug/l	N	S	
			N/A	4,4-DDE	< 0.20	ug/l	N	S	
			N/A	4,4-DDT	< 0.20	ug/l	N	S	
			N/A	4-Bromophenylphenyl Ether	< 0.50	ug/l	N	S	
			N/A	4-Chloro-3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Chloroaniline	< 0.50	ug/l	N	S	
			N/A	4-Chlorophenylphenylether	< 0.50	ug/l	N	S	
			N/A	4-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	4-Isopropyltoluene	< 1.0	ug/l	N	S	
			N/A	4-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	Acenaphthene	< 0.50	ug/l	N	S	
			N/A	Acenaphthylene	< 0.50	ug/l	N	S	
			N/A	Aldrin	< 0.20	ug/l	N	S	
			N/A	Alpha-Chlordane	< 0.20	ug/l	N	S	
			N/A	Alpha-HCH	< 0.20	ug/l	N	S	
			N/A	Ametryn	< 0.20	ug/l	N	S	
			N/A	Anthracene	< 0.50	ug/l	N	S	
			N/A	Atraton	< 0.20	ug/l	N	S	
			N/A	Atrazine	< 0.20	ug/l	N	S	
			N/A	Azinphos-ethyl	< 0.20	ug/l	N	S	
			N/A	Azinphos-Methyl	< 0.20	ug/l	N	S	
			N/A	Azobenzene	< 0.50	ug/l	N	S	
			N/A	Benzene	< 1.0	ug/l	Y	S	
			N/A	Benzo[a]anthracene	< 0.50	ug/l	N	S	
			N/A	Benzo[a]pyrene	< 0.50	ug/l	N	S	
			N/A	Benzo[b]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Benzo[g,h,i]perylene	< 0.50	ug/l	N	S	
			N/A	Benzo[k]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Beta-HCH	< 0.20	ug/l	N	S	
			N/A	Bis(2-Chloroethoxy)Methane	< 0.50	ug/l	N	S	
			N/A	Bis-(2-Chloroethyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Chloroisopropyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Ethylhexyl)Phthalate	< 0.50	ug/l	N	S	
			N/A	Bromobenzene	< 1.0	ug/l	N	S	
			N/A	Bromochloromethane	< 5.0	ug/l	N	S	

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MCQ055115	BH1	22/11/2018	N/A	Bromodichloromethane	< 5.0	ug/l	N	S	
			N/A	Bromomethane	< 5.0	ug/l	N	S	
			N/A	Bromoxynil	<0.04	ug/l	N	S	
			N/A	Butylbenzyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Cadmium (Total)	< 0.080	ug/l	N	S	
			N/A	Carbazole	< 0.50	ug/l	N	S	
			N/A	Carbon Tetrachloride	< 10	ug/l	N	S	
			N/A	Carbophenothion	< 0.50	ug/l	N	S	
			N/A	Chlorfenvinphos	< 0.20	ug/l	N	S	
			N/A	Chlorobenzene	< 1.0	ug/l	N	S	
			N/A	Chloroethane	< 2.0	ug/l	N	S	
			N/A	Chloroform	< 10	ug/l	N	S	
			N/A	Chloromethane	< 1.0	ug/l	N	S	
			N/A	Chlorothalonil	< 0.50	ug/l	N	S	
			N/A	Chlorpyrifos	< 0.50	ug/l	N	S	
			N/A	Chlorpyrifos-methyl	< 0.20	ug/l	N	S	
			N/A	Chrysene	< 0.50	ug/l	N	S	
			N/A	cis 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	cis-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Coumaphos	< 0.20	ug/l	N	S	
			N/A	Delta-HCH	< 0.20	ug/l	N	S	
			N/A	Demeton-O	< 0.20	ug/l	N	S	
			N/A	Demeton-S	< 0.20	ug/l	N	S	
			N/A	Diazinon	< 0.50	ug/l	N	S	
			N/A	Dibenz(a,h)Anthracene	< 0.50	ug/l	N	S	
			N/A	Dibenzofuran	< 0.50	ug/l	N	S	
			N/A	Dibromochloromethane	< 10	ug/l	N	S	
			N/A	Dibromomethane	< 10	ug/l	N	S	
			N/A	Dibutyl Tin	< 0.050	ug/l	N	S	
			N/A	Dichlorodifluoromethane	< 1.0	ug/l	N	S	
			N/A	Dichlorprop	<0.1	ug/l	N	S	
			N/A	Dichlorvos	< 0.50	ug/l	N	S	
			N/A	Dieldrin	< 0.20	ug/l	N	S	
			N/A	Diethyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dimethoate	< 0.20	ug/l	N	S	
			N/A	Dimethylphthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Butyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Octyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dinoseb	< 1.0	ug/l	N	S	
			N/A	Disulfoton	< 1.0	ug/l	N	S	
			N/A	Endosulfan I	< 0.20	ug/l	N	S	
			N/A	Endosulfan II	< 0.20	ug/l	N	S	
			N/A	Endosulfan Sulphate	< 0.20	ug/l	N	S	
			N/A	Endrin	< 0.20	ug/l	N	S	
			N/A	Endrin Aldehyde	< 0.20	ug/l	N	S	
			N/A	Endrin Ketone	< 0.20	ug/l	N	S	
			N/A	Ethion	< 0.50	ug/l	N	S	
			N/A	Ethylbenzene	< 1.0	ug/l	Y	S	
			N/A	Etrimphos	< 0.20	ug/l	N	S	

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MCQ055115	BH1	22/11/2018	N/A	Fenitrothion	< 0.20	ug/l	N	S	
			N/A	Fensulphothion	< 0.20	ug/l	N	S	
			N/A	Fenthion	< 0.20	ug/l	N	S	
			N/A	Fluoranthene	< 0.50	ug/l	N	S	
			N/A	Fluorene	< 0.50	ug/l	N	S	
			N/A	Gamma-Chlordane	< 0.20	ug/l	N	S	
			N/A	Gamma-Lindane	< 0.20	ug/l	N	S	
			N/A	Heptachlor	< 0.20	ug/l	N	S	
			N/A	Heptachlor Epoxide	< 0.20	ug/l	N	S	
			N/A	Hexachlorobenzene	< 0.50	ug/l	N	S	
			N/A	Hexachlorobutadiene	< 0.50	ug/l	N	S	
			N/A	Hexachlorocyclopentadiene	< 0.50	ug/l	N	S	
			N/A	Hexachloroethane	< 0.50	ug/l	N	S	
			N/A	Indeno(1,2,3-c,d)Pyrene	< 0.50	ug/l	N	S	
			N/A	Ioxynil	< 0.05	ug/l	N	S	
			N/A	Isophorone	< 0.50	ug/l	N	S	
			N/A	Isopropylbenzene	< 1.0	ug/l	N	S	
			N/A	List 1 CT Jan 2016					
			N/A	m & p-Xylene	< 1.0	ug/l	N	S	
			N/A	Malathion	< 0.20	ug/l	N	S	
			N/A	MCPA	< 0.05	ug/l	N	S	
			N/A	MCPB	< 0.05	ug/l	N	S	
			N/A	Mercury (Total)	< 0.50	ug/l	N	S	
			N/A	Methoxychlor	< 0.20	ug/l	N	S	
			N/A	Methyl parathion	< 1.0	ug/l	N	S	
			N/A	Methyl Tert-Butyl Ether	< 1.0	ug/l	N	S	
			N/A	Mevinphos	< 0.20	ug/l	N	S	
			N/A	Mineral Oil	< 10	ug/l	N	S	
			N/A	Naphthalene	< 0.50	ug/l	N	S	
			N/A	N-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Nitrobenzene	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodimethylamine	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodi-n-propylamine	< 0.50	ug/l	N	S	
			N/A	N-Propylbenzene	< 1.0	ug/l	N	S	
			N/A	o-Xylene	< 1.0	ug/l	Y	S	
			N/A	Parathion	< 0.20	ug/l	N	S	
			N/A	Pendimethalin	< 5.0	ug/l	N	S	
			N/A	Pentachlorophenol	< 0.04	ug/l	N	S	
			N/A	Permethrin	< 0.50	mg/l	N	S	
			N/A	Phenanthrene	< 0.50	ug/l	N	S	
			N/A	Phorate	< 0.20	ug/l	N	S	
			N/A	Phosalone	< 0.20	ug/l	N	S	
			N/A	Prometon	< 0.20	ug/l	N	S	
			N/A	Prometryn	< 0.20	ug/l	N	S	
			N/A	Propazine	< 0.20	ug/l	N	S	
			N/A	Propetamphos	< 0.20	ug/l	N	S	
			N/A	Prothiofos	< 0.20	ug/l	N	S	
			N/A	Pyrene	< 0.50	ug/l	N	S	
			N/A	Qunitozene	< 5.0	ug/l	N	S	

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ055115	BH1	22/11/2018	N/A	Secbumeton	< 0.20	ug/l	N	S	
			N/A	Sec-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Simazine	< 0.20	ug/l	N	S	
			N/A	Simetryn	< 0.20	ug/l	N	S	
			N/A	Styrene	< 1.0	ug/l	N	S	
			N/A	Sulprofos	< 0.20	ug/l	N	S	
			N/A	Tecnazene	< 5.0	ug/l	N	S	
			N/A	Terbuthylazine	< 0.20	ug/l	N	S	
			N/A	Terbutryn	< 0.20	ug/l	N	S	
			N/A	Tert-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Tetrachloroethene	< 1.0	ug/l	N	S	
			N/A	Tetrachloromethane	< 1.0	ug/l	N	S	
			N/A	Toluene	< 1.0	ug/l	Y	S	
			N/A	Total Phenols	< 5.0	ug/l	Y	S	
			N/A	Trans 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	Trans-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Triallate	< 0.20	ug/l	N	S	
			N/A	Triazophos	< 0.20	ug/l	N	S	
			N/A	Tribromomethane	< 1.0	ug/l	N	S	
			N/A	Tributyl Tin	< 0.050	ug/l	N	S	
			N/A	Trichloroethene	< 1.0	ug/l	N	S	
			N/A	Trichlorofluoromethane	< 1.0	ug/l	N	S	
			N/A	Trichloromethane	< 1.0	ug/l	N	S	
			N/A	Trichloronate	< 0.20	ug/l	N	S	
			N/A	Trifluralin	< 0.20	ug/l	N	S	
			N/A	Triphenyl Tin	< 0.050	ug/l	N	S	
			N/A	Vinyl Chloride	< 1.0	ug/l	N	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ055116	BH2	22/11/2018	SAM031	Alkalinity, Total	168.00	mg/l	Y	MCQ
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ
			N/A	Arsenic (tot.unfilt)	78.3	ug/l	Y	S
			SAM016	BOD (ATU)	1.30	mg/l	Y	MCQ
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S
			N/A	Calcium (tot.unfilt)	86.4	mg/l	N	S
			SAM031	Chloride as Cl	20.90	mg/l	Y	MCQ
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S

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MCQ055116	BH2	22/11/2018	SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	769.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	1.08	mg/l	N	S	
			N/A	Lead (tot.unfilt)	3.95	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	35.8	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	208	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.04	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	5.81	ug/l	Y	S	
			SAM004	pH	7.40	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	3.68	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	20.8	mg/l	N	S	
			SAM031	Sulphate as SO4	185.00	mg/l	Y	MCQ	
			SAM034	TOC	5.18	mg/l	Y	MCQ	
			SAM031	TON as N	4.40	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	10.9	ug/l	Y	S	
			N/A	1,1,1,2-Tetrachloroethane	< 2.0	ug/l	N	S	
			N/A	1,1,1-Trichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1,2-Trichloroethane	< 10	ug/l	N	S	
			N/A	1,1-Dichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloropropene	< 1.0	ug/l	N	S	
			N/A	1,2,3-Trichlorobenzene	< 2.0	ug/l	N	S	
			N/A	1,2,3-Trichloropropane	< 50	ug/l	N	S	
			N/A	1,2,4-Trichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2,4-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,2-Dibromo-3-Chloropropane	< 50	ug/l	N	S	
			N/A	1,2-Dibromoethane	< 5.0	ug/l	N	S	
			N/A	1,2-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2-Dichloroethane	< 2.0	ug/l	N	S	
			N/A	1,2-Dichloropropane	< 1.0	ug/l	N	S	
			N/A	1,3,5-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,3-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,3-Dichloropropane	< 2.0	ug/l	N	S	
			N/A	1,4-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	2,3,4,5-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,5-T	< 0.50	ug/l	N	S	
			N/A	2,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-D	< 0.50	ug/l	N	S	
			N/A	2,4-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dimethylphenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dinitrotoluene	< 0.50	ug/l	N	S	

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MCQ055116	BH2	22/11/2018	N/A	2,6-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,6-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2-Chloronaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Chlorophenol	< 0.20	ug/l	N	S	
			N/A	2-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	2-Methyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Methylnaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Methylphenol (o-Cresol)	< 0.20	ug/l	N	S	
			N/A	2-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	2-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Sec-Butyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	3,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	3-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4,4-DDD	< 0.20	ug/l	N	S	
			N/A	4,4-DDE	< 0.20	ug/l	N	S	
			N/A	4,4-DDT	< 0.20	ug/l	N	S	
			N/A	4-Bromophenylphenyl Ether	< 0.50	ug/l	N	S	
			N/A	4-Chloro-3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Chloroaniline	< 0.50	ug/l	N	S	
			N/A	4-Chlorophenylphenylether	< 0.50	ug/l	N	S	
			N/A	4-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	4-Isopropyltoluene	< 1.0	ug/l	N	S	
			N/A	4-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	Acenaphthene	< 0.50	ug/l	N	S	
			N/A	Acenaphthylene	< 0.50	ug/l	N	S	
			N/A	Aldrin	< 0.20	ug/l	N	S	
			N/A	Alpha-Chlordane	< 0.20	ug/l	N	S	
			N/A	Alpha-HCH	< 0.20	ug/l	N	S	
			N/A	Ametryn	< 0.20	ug/l	N	S	
			N/A	Anthracene	< 0.50	ug/l	N	S	
			N/A	Atraton	< 0.20	ug/l	N	S	
			N/A	Atrazine	< 0.20	ug/l	N	S	
			N/A	Azinphos-ethyl	< 0.20	ug/l	N	S	
			N/A	Azinphos-Methyl	< 0.20	ug/l	N	S	
			N/A	Azobenzene	< 0.50	ug/l	N	S	
			N/A	Benzene	< 1.0	ug/l	Y	S	
			N/A	Benzo[a]anthracene	< 0.50	ug/l	N	S	
			N/A	Benzo[a]pyrene	< 0.50	ug/l	N	S	
			N/A	Benzo[b]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Benzo[g,h,i]perylene	< 0.50	ug/l	N	S	
			N/A	Benzo[k]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Beta-HCH	< 0.20	ug/l	N	S	
			N/A	Bis(2-Chloroethoxy)Methane	< 0.50	ug/l	N	S	
			N/A	Bis-(2-Chloroethyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Chloroisopropyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Ethylhexyl)Phthalate	< 0.50	ug/l	N	S	

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MCQ055116	BH2	22/11/2018	N/A	Bromobenzene	< 1.0	ug/l	N	S	
			N/A	Bromochloromethane	< 5.0	ug/l	N	S	
			N/A	Bromodichloromethane	< 5.0	ug/l	N	S	
			N/A	Bromomethane	< 5.0	ug/l	N	S	
			N/A	Bromoxynil	<0.04	ug/l	N	S	
			N/A	Butylbenzyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Cadmium (Total)	< 0.080	ug/l	N	S	
			N/A	Carbazole	< 0.50	ug/l	N	S	
			N/A	Carbon Tetrachloride	< 10	ug/l	N	S	
			N/A	Carbophenothion	< 0.50	ug/l	N	S	
			N/A	Chlorfenvinphos	< 0.20	ug/l	N	S	
			N/A	Chlorobenzene	< 1.0	ug/l	N	S	
			N/A	Chloroethane	< 2.0	ug/l	N	S	
			N/A	Chloroform	< 10	ug/l	N	S	
			N/A	Chloromethane	< 1.0	ug/l	N	S	
			N/A	Chlorothalonil	< 0.50	ug/l	N	S	
			N/A	Chlorpynifos	< 0.50	ug/l	N	S	
			N/A	Chlorpyrifos-methyl	< 0.20	ug/l	N	S	
			N/A	Chrysene	< 0.50	ug/l	N	S	
			N/A	cis 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	cis-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Coumaphos	< 0.20	ug/l	N	S	
			N/A	Delta-HCH	< 0.20	ug/l	N	S	
			N/A	Demeton-O	< 0.20	ug/l	N	S	
			N/A	Demeton-S	< 0.20	ug/l	N	S	
			N/A	Diazinon	< 0.50	ug/l	N	S	
			N/A	Dibenz(a,h)Anthracene	< 0.50	ug/l	N	S	
			N/A	Dibenzofuran	< 0.50	ug/l	N	S	
			N/A	Dibromochloromethane	< 10	ug/l	N	S	
			N/A	Dibromomethane	< 10	ug/l	N	S	
			N/A	Dibutyl Tin	< 0.050	ug/l	N	S	
			N/A	Dichlorodifluoromethane	< 1.0	ug/l	N	S	
			N/A	Dichlorprop	<0.1	ug/l	N	S	
			N/A	Dichlorvos	< 0.50	ug/l	N	S	
			N/A	Dieldrin	< 0.20	ug/l	N	S	
			N/A	Diethyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dimethoate	< 0.20	ug/l	N	S	
			N/A	Dimethylphthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Butyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Octyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dinoseb	< 1.0	ug/l	N	S	
			N/A	Disulfoton	< 1.0	ug/l	N	S	
			N/A	Endosulfan I	< 0.20	ug/l	N	S	
			N/A	Endosulfan II	< 0.20	ug/l	N	S	
			N/A	Endosulfan Sulphate	< 0.20	ug/l	N	S	
			N/A	Endrin	< 0.20	ug/l	N	S	
			N/A	Endrin Aldehyde	< 0.20	ug/l	N	S	
			N/A	Endrin Ketone	< 0.20	ug/l	N	S	
			N/A	Ethion	< 0.50	ug/l	N	S	

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MCQ055116	BH2	22/11/2018	N/A	Ethylbenzene	< 1.0	ug/l	Y	S	
			N/A	Etrimphos	< 0.20	ug/l	N	S	
			N/A	Fenitrothion	< 0.20	ug/l	N	S	
			N/A	Fensulphothion	< 0.20	ug/l	N	S	
			N/A	Fenthion	< 0.20	ug/l	N	S	
			N/A	Fluoranthene	< 0.50	ug/l	N	S	
			N/A	Fluorene	< 0.50	ug/l	N	S	
			N/A	Gamma-Chlordane	< 0.20	ug/l	N	S	
			N/A	Gamma-Lindane	< 0.20	ug/l	N	S	
			N/A	Heptachlor	< 0.20	ug/l	N	S	
			N/A	Heptachlor Epoxide	< 0.20	ug/l	N	S	
			N/A	Hexachlorobenzene	< 0.50	ug/l	N	S	
			N/A	Hexachlorobutadiene	< 0.50	ug/l	N	S	
			N/A	Hexachlorocyclopentadiene	< 0.50	ug/l	N	S	
			N/A	Hexachloroethane	< 0.50	ug/l	N	S	
			N/A	Indeno(1,2,3-c,d)Pyrene	< 0.50	ug/l	N	S	
			N/A	Ioxynil	< 0.05	ug/l	N	S	
			N/A	Isophorone	< 0.50	ug/l	N	S	
			N/A	Isopropylbenzene	< 1.0	ug/l	N	S	
			N/A	List 1 CT Jan 2016					
			N/A	m & p-Xylene	< 1.0	ug/l	N	S	
			N/A	Malathion	< 0.20	ug/l	N	S	
			N/A	MCPA	< 0.05	ug/l	N	S	
			N/A	MCPB	< 0.05	ug/l	N	S	
			N/A	Mercury (Total)	< 0.50	ug/l	N	S	
			N/A	Methoxychlor	< 0.20	ug/l	N	S	
			N/A	Methyl parathion	< 1.0	ug/l	N	S	
			N/A	Methyl Tert-Butyl Ether	< 1.0	ug/l	N	S	
			N/A	Mevinphos	< 0.20	ug/l	N	S	
			N/A	Mineral Oil	< 10	ug/l	N	S	
			N/A	Naphthalene	< 0.50	ug/l	N	S	
			N/A	N-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Nitrobenzene	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodimethylamine	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodi-n-propylamine	< 0.50	ug/l	N	S	
			N/A	N-Propylbenzene	< 1.0	ug/l	N	S	
			N/A	o-Xylene	< 1.0	ug/l	Y	S	
			N/A	Parathion	< 0.20	ug/l	N	S	
			N/A	Pendimethalin	< 5.0	ug/l	N	S	
			N/A	Pentachlorophenol	< 0.04	ug/l	N	S	
			N/A	Permethrin	< 0.50	mg/l	N	S	
			N/A	Phenanthrene	< 0.50	ug/l	N	S	
			N/A	Phorate	< 0.20	ug/l	N	S	
			N/A	Phosalone	< 0.20	ug/l	N	S	
			N/A	Prometon	< 0.20	ug/l	N	S	
			N/A	Prometryn	< 0.20	ug/l	N	S	
			N/A	Propazine	< 0.20	ug/l	N	S	
			N/A	Propetamphos	< 0.20	ug/l	N	S	
			N/A	Prothiofos	< 0.20	ug/l	N	S	

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MCQ055116	BH2	22/11/2018	N/A	Pyrene	< 0.50	ug/l	N	S	
			N/A	Qunitozene	< 5.0	ug/l	N	S	
			N/A	Secbumeton	< 0.20	ug/l	N	S	
			N/A	Sec-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Simazine	< 0.20	ug/l	N	S	
			N/A	Simetryn	< 0.20	ug/l	N	S	
			N/A	Styrene	< 1.0	ug/l	N	S	
			N/A	Sulprofos	< 0.20	ug/l	N	S	
			N/A	Tecnazene	< 5.0	ug/l	N	S	
			N/A	Terbutylazine	< 0.20	ug/l	N	S	
			N/A	Terbutryn	< 0.20	ug/l	N	S	
			N/A	Tert-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Tetrachloroethene	< 1.0	ug/l	N	S	
			N/A	Tetrachloromethane	< 1.0	ug/l	N	S	
			N/A	Toluene	< 1.0	ug/l	Y	S	
			N/A	Total Phenols	< 5.0	ug/l	Y	S	
			N/A	Trans 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	Trans-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Triallate	< 0.20	ug/l	N	S	
			N/A	Triazophos	< 0.20	ug/l	N	S	
			N/A	Tribromomethane	< 1.0	ug/l	N	S	
			N/A	Tributyl Tin	< 0.050	ug/l	N	S	
			N/A	Trichloroethene	< 1.0	ug/l	N	S	
			N/A	Trichlorofluoromethane	< 1.0	ug/l	N	S	
			N/A	Trichloromethane	< 1.0	ug/l	N	S	
			N/A	Trichloronate	< 0.20	ug/l	N	S	
			N/A	Trifluralin	< 0.20	ug/l	N	S	
			N/A	Triphenyl Tin	< 0.050	ug/l	N	S	
			N/A	Vinyl Chloride	< 1.0	ug/l	N	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ055117	BH4	22/11/2018	SAM031	Alkalinity, Total	260.00	mg/l	Y	MCQ
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ
			N/A	Arsenic (tot.unfilt)	<2	ug/l	Y	S
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S
			N/A	Calcium (tot.unfilt)	171	mg/l	N	S

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MCQ055117	BH4	22/11/2018	SAM031	Chloride as Cl	12.80	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	1,050.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	0.577	mg/l	N	S	
			N/A	Lead (tot.unfilt)	<1	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	37	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	312	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.04	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	2.6	ug/l	Y	S	
			SAM004	pH	6.86	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	5.75	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	10.5	mg/l	N	S	
			SAM031	Sulphate as SO4	308.00	mg/l	Y	MCQ	
			SAM034	TOC	2.45	mg/l	Y	MCQ	
			SAM031	TON as N	2.00	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	6.57	ug/l	Y	S	
			N/A	1,1,1,2-Tetrachloroethane	< 2.0	ug/l	N	S	
			N/A	1,1,1-Trichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1,2-Trichloroethane	< 10	ug/l	N	S	
			N/A	1,1-Dichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloropropene	< 1.0	ug/l	N	S	
			N/A	1,2,3-Trichlorobenzene	< 2.0	ug/l	N	S	
			N/A	1,2,3-Trichloropropane	< 50	ug/l	N	S	
			N/A	1,2,4-Trichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2,4-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,2-Dibromo-3-Chloropropane	< 50	ug/l	N	S	
			N/A	1,2-Dibromoethane	< 5.0	ug/l	N	S	
			N/A	1,2-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2-Dichloroethane	< 2.0	ug/l	N	S	
			N/A	1,2-Dichloropropane	< 1.0	ug/l	N	S	
			N/A	1,3,5-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,3-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,3-Dichloropropane	< 2.0	ug/l	N	S	
			N/A	1,4-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	2,3,4,5-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,5-T	< 0.50	ug/l	N	S	
			N/A	2,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-D	< 0.50	ug/l	N	S	
			N/A	2,4-Dichlorophenol	< 0.20	ug/l	N	S	

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MCQ055117	BH4	22/11/2018	N/A	2,4-Dimethylphenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2,6-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,6-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2-Chloronaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Chlorophenol	< 0.20	ug/l	N	S	
			N/A	2-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	2-Methyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Methylnaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Methylphenol (o-Cresol)	< 0.20	ug/l	N	S	
			N/A	2-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	2-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Sec-Butyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	3,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	3-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4,4-DDD	< 0.20	ug/l	N	S	
			N/A	4,4-DDE	< 0.20	ug/l	N	S	
			N/A	4,4-DDT	< 0.20	ug/l	N	S	
			N/A	4-Bromophenylphenyl Ether	< 0.50	ug/l	N	S	
			N/A	4-Chloro-3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Chloroaniline	< 0.50	ug/l	N	S	
			N/A	4-Chlorophenylphenylether	< 0.50	ug/l	N	S	
			N/A	4-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	4-Isopropyltoluene	< 1.0	ug/l	N	S	
			N/A	4-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	Acenaphthene	< 0.50	ug/l	N	S	
			N/A	Acenaphthylene	< 0.50	ug/l	N	S	
			N/A	Aldrin	< 0.20	ug/l	N	S	
			N/A	Alpha-Chlordane	< 0.20	ug/l	N	S	
			N/A	Alpha-HCH	< 0.20	ug/l	N	S	
			N/A	Ametryn	< 0.20	ug/l	N	S	
			N/A	Anthracene	< 0.50	ug/l	N	S	
			N/A	Atraton	< 0.20	ug/l	N	S	
			N/A	Atrazine	< 0.20	ug/l	N	S	
			N/A	Azinphos-ethyl	< 0.20	ug/l	N	S	
			N/A	Azinphos-Methyl	< 0.20	ug/l	N	S	
			N/A	Azobenzene	< 0.50	ug/l	N	S	
			N/A	Benzene	< 1.0	ug/l	Y	S	
			N/A	Benzo[a]anthracene	< 0.50	ug/l	N	S	
			N/A	Benzo[a]pyrene	< 0.50	ug/l	N	S	
			N/A	Benzo[b]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Benzo[g,h,i]perylene	< 0.50	ug/l	N	S	
			N/A	Benzo[k]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Beta-HCH	< 0.20	ug/l	N	S	
			N/A	Bis(2-Chloroethoxy)Methane	< 0.50	ug/l	N	S	
			N/A	Bis-(2-Chloroethyl)Ether	< 0.50	ug/l	N	S	

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MCQ055117	BH4	22/11/2018	N/A	Bis(2-Chloroisopropyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Ethylhexyl)Phthalate	< 0.50	ug/l	N	S	
			N/A	Bromobenzene	< 1.0	ug/l	N	S	
			N/A	Bromochloromethane	< 5.0	ug/l	N	S	
			N/A	Bromodichloromethane	< 5.0	ug/l	N	S	
			N/A	Bromomethane	< 5.0	ug/l	N	S	
			N/A	Bromoxynil	<0.04	ug/l	N	S	
			N/A	Butylbenzyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Cadmium (Total)	< 0.080	ug/l	N	S	
			N/A	Carbazole	< 0.50	ug/l	N	S	
			N/A	Carbon Tetrachloride	< 10	ug/l	N	S	
			N/A	Carbophenothion	< 0.50	ug/l	N	S	
			N/A	Chlorfenvinphos	< 0.20	ug/l	N	S	
			N/A	Chlorobenzene	< 1.0	ug/l	N	S	
			N/A	Chloroethane	< 2.0	ug/l	N	S	
			N/A	Chloroform	< 10	ug/l	N	S	
			N/A	Chloromethane	< 1.0	ug/l	N	S	
			N/A	Chlorothalonil	< 0.50	ug/l	N	S	
			N/A	Chlorpyrifos	< 0.50	ug/l	N	S	
			N/A	Chlorpyrifos-methyl	< 0.20	ug/l	N	S	
			N/A	Chrysene	< 0.50	ug/l	N	S	
			N/A	cis 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	cis-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Coumaphos	< 0.20	ug/l	N	S	
			N/A	Delta-HCH	< 0.20	ug/l	N	S	
			N/A	Demeton-O	< 0.20	ug/l	N	S	
			N/A	Demeton-S	< 0.20	ug/l	N	S	
			N/A	Diazinon	< 0.50	ug/l	N	S	
			N/A	Dibenz(a,h)Anthracene	< 0.50	ug/l	N	S	
			N/A	Dibenzofuran	< 0.50	ug/l	N	S	
			N/A	Dibromochloromethane	< 10	ug/l	N	S	
			N/A	Dibromomethane	< 10	ug/l	N	S	
			N/A	Dibutyl Tin	< 0.050	ug/l	N	S	
			N/A	Dichlorodifluoromethane	< 1.0	ug/l	N	S	
			N/A	Dichlorprop	<0.1	ug/l	N	S	
			N/A	Dichlorvos	< 0.50	ug/l	N	S	
			N/A	Dieldrin	< 0.20	ug/l	N	S	
			N/A	Diethyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dimethoate	< 0.20	ug/l	N	S	
			N/A	Dimethylphthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Butyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Octyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dinoseb	< 1.0	ug/l	N	S	
			N/A	Disulfoton	< 1.0	ug/l	N	S	
			N/A	Endosulfan I	< 0.20	ug/l	N	S	
			N/A	Endosulfan II	< 0.20	ug/l	N	S	
			N/A	Endosulfan Sulphate	< 0.20	ug/l	N	S	
			N/A	Endrin	< 0.20	ug/l	N	S	
			N/A	Endrin Aldehyde	< 0.20	ug/l	N	S	

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MCQ055117	BH4	22/11/2018	N/A	Endrin Ketone	< 0.20	ug/l	N	S	
			N/A	Ethion	< 0.50	ug/l	N	S	
			N/A	Ethylbenzene	< 1.0	ug/l	Y	S	
			N/A	Etrimphos	< 0.20	ug/l	N	S	
			N/A	Fenitrothion	< 0.20	ug/l	N	S	
			N/A	Fensulphothion	< 0.20	ug/l	N	S	
			N/A	Fenthion	< 0.20	ug/l	N	S	
			N/A	Fluoranthene	< 0.50	ug/l	N	S	
			N/A	Fluorene	< 0.50	ug/l	N	S	
			N/A	Gamma-Chlordane	< 0.20	ug/l	N	S	
			N/A	Gamma-Lindane	< 0.20	ug/l	N	S	
			N/A	Heptachlor	< 0.20	ug/l	N	S	
			N/A	Heptachlor Epoxide	< 0.20	ug/l	N	S	
			N/A	Hexachlorobenzene	< 0.50	ug/l	N	S	
			N/A	Hexachlorobutadiene	< 0.50	ug/l	N	S	
			N/A	Hexachlorocyclopentadiene	< 0.50	ug/l	N	S	
			N/A	Hexachloroethane	< 0.50	ug/l	N	S	
			N/A	Indeno(1,2,3-c,d)Pyrene	< 0.50	ug/l	N	S	
			N/A	Ioxynil	< 0.05	ug/l	N	S	
			N/A	Isophorone	< 0.50	ug/l	N	S	
			N/A	Isopropylbenzene	< 1.0	ug/l	N	S	
			N/A	List 1 CT Jan 2016					
			N/A	m & p-Xylene	< 1.0	ug/l	N	S	
			N/A	Malathion	< 0.20	ug/l	N	S	
			N/A	MCPA	< 0.05	ug/l	N	S	
			N/A	MCPB	< 0.05	ug/l	N	S	
			N/A	Mercury (Total)	< 0.50	ug/l	N	S	
			N/A	Methoxychlor	< 0.20	ug/l	N	S	
			N/A	Methyl parathion	< 1.0	ug/l	N	S	
			N/A	Methyl Tert-Butyl Ether	< 1.0	ug/l	N	S	
			N/A	Mevinphos	< 0.20	ug/l	N	S	
			N/A	Mineral Oil	< 10	ug/l	N	S	
			N/A	Naphthalene	< 0.50	ug/l	N	S	
			N/A	N-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Nitrobenzene	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodimethylamine	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodi-n-propylamine	< 0.50	ug/l	N	S	
			N/A	N-Propylbenzene	< 1.0	ug/l	N	S	
			N/A	o-Xylene	< 1.0	ug/l	Y	S	
			N/A	Parathion	< 0.20	ug/l	N	S	
			N/A	Pendimethalin	< 5.0	ug/l	N	S	
			N/A	Pentachlorophenol	< 0.04	ug/l	N	S	
			N/A	Permethrin	< 0.50	mg/l	N	S	
			N/A	Phenanthrene	< 0.50	ug/l	N	S	
			N/A	Phorate	< 0.20	ug/l	N	S	
			N/A	Phosalone	< 0.20	ug/l	N	S	
			N/A	Prometon	< 0.20	ug/l	N	S	
			N/A	Prometryn	< 0.20	ug/l	N	S	
			N/A	Propazine	< 0.20	ug/l	N	S	

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MCQ055117	BH4	22/11/2018	N/A	Propetamphos	< 0.20	ug/l	N	S	
			N/A	Prothiofos	< 0.20	ug/l	N	S	
			N/A	Pyrene	< 0.50	ug/l	N	S	
			N/A	Qunitozene	< 5.0	ug/l	N	S	
			N/A	Secbumeton	< 0.20	ug/l	N	S	
			N/A	Sec-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Simazine	< 0.20	ug/l	N	S	
			N/A	Simetryn	< 0.20	ug/l	N	S	
			N/A	Styrene	< 1.0	ug/l	N	S	
			N/A	Sulprofos	< 0.20	ug/l	N	S	
			N/A	Tecnazene	< 5.0	ug/l	N	S	
			N/A	Terbuthylazine	< 0.20	ug/l	N	S	
			N/A	Terbutryn	< 0.20	ug/l	N	S	
			N/A	Tert-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Tetrachloroethene	< 1.0	ug/l	N	S	
			N/A	Tetrachloromethane	< 1.0	ug/l	N	S	
			N/A	Toluene	< 1.0	ug/l	Y	S	
			N/A	Total Phenols	< 5.0	ug/l	Y	S	
			N/A	Trans 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	Trans-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Triallate	< 0.20	ug/l	N	S	
			N/A	Triazophos	< 0.20	ug/l	N	S	
			N/A	Tribromomethane	< 1.0	ug/l	N	S	
			N/A	Tributyl Tin	< 0.050	ug/l	N	S	
			N/A	Trichloroethene	< 1.0	ug/l	N	S	
			N/A	Trichlorofluoromethane	< 1.0	ug/l	N	S	
			N/A	Trichloromethane	< 1.0	ug/l	N	S	
			N/A	Trichloronate	< 0.20	ug/l	N	S	
			N/A	Trifluralin	< 0.20	ug/l	N	S	
			N/A	Triphenyl Tin	< 0.050	ug/l	N	S	
			N/A	Vinyl Chloride	< 1.0	ug/l	N	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ055118	BH5	22/11/2018	SAM031	Alkalinity, Total	160.00	mg/l	Y	MCQ
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ
			N/A	Arsenic (tot.unfilt)	2.49	ug/l	Y	S
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ

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MCQ055118	BH5	22/11/2018	N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	132	mg/l	N	S	
			SAM031	Chloride as Cl	26.30	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	5.81	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	921.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	4.24	mg/l	N	S	
			N/A	Lead (tot.unfilt)	4.2	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	34	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	475	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.04	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	0.0963	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	17.9	ug/l	Y	S	
			SAM004	pH	7.05	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	9.48	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	30.6	mg/l	N	S	
			SAM031	Sulphate as SO4	277.00	mg/l	Y	MCQ	
			SAM034	TOC	9.82	mg/l	Y	MCQ	
			SAM031	TON as N	5.40	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	25.1	ug/l	Y	S	
			N/A	1,1,1,2-Tetrachloroethane	< 2.0	ug/l	N	S	
			N/A	1,1,1-Trichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1,2-Trichloroethane	< 10	ug/l	N	S	
			N/A	1,1-Dichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloropropene	< 1.0	ug/l	N	S	
			N/A	1,2,3-Trichlorobenzene	< 2.0	ug/l	N	S	
			N/A	1,2,3-Trichloropropane	< 50	ug/l	N	S	
			N/A	1,2,4-Trichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2,4-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,2-Dibromo-3-Chloropropane	< 50	ug/l	N	S	
			N/A	1,2-Dibromoethane	< 5.0	ug/l	N	S	
			N/A	1,2-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2-Dichloroethane	< 2.0	ug/l	N	S	
			N/A	1,2-Dichloropropane	< 1.0	ug/l	N	S	
			N/A	1,3,5-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,3-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,3-Dichloropropane	< 2.0	ug/l	N	S	
			N/A	1,4-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	2,3,4,5-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,5-T	< 0.50	ug/l	N	S	
			N/A	2,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,6-Trichlorophenol	< 0.20	ug/l	N	S	

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MCQ055118	BH5	22/11/2018	N/A	2,4-D	< 0.50	ug/l	N	S	
			N/A	2,4-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dimethylphenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2,6-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,6-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2-Chloronaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Chlorophenol	< 0.20	ug/l	N	S	
			N/A	2-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	2-Methyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Methylnaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Methylphenol (o-Cresol)	< 0.20	ug/l	N	S	
			N/A	2-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	2-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Sec-Butyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	3,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	3-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4,4-DDD	< 0.20	ug/l	N	S	
			N/A	4,4-DDE	< 0.20	ug/l	N	S	
			N/A	4,4-DDT	< 0.20	ug/l	N	S	
			N/A	4-Bromophenylphenyl Ether	< 0.50	ug/l	N	S	
			N/A	4-Chloro-3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Chloroaniline	< 0.50	ug/l	N	S	
			N/A	4-Chlorophenylphenylether	< 0.50	ug/l	N	S	
			N/A	4-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	4-Isopropyltoluene	< 1.0	ug/l	N	S	
			N/A	4-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	Acenaphthene	< 0.50	ug/l	N	S	
			N/A	Acenaphthylene	< 0.50	ug/l	N	S	
			N/A	Aldrin	< 0.20	ug/l	N	S	
			N/A	Alpha-Chlordane	< 0.20	ug/l	N	S	
			N/A	Alpha-HCH	< 0.20	ug/l	N	S	
			N/A	Ametryn	< 0.20	ug/l	N	S	
			N/A	Anthracene	< 0.50	ug/l	N	S	
			N/A	Atraton	< 0.20	ug/l	N	S	
			N/A	Atrazine	< 0.20	ug/l	N	S	
			N/A	Azinphos-ethyl	< 0.20	ug/l	N	S	
			N/A	Azinphos-Methyl	< 0.20	ug/l	N	S	
			N/A	Azobenzene	< 0.50	ug/l	N	S	
			N/A	Benzene	< 1.0	ug/l	Y	S	
			N/A	Benzo[a]anthracene	< 0.50	ug/l	N	S	
			N/A	Benzo[a]pyrene	< 0.50	ug/l	N	S	
			N/A	Benzo[b]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Benzo[g,h,i]perylene	< 0.50	ug/l	N	S	
			N/A	Benzo[k]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Beta-HCH	< 0.20	ug/l	N	S	

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MCQ055118	BH5	22/11/2018	N/A	Bis(2-Chloroethoxy)Methane	< 0.50	ug/l	N	S	
			N/A	Bis-(2-Chloroethyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Chloroisopropyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Ethylhexyl)Phthalate	< 0.50	ug/l	N	S	
			N/A	Bromobenzene	< 1.0	ug/l	N	S	
			N/A	Bromochloromethane	< 5.0	ug/l	N	S	
			N/A	Bromodichloromethane	< 5.0	ug/l	N	S	
			N/A	Bromomethane	< 5.0	ug/l	N	S	
			N/A	Bromoxynil	<0.04	ug/l	N	S	
			N/A	Butylbenzyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Cadmium (Total)	< 0.080	ug/l	N	S	
			N/A	Carbazole	< 0.50	ug/l	N	S	
			N/A	Carbon Tetrachloride	< 10	ug/l	N	S	
			N/A	Carbophenothion	< 0.50	ug/l	N	S	
			N/A	Chlorfenvinphos	< 0.20	ug/l	N	S	
			N/A	Chlorobenzene	< 1.0	ug/l	N	S	
			N/A	Chloroethane	< 2.0	ug/l	N	S	
			N/A	Chloroform	< 10	ug/l	N	S	
			N/A	Chloromethane	< 1.0	ug/l	N	S	
			N/A	Chlorothalonil	< 0.50	ug/l	N	S	
			N/A	Chlorpynifos	< 0.50	ug/l	N	S	
			N/A	Chlorpyrifos-methyl	< 0.20	ug/l	N	S	
			N/A	Chrysene	< 0.50	ug/l	N	S	
			N/A	cis 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	cis-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Coumaphos	< 0.20	ug/l	N	S	
			N/A	Delta-HCH	< 0.20	ug/l	N	S	
			N/A	Demeton-O	< 0.20	ug/l	N	S	
			N/A	Demeton-S	< 0.20	ug/l	N	S	
			N/A	Diazinon	< 0.50	ug/l	N	S	
			N/A	Dibenz(a,h)Anthracene	< 0.50	ug/l	N	S	
			N/A	Dibenzofuran	< 0.50	ug/l	N	S	
			N/A	Dibromochloromethane	< 10	ug/l	N	S	
			N/A	Dibromomethane	< 10	ug/l	N	S	
			N/A	Dibutyl Tin	< 0.050	ug/l	N	S	
			N/A	Dichlorodifluoromethane	< 1.0	ug/l	N	S	
			N/A	Dichlorprop	<0.1	ug/l	N	S	
			N/A	Dichlorvos	< 0.50	ug/l	N	S	
			N/A	Dieldrin	< 0.20	ug/l	N	S	
			N/A	Diethyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dimethoate	< 0.20	ug/l	N	S	
			N/A	Dimethylphthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Butyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Octyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dinoseb	< 1.0	ug/l	N	S	
			N/A	Disulfoton	< 1.0	ug/l	N	S	
			N/A	Endosulfan I	< 0.20	ug/l	N	S	
			N/A	Endosulfan II	< 0.20	ug/l	N	S	
			N/A	Endosulfan Sulphate	< 0.20	ug/l	N	S	

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MCQ055118	BH5	22/11/2018	N/A	Endrin	< 0.20	ug/l	N	S	
			N/A	Endrin Aldehyde	< 0.20	ug/l	N	S	
			N/A	Endrin Ketone	< 0.20	ug/l	N	S	
			N/A	Ethion	< 0.50	ug/l	N	S	
			N/A	Ethylbenzene	< 1.0	ug/l	Y	S	
			N/A	Etrimphos	< 0.20	ug/l	N	S	
			N/A	Fenitrothion	< 0.20	ug/l	N	S	
			N/A	Fensulphothion	< 0.20	ug/l	N	S	
			N/A	Fenthion	< 0.20	ug/l	N	S	
			N/A	Fluoranthene	< 0.50	ug/l	N	S	
			N/A	Fluorene	< 0.50	ug/l	N	S	
			N/A	Gamma-Chlordane	< 0.20	ug/l	N	S	
			N/A	Gamma-Lindane	< 0.20	ug/l	N	S	
			N/A	Heptachlor	< 0.20	ug/l	N	S	
			N/A	Heptachlor Epoxide	< 0.20	ug/l	N	S	
			N/A	Hexachlorobenzene	< 0.50	ug/l	N	S	
			N/A	Hexachlorobutadiene	< 0.50	ug/l	N	S	
			N/A	Hexachlorocyclopentadiene	< 0.50	ug/l	N	S	
			N/A	Hexachloroethane	< 0.50	ug/l	N	S	
			N/A	Indeno(1,2,3-c,d)Pyrene	< 0.50	ug/l	N	S	
			N/A	Ioxynil	< 0.05	ug/l	N	S	
			N/A	Isophorone	< 0.50	ug/l	N	S	
			N/A	Isopropylbenzene	< 1.0	ug/l	N	S	
			N/A	List 1 CT Jan 2016					
			N/A	m & p-Xylene	< 1.0	ug/l	N	S	
			N/A	Malathion	< 0.20	ug/l	N	S	
			N/A	MCPA	< 0.05	ug/l	N	S	
			N/A	MCPB	< 0.05	ug/l	N	S	
			N/A	Mercury (Total)	0.57	ug/l	N	S	
			N/A	Methoxychlor	< 0.20	ug/l	N	S	
			N/A	Methyl parathion	< 1.0	ug/l	N	S	
			N/A	Methyl Tert-Butyl Ether	< 1.0	ug/l	N	S	
			N/A	Mevinphos	< 0.20	ug/l	N	S	
			N/A	Mineral Oil	< 10	ug/l	N	S	
			N/A	Naphthalene	< 0.50	ug/l	N	S	
			N/A	N-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Nitrobenzene	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodimethylamine	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodi-n-propylamine	< 0.50	ug/l	N	S	
			N/A	N-Propylbenzene	< 1.0	ug/l	N	S	
			N/A	o-Xylene	< 1.0	ug/l	Y	S	
			N/A	Parathion	< 0.20	ug/l	N	S	
			N/A	Pendimethalin	< 5.0	ug/l	N	S	
			N/A	Pentachlorophenol	< 0.04	ug/l	N	S	
			N/A	Permethrin	< 0.50	mg/l	N	S	
			N/A	Phenanthrene	< 0.50	ug/l	N	S	
			N/A	Phorate	< 0.20	ug/l	N	S	
			N/A	Phosalone	< 0.20	ug/l	N	S	
			N/A	Prometon	< 0.20	ug/l	N	S	

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MCQ055118	BH5	22/11/2018	N/A	Prometryn	< 0.20	ug/l	N	S	
			N/A	Propazine	< 0.20	ug/l	N	S	
			N/A	Propetamphos	< 0.20	ug/l	N	S	
			N/A	Prothiofos	< 0.20	ug/l	N	S	
			N/A	Pyrene	< 0.50	ug/l	N	S	
			N/A	Qunitozene	< 5.0	ug/l	N	S	
			N/A	Secbumeton	< 0.20	ug/l	N	S	
			N/A	Sec-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Simazine	< 0.20	ug/l	N	S	
			N/A	Simetryn	< 0.20	ug/l	N	S	
			N/A	Styrene	< 1.0	ug/l	N	S	
			N/A	Sulprofos	< 0.20	ug/l	N	S	
			N/A	Tecnazene	< 5.0	ug/l	N	S	
			N/A	Terbutylazine	< 0.20	ug/l	N	S	
			N/A	Terbutryn	< 0.20	ug/l	N	S	
			N/A	Tert-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Tetrachloroethene	< 1.0	ug/l	N	S	
			N/A	Tetrachloromethane	< 1.0	ug/l	N	S	
			N/A	Toluene	< 1.0	ug/l	Y	S	
			N/A	Total Phenols	< 5.0	ug/l	Y	S	
			N/A	Trans 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	Trans-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Triallate	< 0.20	ug/l	N	S	
			N/A	Triazophos	< 0.20	ug/l	N	S	
			N/A	Tribromomethane	< 1.0	ug/l	N	S	
			N/A	Tributyl Tin	< 0.050	ug/l	N	S	
			N/A	Trichloroethene	< 1.0	ug/l	N	S	
			N/A	Trichlorofluoromethane	< 1.0	ug/l	N	S	
			N/A	Trichloromethane	< 1.0	ug/l	N	S	
			N/A	Trichloronate	< 0.20	ug/l	N	S	
			N/A	Trifluralin	< 0.20	ug/l	N	S	
			N/A	Triphenyl Tin	< 0.050	ug/l	N	S	
			N/A	Vinyl Chloride	< 1.0	ug/l	N	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ055120	BH6A	22/11/2018	SAM031	Alkalinity, Total	213.00	mg/l	Y	MCQ
			SAM031	Ammonia as N	0.54	mg/l	Y	MCQ

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MCQ055120	BH6A	22/11/2018	N/A	Arsenic (tot.unfilt)	6.89	ug/l	Y	S	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	119	mg/l	N	S	
			SAM031	Chloride as Cl	26.60	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	51.2	ug/l	Y	S	
			SAM009	COD (Total)	1,960	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	944.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	22.3	mg/l	N	S	
			N/A	Lead (tot.unfilt)	30.7	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	30.5	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	790	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.04	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	0.0839	ug/l	N	S	
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S	
			N/A	Nickel Total (W)	34	ug/l	Y	S	
			SAM004	pH	6.94	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	8.39	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	35.7	mg/l	N	S	
			SAM031	Sulphate as SO4	250.00	mg/l	Y	MCQ	
			SAM034	TOC	60.80	mg/l	Y	MCQ	
			SAM031	TON as N	4.08	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	108	ug/l	Y	S	
			N/A	1,1,1,2-Tetrachloroethane	< 2.0	ug/l	N	S	
			N/A	1,1,1-Trichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1,2-Trichloroethane	< 10	ug/l	N	S	
			N/A	1,1-Dichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloropropene	< 1.0	ug/l	N	S	
			N/A	1,2,3-Trichlorobenzene	< 2.0	ug/l	N	S	
			N/A	1,2,3-Trichloropropane	< 50	ug/l	N	S	
			N/A	1,2,4-Trichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2,4-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,2-Dibromo-3-Chloropropane	< 50	ug/l	N	S	
			N/A	1,2-Dibromoethane	< 5.0	ug/l	N	S	
			N/A	1,2-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2-Dichloroethane	< 2.0	ug/l	N	S	
			N/A	1,2-Dichloropropane	< 1.0	ug/l	N	S	
			N/A	1,3,5-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,3-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,3-Dichloropropane	< 2.0	ug/l	N	S	
			N/A	1,4-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	2,3,4,5-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,5-T	< 0.50	ug/l	N	S	

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MCQ055120	BH6A	22/11/2018	N/A	2,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-D	< 0.50	ug/l	N	S	
			N/A	2,4-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dimethylphenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2,6-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,6-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2-Chloronaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Chlorophenol	< 0.20	ug/l	N	S	
			N/A	2-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	2-Methyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Methylnaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Methylphenol (o-Cresol)	< 0.20	ug/l	N	S	
			N/A	2-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	2-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Sec-Butyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	3,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	3-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4,4-DDD	< 0.20	ug/l	N	S	
			N/A	4,4-DDE	< 0.20	ug/l	N	S	
			N/A	4,4-DDT	< 0.20	ug/l	N	S	
			N/A	4-Bromophenylphenyl Ether	< 0.50	ug/l	N	S	
			N/A	4-Chloro-3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Chloroaniline	< 0.50	ug/l	N	S	
			N/A	4-Chlorophenylphenylether	< 0.50	ug/l	N	S	
			N/A	4-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	4-Isopropyltoluene	< 1.0	ug/l	N	S	
			N/A	4-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	Acenaphthene	< 0.50	ug/l	N	S	
			N/A	Acenaphthylene	< 0.50	ug/l	N	S	
			N/A	Aldrin	< 0.20	ug/l	N	S	
			N/A	Alpha-Chlordane	< 0.20	ug/l	N	S	
			N/A	Alpha-HCH	< 0.20	ug/l	N	S	
			N/A	Ametryn	< 0.20	ug/l	N	S	
			N/A	Anthracene	< 0.50	ug/l	N	S	
			N/A	Atraton	< 0.20	ug/l	N	S	
			N/A	Atrazine	< 0.20	ug/l	N	S	
			N/A	Azinphos-ethyl	< 0.20	ug/l	N	S	
			N/A	Azinphos-Methyl	< 0.20	ug/l	N	S	
			N/A	Azobenzene	< 0.50	ug/l	N	S	
			N/A	Benzene	< 1.0	ug/l	Y	S	
			N/A	Benzo[a]anthracene	< 0.50	ug/l	N	S	
			N/A	Benzo[a]pyrene	< 0.50	ug/l	N	S	
			N/A	Benzo[b]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Benzo[g,h,i]perylene	< 0.50	ug/l	N	S	

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MCQ055120	BH6A	22/11/2018	N/A	Benzo[k]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Beta-HCH	< 0.20	ug/l	N	S	
			N/A	Bis(2-Chloroethoxy)Methane	< 0.50	ug/l	N	S	
			N/A	Bis-(2-Chloroethyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Chloroisopropyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Ethylhexyl)Phthalate	< 0.50	ug/l	N	S	
			N/A	Bromobenzene	< 1.0	ug/l	N	S	
			N/A	Bromochloromethane	< 5.0	ug/l	N	S	
			N/A	Bromodichloromethane	< 5.0	ug/l	N	S	
			N/A	Bromomethane	< 5.0	ug/l	N	S	
			N/A	Bromoxynil	<0.04	ug/l	N	S	
			N/A	Butylbenzyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Cadmium (Total)	< 0.080	ug/l	N	S	
			N/A	Carbazole	< 0.50	ug/l	N	S	
			N/A	Carbon Tetrachloride	< 10	ug/l	N	S	
			N/A	Carbophenothion	< 0.50	ug/l	N	S	
			N/A	Chlorfenvinphos	< 0.20	ug/l	N	S	
			N/A	Chlorobenzene	< 1.0	ug/l	N	S	
			N/A	Chloroethane	< 2.0	ug/l	N	S	
			N/A	Chloroform	< 10	ug/l	N	S	
			N/A	Chloromethane	< 1.0	ug/l	N	S	
			N/A	Chlorothalonil	< 0.50	ug/l	N	S	
			N/A	Chlorpynifos	< 0.50	ug/l	N	S	
			N/A	Chlorpyrifos-methyl	< 0.20	ug/l	N	S	
			N/A	Chrysene	< 0.50	ug/l	N	S	
			N/A	cis 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	cis-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Coumaphos	< 0.20	ug/l	N	S	
			N/A	Delta-HCH	< 0.20	ug/l	N	S	
			N/A	Demeton-O	< 0.20	ug/l	N	S	
			N/A	Demeton-S	< 0.20	ug/l	N	S	
			N/A	Diazinon	< 0.50	ug/l	N	S	
			N/A	Dibenz(a,h)Anthracene	< 0.50	ug/l	N	S	
			N/A	Dibenzofuran	< 0.50	ug/l	N	S	
			N/A	Dibromochloromethane	< 10	ug/l	N	S	
			N/A	Dibromomethane	< 10	ug/l	N	S	
			N/A	Dibutyl Tin	< 0.050	ug/l	N	S	
			N/A	Dichlorodifluoromethane	< 1.0	ug/l	N	S	
			N/A	Dichlorprop	<0.1	ug/l	N	S	
			N/A	Dichlorvos	< 0.50	ug/l	N	S	
			N/A	Dieldrin	< 0.20	ug/l	N	S	
			N/A	Diethyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dimethoate	< 0.20	ug/l	N	S	
			N/A	Dimethylphthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Butyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Octyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dinoseb	< 1.0	ug/l	N	S	
			N/A	Disulfoton	< 1.0	ug/l	N	S	
			N/A	Endosulfan I	< 0.20	ug/l	N	S	

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MCQ055120	BH6A	22/11/2018	N/A	Endosulfan II	< 0.20	ug/l	N	S	
			N/A	Endosulfan Sulphate	< 0.20	ug/l	N	S	
			N/A	Endrin	< 0.20	ug/l	N	S	
			N/A	Endrin Aldehyde	< 0.20	ug/l	N	S	
			N/A	Endrin Ketone	< 0.20	ug/l	N	S	
			N/A	Ethion	< 0.50	ug/l	N	S	
			N/A	Ethylbenzene	< 1.0	ug/l	Y	S	
			N/A	Etrimphos	< 0.20	ug/l	N	S	
			N/A	Fenitrothion	< 0.20	ug/l	N	S	
			N/A	Fensulphothion	< 0.20	ug/l	N	S	
			N/A	Fenthion	< 0.20	ug/l	N	S	
			N/A	Fluoranthene	< 0.50	ug/l	N	S	
			N/A	Fluorene	< 0.50	ug/l	N	S	
			N/A	Gamma-Chlordane	< 0.20	ug/l	N	S	
			N/A	Gamma-Lindane	< 0.20	ug/l	N	S	
			N/A	Heptachlor	< 0.20	ug/l	N	S	
			N/A	Heptachlor Epoxide	< 0.20	ug/l	N	S	
			N/A	Hexachlorobenzene	< 0.50	ug/l	N	S	
			N/A	Hexachlorobutadiene	< 0.50	ug/l	N	S	
			N/A	Hexachlorocyclopentadiene	< 0.50	ug/l	N	S	
			N/A	Hexachloroethane	< 0.50	ug/l	N	S	
			N/A	Indeno(1,2,3-c,d)Pyrene	< 0.50	ug/l	N	S	
			N/A	Ioxynil	< 0.05	ug/l	N	S	
			N/A	Isophorone	< 0.50	ug/l	N	S	
			N/A	Isopropylbenzene	< 1.0	ug/l	N	S	
			N/A	List 1 CT Jan 2016					
			N/A	m & p-Xylene	< 1.0	ug/l	N	S	
			N/A	Malathion	< 0.20	ug/l	N	S	
			N/A	MCPA	< 0.05	ug/l	N	S	
			N/A	MCPB	< 0.05	ug/l	N	S	
			N/A	Mercury (Total)	< 0.50	ug/l	N	S	
			N/A	Methoxychlor	< 0.20	ug/l	N	S	
			N/A	Methyl parathion	< 1.0	ug/l	N	S	
			N/A	Methyl Tert-Butyl Ether	< 1.0	ug/l	N	S	
			N/A	Mevinphos	< 0.20	ug/l	N	S	
			N/A	Mineral Oil	< 10	ug/l	N	S	
			N/A	Naphthalene	< 0.50	ug/l	N	S	
			N/A	N-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Nitrobenzene	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodimethylamine	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodi-n-propylamine	< 0.50	ug/l	N	S	
			N/A	N-Propylbenzene	< 1.0	ug/l	N	S	
			N/A	o-Xylene	< 1.0	ug/l	Y	S	
			N/A	Parathion	< 0.20	ug/l	N	S	
			N/A	Pendimethalin	< 5.0	ug/l	N	S	
			N/A	Pentachlorophenol	< 0.04	ug/l	N	S	
			N/A	Permethrin	< 0.50	mg/l	N	S	
			N/A	Phenanthrene	< 0.50	ug/l	N	S	
			N/A	Phorate	< 0.20	ug/l	N	S	

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MCQ055120	BH6A	22/11/2018	N/A	Phosalone	< 0.20	ug/l	N	S	
			N/A	Prometon	< 0.20	ug/l	N	S	
			N/A	Prometryn	< 0.20	ug/l	N	S	
			N/A	Propazine	< 0.20	ug/l	N	S	
			N/A	Propetamphos	< 0.20	ug/l	N	S	
			N/A	Prothiofos	< 0.20	ug/l	N	S	
			N/A	Pyrene	< 0.50	ug/l	N	S	
			N/A	Qunitozene	< 5.0	ug/l	N	S	
			N/A	Secbumeton	< 0.20	ug/l	N	S	
			N/A	Sec-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Simazine	< 0.20	ug/l	N	S	
			N/A	Simetryn	< 0.20	ug/l	N	S	
			N/A	Styrene	< 1.0	ug/l	N	S	
			N/A	Sulprofos	< 0.20	ug/l	N	S	
			N/A	Tecnazene	< 5.0	ug/l	N	S	
			N/A	Terbuthylazine	< 0.20	ug/l	N	S	
			N/A	Terbutryn	< 0.20	ug/l	N	S	
			N/A	Tert-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Tetrachloroethene	< 1.0	ug/l	N	S	
			N/A	Tetrachloromethane	< 1.0	ug/l	N	S	
			N/A	Toluene	< 1.0	ug/l	Y	S	
			N/A	Total Phenols	< 5.0	ug/l	Y	S	
			N/A	Trans 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	Trans-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Triallate	< 0.20	ug/l	N	S	
			N/A	Triazophos	< 0.20	ug/l	N	S	
			N/A	Tribromomethane	< 1.0	ug/l	N	S	
			N/A	Tributyl Tin	< 0.050	ug/l	N	S	
			N/A	Trichloroethene	< 1.0	ug/l	N	S	
			N/A	Trichlorofluoromethane	< 1.0	ug/l	N	S	
			N/A	Trichloromethane	< 1.0	ug/l	N	S	
			N/A	Trichloronate	< 0.20	ug/l	N	S	
			N/A	Trifluralin	< 0.20	ug/l	N	S	
			N/A	Triphenyl Tin	< 0.050	ug/l	N	S	
			N/A	Vinyl Chloride	< 1.0	ug/l	N	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

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MCQ055121	BH8	22/11/2018	SAM031	Alkalinity, Total	244.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	2.01	ug/l	Y	S	
			SAM016	BOD (ATU)	1.11	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	170	mg/l	N	S	
			SAM031	Chloride as Cl	31.20	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	3.61	ug/l	Y	S	
			SAM009	COD (Total)	<25	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	1,150.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	2.75	mg/l	N	S	
			N/A	Lead (tot.unfilt)	3.17	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	53.7	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	2600	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.04	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S	
			N/A	Naphthalene (aq)	1.92	ug/l	N	S	
			N/A	Nickel Total (W)	15.2	ug/l	Y	S	
			SAM004	pH	7.32	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	2.3	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	22.1	mg/l	N	S	
			SAM031	Sulphate as SO4	365.00	mg/l	Y	MCQ	
			SAM034	TOC	2.26	mg/l	Y	MCQ	
			SAM031	TON as N	0.35	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	40.1	ug/l	Y	S	
			N/A	1,1,1,2-Tetrachloroethane	< 2.0	ug/l	N	S	
			N/A	1,1,1-Trichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1,2-Trichloroethane	< 10	ug/l	N	S	
			N/A	1,1-Dichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloropropene	< 1.0	ug/l	N	S	
			N/A	1,2,3-Trichlorobenzene	< 2.0	ug/l	N	S	
			N/A	1,2,3-Trichloropropane	< 50	ug/l	N	S	
			N/A	1,2,4-Trichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2,4-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,2-Dibromo-3-Chloropropane	< 50	ug/l	N	S	
			N/A	1,2-Dibromoethane	< 5.0	ug/l	N	S	
			N/A	1,2-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2-Dichloroethane	< 2.0	ug/l	N	S	
			N/A	1,2-Dichloropropane	< 1.0	ug/l	N	S	
			N/A	1,3,5-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,3-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,3-Dichloropropane	< 2.0	ug/l	N	S	
			N/A	1,4-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	2,3,4,5-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5-Trichlorophenol	< 0.20	ug/l	N	S	

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MCQ055121	BH8	22/11/2018	N/A	2,3,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,5-T	< 0.50	ug/l	N	S	
			N/A	2,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-D	< 0.50	ug/l	N	S	
			N/A	2,4-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dimethylphenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2,6-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,6-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2-Chloronaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Chlorophenol	< 0.20	ug/l	N	S	
			N/A	2-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	2-Methyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Methylnaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Methylphenol (o-Cresol)	< 0.20	ug/l	N	S	
			N/A	2-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	2-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Sec-Butyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	3,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	3-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4,4-DDD	< 0.20	ug/l	N	S	
			N/A	4,4-DDE	< 0.20	ug/l	N	S	
			N/A	4,4-DDT	< 0.20	ug/l	N	S	
			N/A	4-Bromophenylphenyl Ether	< 0.50	ug/l	N	S	
			N/A	4-Chloro-3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Chloroaniline	< 0.50	ug/l	N	S	
			N/A	4-Chlorophenylphenylether	< 0.50	ug/l	N	S	
			N/A	4-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	4-Isopropyltoluene	< 1.0	ug/l	N	S	
			N/A	4-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	Acenaphthene	< 0.50	ug/l	N	S	
			N/A	Acenaphthylene	< 0.50	ug/l	N	S	
			N/A	Aldrin	< 0.20	ug/l	N	S	
			N/A	Alpha-Chlordane	< 0.20	ug/l	N	S	
			N/A	Alpha-HCH	< 0.20	ug/l	N	S	
			N/A	Ametryn	< 0.20	ug/l	N	S	
			N/A	Anthracene	< 0.50	ug/l	N	S	
			N/A	Atraton	< 0.20	ug/l	N	S	
			N/A	Atrazine	< 0.20	ug/l	N	S	
			N/A	Azinphos-ethyl	< 0.20	ug/l	N	S	
			N/A	Azinphos-Methyl	< 0.20	ug/l	N	S	
			N/A	Azobenzene	< 0.50	ug/l	N	S	
			N/A	Benzene	< 1.0	ug/l	Y	S	
			N/A	Benzo[a]anthracene	< 0.50	ug/l	N	S	
			N/A	Benzo[a]pyrene	< 0.50	ug/l	N	S	

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MCQ055121	BH8	22/11/2018	N/A	Benzo[b]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Benzo[g,h,i]perylene	< 0.50	ug/l	N	S	
			N/A	Benzo[k]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Beta-HCH	< 0.20	ug/l	N	S	
			N/A	Bis(2-Chloroethoxy)Methane	< 0.50	ug/l	N	S	
			N/A	Bis-(2-Chloroethyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Chloroisopropyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Ethylhexyl)Phthalate	< 0.50	ug/l	N	S	
			N/A	Bromobenzene	< 1.0	ug/l	N	S	
			N/A	Bromochloromethane	< 5.0	ug/l	N	S	
			N/A	Bromodichloromethane	< 5.0	ug/l	N	S	
			N/A	Bromomethane	< 5.0	ug/l	N	S	
			N/A	Bromoxynil	<0.04	ug/l	N	S	
			N/A	Butylbenzyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Cadmium (Total)	< 0.080	ug/l	N	S	
			N/A	Carbazole	< 0.50	ug/l	N	S	
			N/A	Carbon Tetrachloride	< 10	ug/l	N	S	
			N/A	Carbophenothion	< 0.50	ug/l	N	S	
			N/A	Chlorfenvinphos	< 0.20	ug/l	N	S	
			N/A	Chlorobenzene	< 1.0	ug/l	N	S	
			N/A	Chloroethane	< 2.0	ug/l	N	S	
			N/A	Chloroform	< 10	ug/l	N	S	
			N/A	Chloromethane	< 1.0	ug/l	N	S	
			N/A	Chlorothalonil	< 0.50	ug/l	N	S	
			N/A	Chlorpynifos	< 0.50	ug/l	N	S	
			N/A	Chlorpyrifos-methyl	< 0.20	ug/l	N	S	
			N/A	Chrysene	< 0.50	ug/l	N	S	
			N/A	cis 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	cis-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Coumaphos	< 0.20	ug/l	N	S	
			N/A	Delta-HCH	< 0.20	ug/l	N	S	
			N/A	Demeton-O	< 0.20	ug/l	N	S	
			N/A	Demeton-S	< 0.20	ug/l	N	S	
			N/A	Diazinon	< 0.50	ug/l	N	S	
			N/A	Dibenz(a,h)Anthracene	< 0.50	ug/l	N	S	
			N/A	Dibenzofuran	< 0.50	ug/l	N	S	
			N/A	Dibromochloromethane	< 10	ug/l	N	S	
			N/A	Dibromomethane	< 10	ug/l	N	S	
			N/A	Dibutyl Tin	< 0.050	ug/l	N	S	
			N/A	Dichlorodifluoromethane	< 1.0	ug/l	N	S	
			N/A	Dichlorprop	<0.1	ug/l	N	S	
			N/A	Dichlorvos	< 0.50	ug/l	N	S	
			N/A	Dieldrin	< 0.20	ug/l	N	S	
			N/A	Diethyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dimethoate	< 0.20	ug/l	N	S	
			N/A	Dimethylphthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Butyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Octyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dinoseb	< 1.0	ug/l	N	S	

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MCQ055121	BH8	22/11/2018	N/A	Disulfoton	< 1.0	ug/l	N	S	
			N/A	Endosulfan I	< 0.20	ug/l	N	S	
			N/A	Endosulfan II	< 0.20	ug/l	N	S	
			N/A	Endosulfan Sulphate	< 0.20	ug/l	N	S	
			N/A	Endrin	< 0.20	ug/l	N	S	
			N/A	Endrin Aldehyde	< 0.20	ug/l	N	S	
			N/A	Endrin Ketone	< 0.20	ug/l	N	S	
			N/A	Ethion	< 0.50	ug/l	N	S	
			N/A	Ethylbenzene	< 1.0	ug/l	Y	S	
			N/A	Etrimphos	< 0.20	ug/l	N	S	
			N/A	Fenitrothion	< 0.20	ug/l	N	S	
			N/A	Fensulphothion	< 0.20	ug/l	N	S	
			N/A	Fenthion	< 0.20	ug/l	N	S	
			N/A	Fluoranthene	< 0.50	ug/l	N	S	
			N/A	Fluorene	< 0.50	ug/l	N	S	
			N/A	Gamma-Chlordane	< 0.20	ug/l	N	S	
			N/A	Gamma-Lindane	< 0.20	ug/l	N	S	
			N/A	Heptachlor	< 0.20	ug/l	N	S	
			N/A	Heptachlor Epoxide	< 0.20	ug/l	N	S	
			N/A	Hexachlorobenzene	< 0.50	ug/l	N	S	
			N/A	Hexachlorobutadiene	< 0.50	ug/l	N	S	
			N/A	Hexachlorocyclopentadiene	< 0.50	ug/l	N	S	
			N/A	Hexachloroethane	< 0.50	ug/l	N	S	
			N/A	Indeno(1,2,3-c,d)Pyrene	< 0.50	ug/l	N	S	
			N/A	Ioxynil	< 0.05	ug/l	N	S	
			N/A	Isophorone	< 0.50	ug/l	N	S	
			N/A	Isopropylbenzene	< 1.0	ug/l	N	S	
			N/A	List 1 CT Jan 2016					
			N/A	m & p-Xylene	< 1.0	ug/l	N	S	
			N/A	Malathion	< 0.20	ug/l	N	S	
			N/A	MCPA	< 0.05	ug/l	N	S	
			N/A	MCPB	< 0.05	ug/l	N	S	
			N/A	Mercury (Total)	< 0.50	ug/l	N	S	
			N/A	Methoxychlor	< 0.20	ug/l	N	S	
			N/A	Methyl parathion	< 1.0	ug/l	N	S	
			N/A	Methyl Tert-Butyl Ether	< 1.0	ug/l	N	S	
			N/A	Mevinphos	< 0.20	ug/l	N	S	
			N/A	Mineral Oil	< 10	ug/l	N	S	
			N/A	Naphthalene	< 0.50	ug/l	N	S	
			N/A	N-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Nitrobenzene	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodimethylamine	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodi-n-propylamine	< 0.50	ug/l	N	S	
			N/A	N-Propylbenzene	< 1.0	ug/l	N	S	
			N/A	o-Xylene	< 1.0	ug/l	Y	S	
			N/A	Parathion	< 0.20	ug/l	N	S	
			N/A	Pendimethalin	< 5.0	ug/l	N	S	
			N/A	Pentachlorophenol	< 0.04	ug/l	N	S	
			N/A	Permethrin	< 0.50	mg/l	N	S	

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MCQ055121	BH8	22/11/2018	N/A	Phenanthrene	< 0.50	ug/l	N	S	
			N/A	Phorate	< 0.20	ug/l	N	S	
			N/A	Phosalone	< 0.20	ug/l	N	S	
			N/A	Prometon	< 0.20	ug/l	N	S	
			N/A	Prometryn	< 0.20	ug/l	N	S	
			N/A	Propazine	< 0.20	ug/l	N	S	
			N/A	Propetamphos	< 0.20	ug/l	N	S	
			N/A	Prothiofos	< 0.20	ug/l	N	S	
			N/A	Pyrene	< 0.50	ug/l	N	S	
			N/A	Qunitozene	< 5.0	ug/l	N	S	
			N/A	Secbumeton	< 0.20	ug/l	N	S	
			N/A	Sec-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Simazine	< 0.20	ug/l	N	S	
			N/A	Simetryn	< 0.20	ug/l	N	S	
			N/A	Styrene	< 1.0	ug/l	N	S	
			N/A	Sulprofos	< 0.20	ug/l	N	S	
			N/A	Tecnazene	< 5.0	ug/l	N	S	
			N/A	Terbuthylazine	< 0.20	ug/l	N	S	
			N/A	Terbutryn	< 0.20	ug/l	N	S	
			N/A	Tert-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Tetrachloroethene	< 1.0	ug/l	N	S	
			N/A	Tetrachloromethane	< 1.0	ug/l	N	S	
			N/A	Toluene	< 1.0	ug/l	Y	S	
			N/A	Total Phenols	< 5.0	ug/l	Y	S	
			N/A	Trans 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	Trans-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Triallate	< 0.20	ug/l	N	S	
			N/A	Triazophos	< 0.20	ug/l	N	S	
			N/A	Tribromomethane	< 1.0	ug/l	N	S	
			N/A	Tributyl Tin	< 0.050	ug/l	N	S	
			N/A	Trichloroethene	< 1.0	ug/l	N	S	
			N/A	Trichlorofluoromethane	< 1.0	ug/l	N	S	
			N/A	Trichloromethane	< 1.0	ug/l	N	S	
			N/A	Trichloronate	< 0.20	ug/l	N	S	
			N/A	Trifluralin	< 0.20	ug/l	N	S	
			N/A	Triphenyl Tin	< 0.050	ug/l	N	S	
			N/A	Vinyl Chloride	< 1.0	ug/l	N	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ055122	BH9	22/11/2018	SAM031	Alkalinity, Total	358.00	mg/l	Y	MCQ
			SAM031	Ammonia as N	1.71	mg/l	Y	MCQ

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N/A	Arsenic (tot.unfilt)	3.85	ug/l	Y	S
SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ
N/A	Cadmium Total (W)	<0.5	ug/l	Y	S
N/A	Calcium (tot.unfilt)	207	mg/l	N	S
SAM031	Chloride as Cl	67.90	mg/l	Y	MCQ
N/A	Chromium (tot.unfilt)	15.3	ug/l	Y	S
SAM009	COD (Total)	40	mg/l	Y	MCQ
SAM005	Electrical Conductivity	1,730.0	uS/cm	Y	MCQ
N/A	Iron (tot.unfilt)	12.8	mg/l	N	S
N/A	Lead (tot.unfilt)	5.21	ug/l	Y	S
N/A	Magnesium (tot.unfilt)	66.4	mg/l	N	S
N/A	Manganese (tot.unfilt)	883	ug/l	Y	S
N/A	Mecoprop (MCP)	<0.04	ug/l	N	S
N/A	Mercury (tot.unfilt)	0.0288	ug/l	N	S
N/A	Naphthalene (aq)	<0.01	ug/l	N	S
N/A	Nickel Total (W)	30.3	ug/l	Y	S
SAM004	pH	6.88	Units	Y	MCQ
N/A	Potassium (tot.unfilt)	17.3	mg/l	N	S
N/A	Sodium (tot.unfilt)	74	mg/l	N	S
SAM031	Sulphate as SO4	492.00	mg/l	Y	MCQ
SAM034	TOC	16.80	mg/l	Y	MCQ
SAM031	TON as N	8.30	mg/l	Y	MCQ
N/A	Zinc (tot.unfilt)	20.2	ug/l	Y	S
N/A	1,1,1,2-Tetrachloroethane	< 2.0	ug/l	N	S
N/A	1,1,1-Trichloroethane	< 1.0	ug/l	N	S
N/A	1,1,2-Trichloroethane	< 10	ug/l	N	S
N/A	1,1-Dichloroethane	< 1.0	ug/l	N	S
N/A	1,1-Dichloroethene	< 1.0	ug/l	N	S
N/A	1,1-Dichloropropene	< 1.0	ug/l	N	S
N/A	1,2,3-Trichlorobenzene	< 2.0	ug/l	N	S
N/A	1,2,3-Trichloropropane	< 50	ug/l	N	S
N/A	1,2,4-Trichlorobenzene	< 0.50	ug/l	N	S
N/A	1,2,4-Trimethylbenzene	< 1.0	ug/l	N	S
N/A	1,2-Dibromo-3-Chloropropane	< 50	ug/l	N	S
N/A	1,2-Dibromoethane	< 5.0	ug/l	N	S
N/A	1,2-Dichlorobenzene	< 0.50	ug/l	N	S
N/A	1,2-Dichloroethane	< 2.0	ug/l	N	S
N/A	1,2-Dichloropropane	< 1.0	ug/l	N	S
N/A	1,3,5-Trimethylbenzene	< 1.0	ug/l	N	S
N/A	1,3-Dichlorobenzene	< 0.50	ug/l	N	S
N/A	1,3-Dichloropropane	< 2.0	ug/l	N	S
N/A	1,4-Dichlorobenzene	< 0.50	ug/l	N	S
N/A	2,3,4,5-Tetrachlorophenol	< 0.20	ug/l	N	S
N/A	2,3,4,6-Tetrachlorophenol	< 0.20	ug/l	N	S
N/A	2,3,4-Trichlorophenol	< 0.20	ug/l	N	S
N/A	2,3,5,6-Tetrachlorophenol	< 0.20	ug/l	N	S
N/A	2,3,5-Trichlorophenol	< 0.20	ug/l	N	S
N/A	2,3,6-Trichlorophenol	< 0.20	ug/l	N	S
N/A	2,4,5-T	< 0.50	ug/l	N	S
N/A	2,4,5-Trichlorophenol	< 0.20	ug/l	N	S
N/A	2,4,6-Trichlorophenol	< 0.20	ug/l	N	S
N/A	2,4-D	< 0.50	ug/l	N	S

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N/A	2,4-Dichlorophenol	< 0.20	ug/l	N	S
N/A	2,4-Dimethylphenol	< 0.20	ug/l	N	S
N/A	2,4-Dinitrotoluene	< 0.50	ug/l	N	S
N/A	2,6-Dichlorophenol	< 0.20	ug/l	N	S
N/A	2,6-Dinitrotoluene	< 0.50	ug/l	N	S
N/A	2-Chloronaphthalene	< 0.50	ug/l	N	S
N/A	2-Chlorophenol	< 0.20	ug/l	N	S
N/A	2-Chlorotoluene	< 1.0	ug/l	N	S
N/A	2-Methyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S
N/A	2-Methylnaphthalene	< 0.50	ug/l	N	S
N/A	2-Methylphenol (o-Cresol)	< 0.20	ug/l	N	S
N/A	2-Nitroaniline	< 0.50	ug/l	N	S
N/A	2-Nitrophenol	< 0.20	ug/l	N	S
N/A	2-Sec-Butyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S
N/A	3,4,5-Trichlorophenol	< 0.20	ug/l	N	S
N/A	3-Methylphenol	< 0.20	ug/l	N	S
N/A	3-Nitroaniline	< 0.50	ug/l	N	S
N/A	4,4-DDD	< 0.20	ug/l	N	S
N/A	4,4-DDE	< 0.20	ug/l	N	S
N/A	4,4-DDT	< 0.20	ug/l	N	S
N/A	4-Bromophenylphenyl Ether	< 0.50	ug/l	N	S
N/A	4-Chloro-3-Methylphenol	< 0.20	ug/l	N	S
N/A	4-Chloroaniline	< 0.50	ug/l	N	S
N/A	4-Chlorophenylphenylether	< 0.50	ug/l	N	S
N/A	4-Chlorotoluene	< 1.0	ug/l	N	S
N/A	4-Isopropyltoluene	< 1.0	ug/l	N	S
N/A	4-Methylphenol	< 0.20	ug/l	N	S
N/A	4-Nitroaniline	< 0.50	ug/l	N	S
N/A	4-Nitrophenol	< 0.20	ug/l	N	S
N/A	Acenaphthene	< 0.50	ug/l	N	S
N/A	Acenaphthylene	< 0.50	ug/l	N	S
N/A	Aldrin	< 0.20	ug/l	N	S
N/A	Alpha-Chlordane	< 0.20	ug/l	N	S
N/A	Alpha-HCH	< 0.20	ug/l	N	S
N/A	Ametryn	< 0.20	ug/l	N	S
N/A	Anthracene	< 0.50	ug/l	N	S
N/A	Atraton	< 0.20	ug/l	N	S
N/A	Atrazine	< 0.20	ug/l	N	S
N/A	Azinphos-ethyl	< 0.20	ug/l	N	S
N/A	Azinphos-Methyl	< 0.20	ug/l	N	S
N/A	Azobenzene	< 0.50	ug/l	N	S
N/A	Benzene	< 1.0	ug/l	Y	S
N/A	Benzo[a]anthracene	< 0.50	ug/l	N	S
N/A	Benzo[a]pyrene	< 0.50	ug/l	N	S
N/A	Benzo[b]fluoranthene	< 0.50	ug/l	N	S
N/A	Benzo[g,h,i]perylene	< 0.50	ug/l	N	S
N/A	Benzo[k]fluoranthene	< 0.50	ug/l	N	S
N/A	Beta-HCH	< 0.20	ug/l	N	S
N/A	Bis(2-Chloroethoxy)Methane	< 0.50	ug/l	N	S
N/A	Bis-(2-Chloroethyl)Ether	< 0.50	ug/l	N	S
N/A	Bis(2-Chloroisopropyl)Ether	< 0.50	ug/l	N	S
N/A	Bis(2-Ethylhexyl)Phthalate	< 0.50	ug/l	N	S

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N/A	Bromobenzene	< 1.0	ug/l	N	S
N/A	Bromochloromethane	< 5.0	ug/l	N	S
N/A	Bromodichloromethane	< 5.0	ug/l	N	S
N/A	Bromomethane	< 5.0	ug/l	N	S
N/A	Bromoxynil	<0.04	ug/l	N	S
N/A	Butylbenzyl Phthalate	< 0.50	ug/l	N	S
N/A	Cadmium (Total)	< 0.080	ug/l	N	S
N/A	Carbazole	< 0.50	ug/l	N	S
N/A	Carbon Tetrachloride	< 10	ug/l	N	S
N/A	Carbophenothion	< 0.50	ug/l	N	S
N/A	Chlorfenvinphos	< 0.20	ug/l	N	S
N/A	Chlorobenzene	< 1.0	ug/l	N	S
N/A	Chloroethane	< 2.0	ug/l	N	S
N/A	Chloroform	< 10	ug/l	N	S
N/A	Chloromethane	< 1.0	ug/l	N	S
N/A	Chlorothalonil	< 0.50	ug/l	N	S
N/A	Chlorpyrifos	< 0.50	ug/l	N	S
N/A	Chlorpyrifos-methyl	< 0.20	ug/l	N	S
N/A	Chrysene	< 0.50	ug/l	N	S
N/A	cis 1,2-Dichloroethene	< 1.0	ug/l	N	S
N/A	cis-1,3-Dichloropropene	< 10	ug/l	N	S
N/A	Coumaphos	< 0.20	ug/l	N	S
N/A	Delta-HCH	< 0.20	ug/l	N	S
N/A	Demeton-O	< 0.20	ug/l	N	S
N/A	Demeton-S	< 0.20	ug/l	N	S
N/A	Diazinon	< 0.50	ug/l	N	S
N/A	Dibenz(a,h)Anthracene	< 0.50	ug/l	N	S
N/A	Dibenzofuran	< 0.50	ug/l	N	S
N/A	Dibromochloromethane	< 10	ug/l	N	S
N/A	Dibromomethane	< 10	ug/l	N	S
N/A	Dibutyl Tin	< 0.050	ug/l	N	S
N/A	Dichlorodifluoromethane	< 1.0	ug/l	N	S
N/A	Dichlorprop	<0.1	ug/l	N	S
N/A	Dichlorvos	< 0.50	ug/l	N	S
N/A	Dieldrin	< 0.20	ug/l	N	S
N/A	Diethyl Phthalate	< 0.50	ug/l	N	S
N/A	Dimethoate	< 0.20	ug/l	N	S
N/A	Dimethylphthalate	< 0.50	ug/l	N	S
N/A	Di-N-Butyl Phthalate	< 0.50	ug/l	N	S
N/A	Di-N-Octyl Phthalate	< 0.50	ug/l	N	S
N/A	Dinoseb	< 1.0	ug/l	N	S
N/A	Disulfoton	< 1.0	ug/l	N	S
N/A	Endosulfan I	< 0.20	ug/l	N	S
N/A	Endosulfan II	< 0.20	ug/l	N	S
N/A	Endosulfan Sulphate	< 0.20	ug/l	N	S
N/A	Endrin	< 0.20	ug/l	N	S
N/A	Endrin Aldehyde	< 0.20	ug/l	N	S
N/A	Endrin Ketone	< 0.20	ug/l	N	S
N/A	Ethion	< 0.50	ug/l	N	S
N/A	Ethylbenzene	< 1.0	ug/l	Y	S
N/A	Etrimphos	< 0.20	ug/l	N	S
N/A	Fenitrothion	< 0.20	ug/l	N	S

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N/A	Fensulphothion	< 0.20	ug/l	N	S
N/A	Fenthion	< 0.20	ug/l	N	S
N/A	Fluoranthene	< 0.50	ug/l	N	S
N/A	Fluorene	< 0.50	ug/l	N	S
N/A	Gamma-Chlordane	< 0.20	ug/l	N	S
N/A	Gamma-Lindane	< 0.20	ug/l	N	S
N/A	Heptachlor	< 0.20	ug/l	N	S
N/A	Heptachlor Epoxide	< 0.20	ug/l	N	S
N/A	Hexachlorobenzene	< 0.50	ug/l	N	S
N/A	Hexachlorobutadiene	< 0.50	ug/l	N	S
N/A	Hexachlorocyclopentadiene	< 0.50	ug/l	N	S
N/A	Hexachloroethane	< 0.50	ug/l	N	S
N/A	Indeno(1,2,3-c,d)Pyrene	< 0.50	ug/l	N	S
N/A	Ioxynil	< 0.05	ug/l	N	S
N/A	Isophorone	< 0.50	ug/l	N	S
N/A	Isopropylbenzene	< 1.0	ug/l	N	S
N/A	List 1 CT Jan 2016				
N/A	m & p-Xylene	< 1.0	ug/l	N	S
N/A	Malathion	< 0.20	ug/l	N	S
N/A	MCPA	< 0.05	ug/l	N	S
N/A	MCPB	< 0.05	ug/l	N	S
N/A	Mercury (Total)	< 0.50	ug/l	N	S
N/A	Methoxychlor	< 0.20	ug/l	N	S
N/A	Methyl parathion	< 1.0	ug/l	N	S
N/A	Methyl Tert-Butyl Ether	< 1.0	ug/l	N	S
N/A	Mevinphos	< 0.20	ug/l	N	S
N/A	Mineral Oil	< 10	ug/l	N	S
N/A	Naphthalene	< 0.50	ug/l	N	S
N/A	N-Butylbenzene	< 1.0	ug/l	N	S
N/A	Nitrobenzene	< 0.50	ug/l	N	S
N/A	N-Nitrosodimethylamine	< 0.50	ug/l	N	S
N/A	N-Nitrosodi-n-propylamine	< 0.50	ug/l	N	S
N/A	N-Propylbenzene	< 1.0	ug/l	N	S
N/A	o-Xylene	< 1.0	ug/l	Y	S
N/A	Parathion	< 0.20	ug/l	N	S
N/A	Pendimethalin	< 5.0	ug/l	N	S
N/A	Pentachlorophenol	< 0.04	ug/l	N	S
N/A	Permethrin	< 0.50	mg/l	N	S
N/A	Phenanthrene	< 0.50	ug/l	N	S
N/A	Phorate	< 0.20	ug/l	N	S
N/A	Phosalone	< 0.20	ug/l	N	S
N/A	Prometon	< 0.20	ug/l	N	S
N/A	Prometryn	< 0.20	ug/l	N	S
N/A	Propazine	< 0.20	ug/l	N	S
N/A	Propetamphos	< 0.20	ug/l	N	S
N/A	Prothiofos	< 0.20	ug/l	N	S
N/A	Pyrene	< 0.50	ug/l	N	S
N/A	Qunitozene	< 5.0	ug/l	N	S
N/A	Secbumeton	< 0.20	ug/l	N	S
N/A	Sec-Butylbenzene	< 1.0	ug/l	N	S
N/A	Simazine	< 0.20	ug/l	N	S
N/A	Simetryn	< 0.20	ug/l	N	S

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N/A	Styrene	< 1.0	ug/l	N	S
N/A	Sulprofos	< 0.20	ug/l	N	S
N/A	Tecnazene	< 5.0	ug/l	N	S
N/A	Terbutylazine	< 0.20	ug/l	N	S
N/A	Terbutryn	< 0.20	ug/l	N	S
N/A	Tert-Butylbenzene	< 1.0	ug/l	N	S
N/A	Tetrachloroethene	< 1.0	ug/l	N	S
N/A	Tetrachloromethane	< 1.0	ug/l	N	S
N/A	Toluene	< 1.0	ug/l	Y	S
N/A	Total Phenols	< 5.0	ug/l	Y	S
N/A	Trans 1,2-Dichloroethene	< 1.0	ug/l	N	S
N/A	Trans-1,3-Dichloropropene	< 10	ug/l	N	S
N/A	Triallate	< 0.20	ug/l	N	S
N/A	Triazophos	< 0.20	ug/l	N	S
N/A	Tribromomethane	< 1.0	ug/l	N	S
N/A	Tributyl Tin	< 0.050	ug/l	N	S
N/A	Trichloroethene	< 1.0	ug/l	N	S
N/A	Trichlorofluoromethane	< 1.0	ug/l	N	S
N/A	Trichloromethane	< 1.0	ug/l	N	S
N/A	Trichloronate	< 0.20	ug/l	N	S
N/A	Trifluralin	< 0.20	ug/l	N	S
N/A	Triphenyl Tin	< 0.050	ug/l	N	S
N/A	Vinyl Chloride	< 1.0	ug/l	N	S
N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S
N/A	2-Isopropylphenol	<0.006	mg/l	Y	S
N/A	Cresols	<0.006	mg/l	Y	S
N/A	Phenol	<0.002	mg/l	Y	S
N/A	Phenol 5 Speciated				
N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S
N/A	Xylenols	<0.008	mg/l	Y	S

Sample Matrix: Ground Water

Analyst
Comment:

MCQ055123	BH13	22/11/2018	SAM031	Alkalinity, Total	190.00	mg/l	Y	MCQ
			SAM031	Ammonia as N	< 0.11	mg/l	Y	MCQ
			N/A	Arsenic (tot.unfilt)	5.54	ug/l	Y	S
			SAM016	BOD (ATU)	1.21	mg/l	Y	MCQ
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S
			N/A	Calcium (tot.unfilt)	87.1	mg/l	N	S
			SAM031	Chloride as Cl	27.00	mg/l	Y	MCQ
			N/A	Chromium (tot.unfilt)	<3	ug/l	Y	S
			SAM009	COD (Total)	<25	mg/l	Y	MCQ
			SAM005	Electrical Conductivity	729.0	uS/cm	Y	MCQ
			N/A	Iron (tot.unfilt)	0.404	mg/l	N	S
			N/A	Lead (tot.unfilt)	<1	ug/l	Y	S
			N/A	Magnesium (tot.unfilt)	43.3	mg/l	N	S
			N/A	Manganese (tot.unfilt)	1260	ug/l	Y	S
			N/A	Mecoprop (MCP)	<0.04	ug/l	N	S
			N/A	Mercury (tot.unfilt)	<0.02	ug/l	N	S
			N/A	Naphthalene (aq)	<0.01	ug/l	N	S
			N/A	Nickel Total (W)	2.8	ug/l	Y	S

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MCQ055123	BH13	22/11/2018	SAM004	pH	7.51	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	1.33	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	19.7	mg/l	N	S	
			SAM031	Sulphate as SO4	154.00	mg/l	Y	MCQ	
			SAM034	TOC	<1.00	mg/l	Y	MCQ	
			SAM031	TON as N	0.24	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	6.7	ug/l	Y	S	
			N/A	1,1,1,2-Tetrachloroethane	< 2.0	ug/l	N	S	
			N/A	1,1,1-Trichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1,2-Trichloroethane	< 10	ug/l	N	S	
			N/A	1,1-Dichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloropropene	< 1.0	ug/l	N	S	
			N/A	1,2,3-Trichlorobenzene	< 2.0	ug/l	N	S	
			N/A	1,2,3-Trichloropropane	< 50	ug/l	N	S	
			N/A	1,2,4-Trichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2,4-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,2-Dibromo-3-Chloropropane	< 50	ug/l	N	S	
			N/A	1,2-Dibromoethane	< 5.0	ug/l	N	S	
			N/A	1,2-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2-Dichloroethane	< 2.0	ug/l	N	S	
			N/A	1,2-Dichloropropane	< 1.0	ug/l	N	S	
			N/A	1,3,5-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,3-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,3-Dichloropropane	< 2.0	ug/l	N	S	
			N/A	1,4-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	2,3,4,5-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,5-T	< 0.50	ug/l	N	S	
			N/A	2,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-D	< 0.50	ug/l	N	S	
			N/A	2,4-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dimethylphenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2,6-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,6-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2-Chloronaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Chlorophenol	< 0.20	ug/l	N	S	
			N/A	2-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	2-Methyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Methylnaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Methylphenol (o-Cresol)	< 0.20	ug/l	N	S	
			N/A	2-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	2-Nitrophenol	< 0.20	ug/l	N	S	

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MCQ055123	BH13	22/11/2018	N/A	2-Sec-Butyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	3,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	3-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4,4-DDD	< 0.20	ug/l	N	S	
			N/A	4,4-DDE	< 0.20	ug/l	N	S	
			N/A	4,4-DDT	< 0.20	ug/l	N	S	
			N/A	4-Bromophenylphenyl Ether	< 0.50	ug/l	N	S	
			N/A	4-Chloro-3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Chloroaniline	< 0.50	ug/l	N	S	
			N/A	4-Chlorophenylphenylether	< 0.50	ug/l	N	S	
			N/A	4-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	4-Isopropyltoluene	< 1.0	ug/l	N	S	
			N/A	4-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	Acenaphthene	< 0.50	ug/l	N	S	
			N/A	Acenaphthylene	< 0.50	ug/l	N	S	
			N/A	Aldrin	< 0.20	ug/l	N	S	
			N/A	Alpha-Chlordane	< 0.20	ug/l	N	S	
			N/A	Alpha-HCH	< 0.20	ug/l	N	S	
			N/A	Ametryn	< 0.20	ug/l	N	S	
			N/A	Anthracene	< 0.50	ug/l	N	S	
			N/A	Atraton	< 0.20	ug/l	N	S	
			N/A	Atrazine	< 0.20	ug/l	N	S	
			N/A	Azinphos-ethyl	< 0.20	ug/l	N	S	
			N/A	Azinphos-Methyl	< 0.20	ug/l	N	S	
			N/A	Azobenzene	< 0.50	ug/l	N	S	
			N/A	Benzene	< 1.0	ug/l	Y	S	
			N/A	Benzo[a]anthracene	< 0.50	ug/l	N	S	
			N/A	Benzo[a]pyrene	< 0.50	ug/l	N	S	
			N/A	Benzo[b]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Benzo[g,h,i]perylene	< 0.50	ug/l	N	S	
			N/A	Benzo[k]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Beta-HCH	< 0.20	ug/l	N	S	
			N/A	Bis(2-Chloroethoxy)Methane	< 0.50	ug/l	N	S	
			N/A	Bis-(2-Chloroethyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Chloroisopropyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Ethylhexyl)Phthalate	< 0.50	ug/l	N	S	
			N/A	Bromobenzene	< 1.0	ug/l	N	S	
			N/A	Bromochloromethane	< 5.0	ug/l	N	S	
			N/A	Bromodichloromethane	< 5.0	ug/l	N	S	
			N/A	Bromomethane	< 5.0	ug/l	N	S	
			N/A	Bromoxynil	< 0.04	ug/l	N	S	
			N/A	Butylbenzyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Cadmium (Total)	< 0.080	ug/l	N	S	
			N/A	Carbazole	< 0.50	ug/l	N	S	
			N/A	Carbon Tetrachloride	< 10	ug/l	N	S	
			N/A	Carbophenothion	< 0.50	ug/l	N	S	

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MCQ055123	BH13	22/11/2018	N/A	Chlorfenvinphos	< 0.20	ug/l	N	S	
			N/A	Chlorobenzene	< 1.0	ug/l	N	S	
			N/A	Chloroethane	< 2.0	ug/l	N	S	
			N/A	Chloroform	< 10	ug/l	N	S	
			N/A	Chloromethane	< 1.0	ug/l	N	S	
			N/A	Chlorothalonil	< 0.50	ug/l	N	S	
			N/A	Chlorpynifos	< 0.50	ug/l	N	S	
			N/A	Chlorpyrifos-methyl	< 0.20	ug/l	N	S	
			N/A	Chrysene	< 0.50	ug/l	N	S	
			N/A	cis 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	cis-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Coumaphos	< 0.20	ug/l	N	S	
			N/A	Delta-HCH	< 0.20	ug/l	N	S	
			N/A	Demeton-O	< 0.20	ug/l	N	S	
			N/A	Demeton-S	< 0.20	ug/l	N	S	
			N/A	Diazinon	< 0.50	ug/l	N	S	
			N/A	Dibenz(a,h)Anthracene	< 0.50	ug/l	N	S	
			N/A	Dibenzofuran	< 0.50	ug/l	N	S	
			N/A	Dibromochloromethane	< 10	ug/l	N	S	
			N/A	Dibromomethane	< 10	ug/l	N	S	
			N/A	Dibutyl Tin	< 0.050	ug/l	N	S	
			N/A	Dichlorodifluoromethane	< 1.0	ug/l	N	S	
			N/A	Dichlorprop	< 0.1	ug/l	N	S	
			N/A	Dichlorvos	< 0.50	ug/l	N	S	
			N/A	Dieldrin	< 0.20	ug/l	N	S	
			N/A	Diethyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dimethoate	< 0.20	ug/l	N	S	
			N/A	Dimethylphthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Butyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Octyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dinoseb	< 1.0	ug/l	N	S	
			N/A	Disulfoton	< 1.0	ug/l	N	S	
			N/A	Endosulfan I	< 0.20	ug/l	N	S	
			N/A	Endosulfan II	< 0.20	ug/l	N	S	
			N/A	Endosulfan Sulphate	< 0.20	ug/l	N	S	
			N/A	Endrin	< 0.20	ug/l	N	S	
			N/A	Endrin Aldehyde	< 0.20	ug/l	N	S	
			N/A	Endrin Ketone	< 0.20	ug/l	N	S	
			N/A	Ethion	< 0.50	ug/l	N	S	
			N/A	Ethylbenzene	< 1.0	ug/l	Y	S	
			N/A	Etrimphos	< 0.20	ug/l	N	S	
			N/A	Fenitrothion	< 0.20	ug/l	N	S	
			N/A	Fensulphothion	< 0.20	ug/l	N	S	
			N/A	Fenthion	< 0.20	ug/l	N	S	
			N/A	Fluoranthene	< 0.50	ug/l	N	S	
			N/A	Fluorene	< 0.50	ug/l	N	S	
			N/A	Gamma-Chlordane	< 0.20	ug/l	N	S	
			N/A	Gamma-Lindane	< 0.20	ug/l	N	S	
			N/A	Heptachlor	< 0.20	ug/l	N	S	

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MCQ055123	BH13	22/11/2018	N/A	Heptachlor Epoxide	< 0.20	ug/l	N	S	
			N/A	Hexachlorobenzene	< 0.50	ug/l	N	S	
			N/A	Hexachlorobutadiene	< 0.50	ug/l	N	S	
			N/A	Hexachlorocyclopentadiene	< 0.50	ug/l	N	S	
			N/A	Hexachloroethane	< 0.50	ug/l	N	S	
			N/A	Indeno(1,2,3-c,d)Pyrene	< 0.50	ug/l	N	S	
			N/A	Ioxynil	<0.05	ug/l	N	S	
			N/A	Isophorone	< 0.50	ug/l	N	S	
			N/A	Isopropylbenzene	< 1.0	ug/l	N	S	
			N/A	List 1 CT Jan 2016					
			N/A	m & p-Xylene	< 1.0	ug/l	N	S	
			N/A	Malathion	< 0.20	ug/l	N	S	
			N/A	MCPA	<0.05	ug/l	N	S	
			N/A	MCPB	<0.05	ug/l	N	S	
			N/A	Mercury (Total)	< 0.50	ug/l	N	S	
			N/A	Methoxychlor	< 0.20	ug/l	N	S	
			N/A	Methyl parathion	< 1.0	ug/l	N	S	
			N/A	Methyl Tert-Butyl Ether	< 1.0	ug/l	N	S	
			N/A	Mevinphos	< 0.20	ug/l	N	S	
			N/A	Mineral Oil	< 10	ug/l	N	S	
			N/A	Naphthalene	< 0.50	ug/l	N	S	
			N/A	N-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Nitrobenzene	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodimethylamine	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodi-n-propylamine	< 0.50	ug/l	N	S	
			N/A	N-Propylbenzene	< 1.0	ug/l	N	S	
			N/A	o-Xylene	< 1.0	ug/l	Y	S	
			N/A	Parathion	< 0.20	ug/l	N	S	
			N/A	Pendimethalin	< 5.0	ug/l	N	S	
			N/A	Pentachlorophenol	<0.04	ug/l	N	S	
			N/A	Permethrin	< 0.50	mg/l	N	S	
			N/A	Phenanthrene	< 0.50	ug/l	N	S	
			N/A	Phorate	< 0.20	ug/l	N	S	
			N/A	Phosalone	< 0.20	ug/l	N	S	
			N/A	Prometon	< 0.20	ug/l	N	S	
			N/A	Prometryn	< 0.20	ug/l	N	S	
			N/A	Propazine	< 0.20	ug/l	N	S	
			N/A	Propetamphos	< 0.20	ug/l	N	S	
			N/A	Prothiofos	< 0.20	ug/l	N	S	
			N/A	Pyrene	< 0.50	ug/l	N	S	
			N/A	Qunitozene	< 5.0	ug/l	N	S	
			N/A	Sebumeon	< 0.20	ug/l	N	S	
			N/A	Sec-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Simazine	< 0.20	ug/l	N	S	
			N/A	Simetryn	< 0.20	ug/l	N	S	
			N/A	Styrene	< 1.0	ug/l	N	S	
			N/A	Sulprofos	< 0.20	ug/l	N	S	
			N/A	Tecnazene	< 5.0	ug/l	N	S	
			N/A	Terbutylazine	< 0.20	ug/l	N	S	

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MCQ055123	BH13	22/11/2018	N/A	Terbutryn	< 0.20	ug/l	N	S	
			N/A	Tert-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Tetrachloroethene	< 1.0	ug/l	N	S	
			N/A	Tetrachloromethane	< 1.0	ug/l	N	S	
			N/A	Toluene	< 1.0	ug/l	Y	S	
			N/A	Total Phenols	< 5.0	ug/l	Y	S	
			N/A	Trans 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	Trans-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Triallate	< 0.20	ug/l	N	S	
			N/A	Triazophos	< 0.20	ug/l	N	S	
			N/A	Tribromomethane	< 1.0	ug/l	N	S	
			N/A	Tributyl Tin	< 0.050	ug/l	N	S	
			N/A	Trichloroethene	< 1.0	ug/l	N	S	
			N/A	Trichlorofluoromethane	< 1.0	ug/l	N	S	
			N/A	Trichloromethane	< 1.0	ug/l	N	S	
			N/A	Trichloronate	< 0.20	ug/l	N	S	
			N/A	Trifluralin	< 0.20	ug/l	N	S	
			N/A	Triphenyl Tin	< 0.050	ug/l	N	S	
			N/A	Vinyl Chloride	< 1.0	ug/l	N	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Ground Water

Analyst
Comment:

MCQ055124	Treated Leachate	22/11/2018	SAM031	Alkalinity, Total	232.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	1.13	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	24.3	ug/l	Y	S	
			SAM016	BOD (ATU)	1.65	mg/l	Y	MCQ	
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	94.5	mg/l	N	S	
			SAM031	Chloride as Cl	1,150.00	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	192	ug/l	Y	S	
			SAM009	COD (Total)	972	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	11,400.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	8.53	mg/l	N	S	
			N/A	Lead (tot.unfilt)	4.43	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	54	mg/l	N	S	
			N/A	Manganese (tot.unfilt)	167	ug/l	Y	S	
			N/A	Mecoprop (MCP)	<0.04	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	0.0381	ug/l	N	S	

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MCQ055124	Treated Leachate	22/11/2018	N/A	Naphthalene (aq)	0.0253	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	128	ug/l	Y	S	
			SAM004	pH	6.77	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	498	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	1800	mg/l	N	S	
			SAM031	Sulphate as SO4	109.00	mg/l	Y	MCQ	
			SAM001	Suspended Solids	18.00	mg/l	Y	MCQ	
			SAM034	TOC	369.00	mg/l	Y	MCQ	
			SAM031	TON as N	2.35	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	293	ug/l	Y	S	
			N/A	1,1,1,2-Tetrachloroethane	< 2.0	ug/l	N	S	
			N/A	1,1,1-Trichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1,2-Trichloroethane	< 10	ug/l	N	S	
			N/A	1,1-Dichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloropropene	< 1.0	ug/l	N	S	
			N/A	1,2,3-Trichlorobenzene	< 2.0	ug/l	N	S	
			N/A	1,2,3-Trichloropropane	< 50	ug/l	N	S	
			N/A	1,2,4-Trichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2,4-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,2-Dibromo-3-Chloropropane	< 50	ug/l	N	S	
			N/A	1,2-Dibromoethane	< 5.0	ug/l	N	S	
			N/A	1,2-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2-Dichloroethane	< 2.0	ug/l	N	S	
			N/A	1,2-Dichloropropane	< 1.0	ug/l	N	S	
			N/A	1,3,5-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,3-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,3-Dichloropropane	< 2.0	ug/l	N	S	
			N/A	1,4-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	2,3,4,5-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,5-T	< 0.50	ug/l	N	S	
			N/A	2,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-D	< 0.50	ug/l	N	S	
			N/A	2,4-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dimethylphenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2,6-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,6-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2-Chloronaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Chlorophenol	< 0.20	ug/l	N	S	
			N/A	2-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	2-Methyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Methylnaphthalene	< 0.50	ug/l	N	S	

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MCQ055124	Treated Leachate	22/11/2018	N/A	2-Methylphenol (o-Cresol)	< 0.20	ug/l	N	S	
			N/A	2-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	2-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Sec-Butyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	3,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	3-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4,4-DDD	< 0.20	ug/l	N	S	
			N/A	4,4-DDE	< 0.20	ug/l	N	S	
			N/A	4,4-DDT	< 0.20	ug/l	N	S	
			N/A	4-Bromophenylphenyl Ether	< 0.50	ug/l	N	S	
			N/A	4-Chloro-3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Chloroaniline	< 0.50	ug/l	N	S	
			N/A	4-Chlorophenylphenylether	< 0.50	ug/l	N	S	
			N/A	4-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	4-Isopropyltoluene	< 1.0	ug/l	N	S	
			N/A	4-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	Acenaphthene	< 0.50	ug/l	N	S	
			N/A	Acenaphthylene	< 0.50	ug/l	N	S	
			N/A	Aldrin	< 0.20	ug/l	N	S	
			N/A	Alpha-Chlordane	< 0.20	ug/l	N	S	
			N/A	Alpha-HCH	< 0.20	ug/l	N	S	
			N/A	Ametryn	< 0.20	ug/l	N	S	
			N/A	Anthracene	< 0.50	ug/l	N	S	
			N/A	Atraton	< 0.20	ug/l	N	S	
			N/A	Atrazine	< 0.20	ug/l	N	S	
			N/A	Azinphos-ethyl	< 0.20	ug/l	N	S	
			N/A	Azinphos-Methyl	< 0.20	ug/l	N	S	
			N/A	Azobenzene	< 0.50	ug/l	N	S	
			N/A	Benzene	< 1.0	ug/l	Y	S	
			N/A	Benzo[a]anthracene	< 0.50	ug/l	N	S	
			N/A	Benzo[a]pyrene	< 0.50	ug/l	N	S	
			N/A	Benzo[b]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Benzo[g,h,i]perylene	< 0.50	ug/l	N	S	
			N/A	Benzo[k]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Beta-HCH	< 0.20	ug/l	N	S	
			N/A	Bis(2-Chloroethoxy)Methane	< 0.50	ug/l	N	S	
			N/A	Bis-(2-Chloroethyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Chloroisopropyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Ethylhexyl)Phthalate	< 0.50	ug/l	N	S	
			N/A	Bromobenzene	< 1.0	ug/l	N	S	
			N/A	Bromochloromethane	< 5.0	ug/l	N	S	
			N/A	Bromodichloromethane	< 5.0	ug/l	N	S	
			N/A	Bromomethane	< 5.0	ug/l	N	S	
			N/A	Bromoxynil	<0.04	ug/l	N	S	
			N/A	Butylbenzyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Cadmium (Total)	< 0.080	ug/l	N	S	

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MCQ055124	Treated Leachate	22/11/2018	N/A	Carbazole	< 0.50	ug/l	N	S	
			N/A	Carbon Tetrachloride	< 10	ug/l	N	S	
			N/A	Carbophenothion	< 0.50	ug/l	N	S	
			N/A	Chlorfenvinphos	< 0.20	ug/l	N	S	
			N/A	Chlorobenzene	< 1.0	ug/l	N	S	
			N/A	Chloroethane	< 2.0	ug/l	N	S	
			N/A	Chloroform	10	ug/l	N	S	
			N/A	Chloromethane	< 1.0	ug/l	N	S	
			N/A	Chlorothalonil	< 0.50	ug/l	N	S	
			N/A	Chlorpynifos	< 0.50	ug/l	N	S	
			N/A	Chlorpyrifos-methyl	< 0.20	ug/l	N	S	
			N/A	Chrysene	< 0.50	ug/l	N	S	
			N/A	cis 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	cis-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Coumaphos	< 0.20	ug/l	N	S	
			N/A	Delta-HCH	< 0.20	ug/l	N	S	
			N/A	Demeton-O	< 0.20	ug/l	N	S	
			N/A	Demeton-S	< 0.20	ug/l	N	S	
			N/A	Diazinon	< 0.50	ug/l	N	S	
			N/A	Dibenz(a,h)Anthracene	< 0.50	ug/l	N	S	
			N/A	Dibenzofuran	< 0.50	ug/l	N	S	
			N/A	Dibromochloromethane	< 10	ug/l	N	S	
			N/A	Dibromomethane	< 10	ug/l	N	S	
			N/A	Dibutyl Tin	< 0.050	ug/l	N	S	
			N/A	Dichlorodifluoromethane	< 1.0	ug/l	N	S	
			N/A	Dichlorprop	< 0.1	ug/l	N	S	
			N/A	Dichlorvos	< 0.50	ug/l	N	S	
			N/A	Dieldrin	< 0.20	ug/l	N	S	
			N/A	Diethyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dimethoate	< 0.20	ug/l	N	S	
			N/A	Dimethylphthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Butyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Octyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dinoseb	< 1.0	ug/l	N	S	
			N/A	Disulfoton	< 1.0	ug/l	N	S	
			N/A	Endosulfan I	< 0.20	ug/l	N	S	
			N/A	Endosulfan II	< 0.20	ug/l	N	S	
			N/A	Endosulfan Sulphate	< 0.20	ug/l	N	S	
			N/A	Endrin	< 0.20	ug/l	N	S	
			N/A	Endrin Aldehyde	< 0.20	ug/l	N	S	
			N/A	Endrin Ketone	< 0.20	ug/l	N	S	
			N/A	Ethion	< 0.50	ug/l	N	S	
			N/A	Ethylbenzene	< 1.0	ug/l	Y	S	
			N/A	Etrimphos	< 0.20	ug/l	N	S	
			N/A	Fenitrothion	< 0.20	ug/l	N	S	
			N/A	Fensulphothion	< 0.20	ug/l	N	S	
			N/A	Fenthion	< 0.20	ug/l	N	S	
			N/A	Fluoranthene	< 0.50	ug/l	N	S	
			N/A	Fluorene	< 0.50	ug/l	N	S	

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MCQ055124	Treated Leachate	22/11/2018	N/A	Gamma-Chlordane	< 0.20	ug/l	N	S	
			N/A	Gamma-Lindane	< 0.20	ug/l	N	S	
			N/A	Heptachlor	< 0.20	ug/l	N	S	
			N/A	Heptachlor Epoxide	< 0.20	ug/l	N	S	
			N/A	Hexachlorobenzene	< 0.50	ug/l	N	S	
			N/A	Hexachlorobutadiene	< 0.50	ug/l	N	S	
			N/A	Hexachlorocyclopentadiene	< 0.50	ug/l	N	S	
			N/A	Hexachloroethane	< 0.50	ug/l	N	S	
			N/A	Indeno(1,2,3-c,d)Pyrene	< 0.50	ug/l	N	S	
			N/A	Ioxynil	<0.05	ug/l	N	S	
			N/A	Isophorone	< 0.50	ug/l	N	S	
			N/A	Isopropylbenzene	< 1.0	ug/l	N	S	
			N/A	List 1 CT Jan 2016					
			N/A	m & p-Xylene	< 1.0	ug/l	N	S	
			N/A	Malathion	< 0.20	ug/l	N	S	
			N/A	MCPA	<0.05	ug/l	N	S	
			N/A	MCPB	<0.05	ug/l	N	S	
			N/A	Mercury (Total)	4	ug/l	N	S	
			N/A	Methoxychlor	< 0.20	ug/l	N	S	
			N/A	Methyl parathion	< 1.0	ug/l	N	S	
			N/A	Methyl Tert-Butyl Ether	< 1.0	ug/l	N	S	
			N/A	Mevinphos	< 0.20	ug/l	N	S	
			N/A	Mineral Oil	< 10	ug/l	N	S	
			N/A	Naphthalene	< 0.50	ug/l	N	S	
			N/A	N-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Nitrobenzene	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodimethylamine	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodi-n-propylamine	< 0.50	ug/l	N	S	
			N/A	N-Propylbenzene	< 1.0	ug/l	N	S	
			N/A	o-Xylene	< 1.0	ug/l	Y	S	
			N/A	Parathion	< 0.20	ug/l	N	S	
			N/A	Pendimethalin	< 5.0	ug/l	N	S	
			N/A	Pentachlorophenol	<0.04	ug/l	N	S	
			N/A	Permethrin	< 0.50	mg/l	N	S	
			N/A	Phenanthrene	< 0.50	ug/l	N	S	
			N/A	Phorate	< 0.20	ug/l	N	S	
			N/A	Phosalone	< 0.20	ug/l	N	S	
			N/A	Prometon	< 0.20	ug/l	N	S	
			N/A	Prometryn	< 0.20	ug/l	N	S	
			N/A	Propazine	< 0.20	ug/l	N	S	
			N/A	Propetamphos	< 0.20	ug/l	N	S	
			N/A	Prothiofos	< 0.20	ug/l	N	S	
			N/A	Pyrene	< 0.50	ug/l	N	S	
			N/A	Qunitozene	< 5.0	ug/l	N	S	
			N/A	Secbumeton	< 0.20	ug/l	N	S	
			N/A	Sec-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Simazine	< 0.20	ug/l	N	S	
			N/A	Simetryn	< 0.20	ug/l	N	S	
			N/A	Styrene	< 1.0	ug/l	N	S	

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MCQ055124	Treated Leachate	22/11/2018	N/A	Sulprofos	< 0.20	ug/l	N	S	
			N/A	Tecnazene	< 5.0	ug/l	N	S	
			N/A	Terbutylazine	< 0.20	ug/l	N	S	
			N/A	Terbutryn	< 0.20	ug/l	N	S	
			N/A	Tert-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Tetrachloroethene	< 1.0	ug/l	N	S	
			N/A	Tetrachloromethane	< 1.0	ug/l	N	S	
			N/A	Toluene	< 1.0	ug/l	Y	S	
			N/A	Total Phenols	< 5.0	ug/l	Y	S	
			N/A	Trans 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	Trans-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Triallate	< 0.20	ug/l	N	S	
			N/A	Triazophos	< 0.20	ug/l	N	S	
			N/A	Tribromomethane	< 1.0	ug/l	N	S	
			N/A	Tributyl Tin	< 0.050	ug/l	N	S	
			N/A	Trichloroethene	< 1.0	ug/l	N	S	
			N/A	Trichlorofluoromethane	< 1.0	ug/l	N	S	
			N/A	Trichloromethane	10	ug/l	N	S	
			N/A	Trichloronate	< 0.20	ug/l	N	S	
			N/A	Trifluralin	< 0.20	ug/l	N	S	
			N/A	Triphenyl Tin	< 0.050	ug/l	N	S	
			N/A	Vinyl Chloride	< 1.0	ug/l	N	S	
			N/A	2,3,5-Trimethylphenol	<0.003	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.006	mg/l	Y	S	
			N/A	Cresols	<0.006	mg/l	Y	S	
			N/A	Phenol	<0.002	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.008	mg/l	Y	S	

Sample Matrix: Landfill Leachate

Analyst
Comment:

MCQ055125	Raw Leachate	22/11/2018	SAM031	Alkalinity, Total	5,380.00	mg/l	Y	MCQ	
			SAM031	Ammonia as N	9.07	mg/l	Y	MCQ	
			N/A	Arsenic (tot.unfilt)	28.3	ug/l	Y	S	
			SAM016	BOD (ATU)	54.20	mg/l	Y	MCQ	#
			N/A	Cadmium Total (W)	<0.5	ug/l	Y	S	
			N/A	Calcium (tot.unfilt)	112	mg/l	N	S	
			SAM031	Chloride as Cl	1,160.00	mg/l	Y	MCQ	
			N/A	Chromium (tot.unfilt)	159	ug/l	Y	S	
			SAM009	COD (Total)	1,360	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	13,100.0	uS/cm	Y	MCQ	
			N/A	Iron (tot.unfilt)	7.31	mg/l	N	S	
			N/A	Lead (tot.unfilt)	2.25	ug/l	Y	S	
			N/A	Magnesium (tot.unfilt)	60.4	mg/l	N	S	

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MCQ055125	Raw Leachate	22/11/2018	N/A	Manganese (tot.unfilt)	943	ug/l	Y	S	
			N/A	Mecoprop (MCP)	38	ug/l	N	S	
			N/A	Mercury (tot.unfilt)	0.0303	ug/l	N	S	
			N/A	Naphthalene (aq)	0.0666	ug/l	N	S	
			N/A	Nickel (tot.unfilt)	115	ug/l	Y	S	
			SAM004	pH	7.51	Units	Y	MCQ	
			N/A	Potassium (tot.unfilt)	470	mg/l	N	S	
			N/A	Sodium (tot.unfilt)	1030	mg/l	N	S	
			SAM031	Sulphate as SO4	<25.00	mg/l	Y	MCQ	
			SAM001	Suspended Solids	12.00	mg/l	Y	MCQ	
			SAM034	TOC	454.00	mg/l	Y	MCQ	
			SAM031	TON as N	< 0.08	mg/l	Y	MCQ	
			N/A	Zinc (tot.unfilt)	82.3	ug/l	Y	S	
			N/A	1,1,1,2-Tetrachloroethane	< 2.0	ug/l	N	S	
			N/A	1,1,1-Trichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1,2-Trichloroethane	< 10	ug/l	N	S	
			N/A	1,1-Dichloroethane	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	1,1-Dichloropropene	< 1.0	ug/l	N	S	
			N/A	1,2,3-Trichlorobenzene	< 2.0	ug/l	N	S	
			N/A	1,2,3-Trichloropropane	< 50	ug/l	N	S	
			N/A	1,2,4-Trichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2,4-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,2-Dibromo-3-Chloropropane	< 50	ug/l	N	S	
			N/A	1,2-Dibromoethane	< 5.0	ug/l	N	S	
			N/A	1,2-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,2-Dichloroethane	< 2.0	ug/l	N	S	
			N/A	1,2-Dichloropropane	< 1.0	ug/l	N	S	
			N/A	1,3,5-Trimethylbenzene	< 1.0	ug/l	N	S	
			N/A	1,3-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	1,3-Dichloropropane	< 2.0	ug/l	N	S	
			N/A	1,4-Dichlorobenzene	< 0.50	ug/l	N	S	
			N/A	2,3,4,5-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,4-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5,6-Tetrachlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,3,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,5-T	< 0.50	ug/l	N	S	
			N/A	2,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4,6-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-D	< 0.50	ug/l	N	S	
			N/A	2,4-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dimethylphenol	< 0.20	ug/l	N	S	
			N/A	2,4-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2,6-Dichlorophenol	< 0.20	ug/l	N	S	
			N/A	2,6-Dinitrotoluene	< 0.50	ug/l	N	S	
			N/A	2-Chloronaphthalene	< 0.50	ug/l	N	S	
			N/A	2-Chlorophenol	< 0.20	ug/l	N	S	

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

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Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ055125	Raw Leachate	22/11/2018	N/A	2-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	2-Methyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Methylnaphthalene	6	ug/l	N	S	
			N/A	2-Methylphenol (o-Cresol)	< 0.20	ug/l	N	S	
			N/A	2-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	2-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	2-Sec-Butyl-4,6-Dinitrophenol	< 0.20	ug/l	N	S	
			N/A	3,4,5-Trichlorophenol	< 0.20	ug/l	N	S	
			N/A	3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	3-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4,4-DDD	< 0.20	ug/l	N	S	
			N/A	4,4-DDE	< 0.20	ug/l	N	S	
			N/A	4,4-DDT	< 0.20	ug/l	N	S	
			N/A	4-Bromophenylphenyl Ether	< 0.50	ug/l	N	S	
			N/A	4-Chloro-3-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Chloroaniline	< 0.50	ug/l	N	S	
			N/A	4-Chlorophenylphenylether	< 0.50	ug/l	N	S	
			N/A	4-Chlorotoluene	< 1.0	ug/l	N	S	
			N/A	4-Isopropyltoluene	< 1.0	ug/l	N	S	
			N/A	4-Methylphenol	< 0.20	ug/l	N	S	
			N/A	4-Nitroaniline	< 0.50	ug/l	N	S	
			N/A	4-Nitrophenol	< 0.20	ug/l	N	S	
			N/A	Acenaphthene	< 0.50	ug/l	N	S	
			N/A	Acenaphthylene	< 0.50	ug/l	N	S	
			N/A	Aldrin	< 0.20	ug/l	N	S	
			N/A	Alpha-Chlordane	< 0.20	ug/l	N	S	
			N/A	Alpha-HCH	< 0.20	ug/l	N	S	
			N/A	Ametryn	< 0.20	ug/l	N	S	
			N/A	Anthracene	< 0.50	ug/l	N	S	
			N/A	Atraton	< 0.20	ug/l	N	S	
			N/A	Atrazine	< 0.20	ug/l	N	S	
			N/A	Azinphos-ethyl	< 0.20	ug/l	N	S	
			N/A	Azinphos-Methyl	< 0.20	ug/l	N	S	
			N/A	Azobenzene	< 0.50	ug/l	N	S	
			N/A	Benzene	1.1	ug/l	Y	S	
			N/A	Benzo[a]anthracene	< 0.50	ug/l	N	S	
			N/A	Benzo[a]pyrene	< 0.50	ug/l	N	S	
			N/A	Benzo[b]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Benzo[g,h,i]perylene	< 0.50	ug/l	N	S	
			N/A	Benzo[k]fluoranthene	< 0.50	ug/l	N	S	
			N/A	Beta-HCH	< 0.20	ug/l	N	S	
			N/A	Bis(2-Chloroethoxy)Methane	< 0.50	ug/l	N	S	
			N/A	Bis-(2-Chloroethyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Chloroisopropyl)Ether	< 0.50	ug/l	N	S	
			N/A	Bis(2-Ethylhexyl)Phthalate	< 0.50	ug/l	N	S	
			N/A	Bromobenzene	< 1.0	ug/l	N	S	
			N/A	Bromochloromethane	< 5.0	ug/l	N	S	
			N/A	Bromodichloromethane	< 5.0	ug/l	N	S	
			N/A	Bromomethane	< 5.0	ug/l	N	S	

McQuillan Envirocare Ltd

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ055125	Raw Leachate	22/11/2018	N/A	Bromoxynil	<0.04	ug/l	N	S	
			N/A	Butylbenzyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Cadmium (Total)	< 0.080	ug/l	N	S	
			N/A	Carbazole	< 0.50	ug/l	N	S	
			N/A	Carbon Tetrachloride	< 10	ug/l	N	S	
			N/A	Carbophenothion	< 0.50	ug/l	N	S	
			N/A	Chlorfenvinphos	< 0.20	ug/l	N	S	
			N/A	Chlorobenzene	< 1.0	ug/l	N	S	
			N/A	Chloroethane	< 2.0	ug/l	N	S	
			N/A	Chloroform	< 10	ug/l	N	S	
			N/A	Chloromethane	< 1.0	ug/l	N	S	
			N/A	Chloroethalonil	< 0.50	ug/l	N	S	
			N/A	Chlorpyrifos	< 0.50	ug/l	N	S	
			N/A	Chlorpyrifos-methyl	< 0.20	ug/l	N	S	
			N/A	Chrysene	< 0.50	ug/l	N	S	
			N/A	cis 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	cis-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Coumaphos	< 0.20	ug/l	N	S	
			N/A	Delta-HCH	< 0.20	ug/l	N	S	
			N/A	Demeton-O	< 0.20	ug/l	N	S	
			N/A	Demeton-S	< 0.20	ug/l	N	S	
			N/A	Diazinon	< 0.50	ug/l	N	S	
			N/A	Dibenz(a,h)Anthracene	< 0.50	ug/l	N	S	
			N/A	Dibenzofuran	< 0.50	ug/l	N	S	
			N/A	Dibromochloromethane	< 10	ug/l	N	S	
			N/A	Dibromomethane	< 10	ug/l	N	S	
			N/A	Dibutyl Tin	< 0.050	ug/l	N	S	
			N/A	Dichlorodifluoromethane	< 1.0	ug/l	N	S	
			N/A	Dichlorprop	<0.1	ug/l	N	S	
			N/A	Dichlorvos	< 0.50	ug/l	N	S	
			N/A	Dieldrin	< 0.20	ug/l	N	S	
			N/A	Diethyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dimethoate	< 0.20	ug/l	N	S	
			N/A	Dimethylphthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Butyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Di-N-Octyl Phthalate	< 0.50	ug/l	N	S	
			N/A	Dinoseb	< 1.0	ug/l	N	S	
			N/A	Disulfoton	< 1.0	ug/l	N	S	
			N/A	Endosulfan I	< 0.20	ug/l	N	S	
			N/A	Endosulfan II	< 0.20	ug/l	N	S	
			N/A	Endosulfan Sulphate	< 0.20	ug/l	N	S	
			N/A	Endrin	< 0.20	ug/l	N	S	
			N/A	Endrin Aldehyde	< 0.20	ug/l	N	S	
			N/A	Endrin Ketone	< 0.20	ug/l	N	S	
			N/A	Ethion	< 0.50	ug/l	N	S	
			N/A	Ethylbenzene	< 1.0	ug/l	Y	S	
			N/A	Etrimphos	< 0.20	ug/l	N	S	
			N/A	Fenitrothion	< 0.20	ug/l	N	S	
			N/A	Fensulphothion	< 0.20	ug/l	N	S	

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MCQ055125	Raw Leachate	22/11/2018	N/A	Fenthion	< 0.20	ug/l	N	S	
			N/A	Fluoranthene	< 0.50	ug/l	N	S	
			N/A	Fluorene	1	ug/l	N	S	
			N/A	Gamma-Chlordane	< 0.20	ug/l	N	S	
			N/A	Gamma-Lindane	< 0.20	ug/l	N	S	
			N/A	Heptachlor	< 0.20	ug/l	N	S	
			N/A	Heptachlor Epoxide	< 0.20	ug/l	N	S	
			N/A	Hexachlorobenzene	< 0.50	ug/l	N	S	
			N/A	Hexachlorobutadiene	< 0.50	ug/l	N	S	
			N/A	Hexachlorocyclopentadiene	< 0.50	ug/l	N	S	
			N/A	Hexachloroethane	< 0.50	ug/l	N	S	
			N/A	Indeno(1,2,3-c,d)Pyrene	< 0.50	ug/l	N	S	
			N/A	Ioxynil	<0.05	ug/l	N	S	
			N/A	Isophorone	< 0.50	ug/l	N	S	
			N/A	Isopropylbenzene	< 1.0	ug/l	N	S	
			N/A	List 1 CT Jan 2016					
			N/A	m & p-Xylene	< 1.0	ug/l	N	S	
			N/A	Malathion	< 0.20	ug/l	N	S	
			N/A	MCPA	<0.05	ug/l	N	S	
			N/A	MCPB	<0.05	ug/l	N	S	
			N/A	Mercury (Total)	1.9	ug/l	N	S	
			N/A	Methoxychlor	< 0.20	ug/l	N	S	
			N/A	Methyl parathion	< 1.0	ug/l	N	S	
			N/A	Methyl Tert-Butyl Ether	< 1.0	ug/l	N	S	
			N/A	Mevinphos	< 0.20	ug/l	N	S	
			N/A	Mineral Oil	400	ug/l	N	S	
			N/A	Naphthalene	5.8	ug/l	N	S	
			N/A	N-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Nitrobenzene	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodimethylamine	< 0.50	ug/l	N	S	
			N/A	N-Nitrosodi-n-propylamine	< 0.50	ug/l	N	S	
			N/A	N-Propylbenzene	< 1.0	ug/l	N	S	
			N/A	o-Xylene	3.2	ug/l	Y	S	
			N/A	Parathion	< 0.20	ug/l	N	S	
			N/A	Pendimethalin	< 5.0	ug/l	N	S	
			N/A	Pentachlorophenol	<0.04	ug/l	N	S	
			N/A	Permethrin	< 0.50	mg/l	N	S	
			N/A	Phenanthrene	< 0.50	ug/l	N	S	
			N/A	Phorate	< 0.20	ug/l	N	S	
			N/A	Phosalone	< 0.20	ug/l	N	S	
			N/A	Prometon	< 0.20	ug/l	N	S	
			N/A	Prometryn	< 0.20	ug/l	N	S	
			N/A	Propazine	< 0.20	ug/l	N	S	
			N/A	Propetamphos	< 0.20	ug/l	N	S	
			N/A	Prothiofos	< 0.20	ug/l	N	S	
			N/A	Pyrene	< 0.50	ug/l	N	S	
			N/A	Qunitozene	< 5.0	ug/l	N	S	
			N/A	Secbumeton	< 0.20	ug/l	N	S	
			N/A	Sec-Butylbenzene	< 1.0	ug/l	N	S	

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Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ055125	Raw Leachate	22/11/2018	N/A	Simazine	< 0.20	ug/l	N	S	
			N/A	Simetryn	< 0.20	ug/l	N	S	
			N/A	Styrene	< 1.0	ug/l	N	S	
			N/A	Sulprofos	< 0.20	ug/l	N	S	
			N/A	Tecnazene	< 5.0	ug/l	N	S	
			N/A	Terbutylazine	< 0.20	ug/l	N	S	
			N/A	Terbutryn	< 0.20	ug/l	N	S	
			N/A	Tert-Butylbenzene	< 1.0	ug/l	N	S	
			N/A	Tetrachloroethene	< 1.0	ug/l	N	S	
			N/A	Tetrachloromethane	< 1.0	ug/l	N	S	
			N/A	Toluene	< 1.0	ug/l	Y	S	
			N/A	Total Phenols	< 5.0	ug/l	Y	S	
			N/A	Trans 1,2-Dichloroethene	< 1.0	ug/l	N	S	
			N/A	Trans-1,3-Dichloropropene	< 10	ug/l	N	S	
			N/A	Triallate	< 0.20	ug/l	N	S	
			N/A	Triazophos	< 0.20	ug/l	N	S	
			N/A	Tribromomethane	< 1.0	ug/l	N	S	
			N/A	Tributyl Tin	< 0.050	ug/l	N	S	
			N/A	Trichloroethene	< 1.0	ug/l	N	S	
			N/A	Trichlorofluoromethane	< 1.0	ug/l	N	S	
			N/A	Trichloromethane	< 1.0	ug/l	N	S	
			N/A	Trichloronate	< 0.20	ug/l	N	S	
			N/A	Trifluralin	< 0.20	ug/l	N	S	
			N/A	Triphenyl Tin	< 0.050	ug/l	N	S	
			N/A	Vinyl Chloride	< 1.0	ug/l	N	S	
			N/A	2,3,5-Trimethylphenol	<0.03	mg/l	Y	S	
			N/A	2-Isopropylphenol	<0.06	mg/l	Y	S	
			N/A	Cresols	<0.06	mg/l	Y	S	
			N/A	Phenol	<0.02	mg/l	Y	S	
			N/A	Phenol 5 Speciated					
			N/A	Phenols, Total Detected 5 speciated	<0.025	mg/l	N	S	
			N/A	Xylenols	<0.08	mg/l	Y	S	

Sample Matrix: Landfill Leachate

Analyst
Comment:

Sample Deviations Legend			
Results may be compromised if the following deviations apply			
Comment	C	Incorrect Container	‡
Container with Headspace provided	8	Insufficient sample volume	È
BOD Overdiluted, therefore result indicative only	\$	BOD Underdiluted, therefore result indicative only	#
High Chloride concentration, COD could not be determined	§	Holding time exceeded due to sampled on date	@
Holding time exceeded in Lab	±	Holding time exceeded due to delayed instructions	&

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC014890

Issue No: 1

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MCQ Job No	ORD-16324
Sample Receipt Date	13/12/2018
Date Analysis Started	14/12/2018
Completion Date	14/01/2019
Turnaround Time	10
No of Samples	15
Purchase Order Number	Lisbane Monthly
McQuillan Quote Number	ECA-02439

Dear [REDACTED]

Analysis of your sample(s) is now complete and we have pleasure in enclosing the appropriate test report.

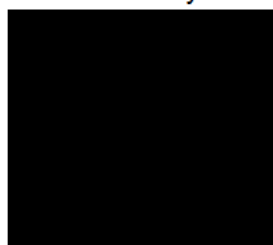
All analysis was completed within McQuillan Envirocare Analytical Laboratory (MCQ) unless otherwise specified. Any analysis that was subcontracted to a McQuillan Companies Approved Laboratory is indicated by 'S'. Please refer to the table at the end of your test certificate for explanations of sample deviations.

Results relate only to the items tested. This Test Certificate supersedes any version previously issued by the laboratory. It cannot be reproduced except in full and without written approval from McQuillan Envirocare Ltd.

Should you have any queries regarding this report(s) or any part of our service, please contact Sales on +44(0)28 9446 6708 who will be happy to discuss your requirements.

Thank you for using McQuillan Companies Analytical Services and we look forward to receiving your next samples.

Yours Sincerely



Name: [REDACTED]

Date: 14/1/2019

Title: Lab Administrator

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC014890

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ055857	BH1	11/12/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S	C	
			N/A	Chloride	11.5	mg/l	Y	S		
			SAM009	COD (Total)	<25	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	532.0	uS/cm	Y	MCQ		
			SAM004	pH	7.57	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	BH2	11/12/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S		
			N/A	Chloride	34.1	mg/l	Y	S		
			SAM009	COD (Total)	<25	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	790.0	uS/cm	Y	MCQ		
SAM004			pH	7.51	Units	Y	MCQ			
Sample Matrix: Ground Water		Analyst Comment:								
MCQ055859	BH4	11/12/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S		
			N/A	Chloride	21.5	mg/l	Y	S		
			SAM009	COD (Total)	<25	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	1,150.0	uS/cm	Y	MCQ		
			SAM004	pH	7.14	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ055860	BH5	11/12/2018	N/A	Ammoniacal Nitrogen as N	0.291	mg/l	Y	S		
			N/A	Chloride	21.2	mg/l	Y	S		
			SAM009	COD (Total)	<25	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	714.0	uS/cm	Y	MCQ		
			SAM004	pH	7.34	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ055861	BH6	11/12/2018	N/A	Ammoniacal Nitrogen as N	1.09	mg/l	Y	S		
			N/A	Chloride	29.9	mg/l	Y	S		
			SAM009	COD (Total)	6,290	mg/l	Y	MCQ		
			SAM009	COD Settled	51.00	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	983.0	uS/cm	Y	MCQ		
			SAM004	pH	7.30	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:		COD - result compromised due to high suspended solid content						

Test Certificate

Certificate: ECTC014890

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations	
MCQ055862	BH6A	11/12/2018	N/A	Ammoniacal Nitrogen as N	0.344	mg/l	Y	S		
			N/A	Chloride	29.6	mg/l	Y	S		
			SAM009	COD (Total)	<25	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	954.0	uS/cm	Y	MCQ		
			SAM004	pH	7.03	Units	Y	MCQ		
	Sample Matrix: Ground Water		Analyst Comment:							
	BH8	11/12/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S		
			N/A	Chloride	11.4	mg/l	Y	S		
			SAM009	COD (Total)	<25	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	1,050.0	uS/cm	Y	MCQ		
SAM004			pH	7.26	Units	Y	MCQ			
Sample Matrix: Ground Water		Analyst Comment:								
MCQ055864	BH9	11/12/2018	N/A	Ammoniacal Nitrogen as N	0.618	mg/l	Y	S		
			N/A	Chloride	66.5	mg/l	Y	S		
			SAM009	COD (Total)	46	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	1,670.0	uS/cm	Y	MCQ		
			SAM004	pH	6.89	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ055865	BH13	11/12/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S		
			N/A	Chloride	27.9	mg/l	Y	S		
			SAM009	COD (Total)	<25	mg/l	Y	MCQ		
			SAM005	Electrical Conductivity	727.0	uS/cm	Y	MCQ		
			SAM004	pH	7.62	Units	Y	MCQ		
Sample Matrix: Ground Water		Analyst Comment:								
MCQ055866	SW1	11/12/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S	@	
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ		
			N/A	Chloride	25.9	mg/l	Y	S		
			SAM005	Electrical Conductivity	755.0	uS/cm	Y	MCQ		
			SAM004	pH	7.46	Units	Y	MCQ		
			SAM001	Suspended Solids	<3.00	mg/l	Y	MCQ		
Sample Matrix: Surface Water		Analyst Comment:								

McQuillan Envirocare Ltd

Analytical Services

Test Certificate

Certificate: ECTC014890

Issue No: 1

Lab Ref	Sample Details	Sample Date	Method No.	Test	Result	Units	ACC	Lab	Sample Deviations
MCQ055867	SW2	11/12/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S	@
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Chloride	26.3	mg/l	Y	S	
			SAM005	Electrical Conductivity	752.0	uS/cm	Y	MCQ	
			SAM004	pH	7.55	Units	Y	MCQ	
			SAM001	Suspended Solids	<3.00	mg/l	Y	MCQ	
			Sample Matrix: Surface Water		Analyst Comment:				
MCQ055868	SW3	11/12/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S	@
			SAM016	BOD (ATU)	2.06	mg/l	Y	MCQ	
			N/A	Chloride	45.2	mg/l	Y	S	
			SAM005	Electrical Conductivity	478.0	uS/cm	Y	MCQ	
			SAM004	pH	7.12	Units	Y	MCQ	
			SAM001	Suspended Solids	7.00	mg/l	Y	MCQ	
			Sample Matrix: Surface Water		Analyst Comment:				
MCQ055869	SW4	11/12/2018	N/A	Ammoniacal Nitrogen as N	<0.2	mg/l	Y	S	@
			SAM016	BOD (ATU)	<1.00	mg/l	Y	MCQ	
			N/A	Chloride	32.7	mg/l	Y	S	
			SAM005	Electrical Conductivity	675.0	uS/cm	Y	MCQ	
			SAM004	pH	7.50	Units	Y	MCQ	
			SAM001	Suspended Solids	<3.00	mg/l	Y	MCQ	
			Sample Matrix: Surface Water		Analyst Comment:				
MCQ055870	Raw Leachate	11/12/2018	N/A	Ammoniacal Nitrogen as N	596	mg/l	Y	S	@
			SAM016	BOD (ATU)	37.20	mg/l	Y	MCQ	
			N/A	Chloride	896	mg/l	Y	S	
			SAM009	COD (Total)	858	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	9,010.0	uS/cm	Y	MCQ	
			SAM004	pH	7.70	Units	Y	MCQ	
			SAM001	Suspended Solids	36.00	mg/l	Y	MCQ	
			Sample Matrix: Landfill Leachate		Analyst Comment:				
MCQ055871	Treated Leachate	11/12/2018	N/A	Ammoniacal Nitrogen as N	3.57	mg/l	Y	S	\$@
			SAM016	BOD (ATU)	3.67	mg/l	Y	MCQ	
			N/A	Chloride	1290	mg/l	Y	S	
			SAM009	COD (Total)	910	mg/l	Y	MCQ	
			SAM005	Electrical Conductivity	11,000.0	uS/cm	Y	MCQ	
			SAM004	pH	6.91	Units	Y	MCQ	
			SAM001	Suspended Solids	12.00	mg/l	Y	MCQ	

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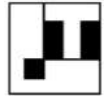
Issue No: 1

MCQ055871

Sample Matrix: Landfill Leachate

Analyst
Comment:

Sample Deviations Legend			
Results may be compromised if the following deviations apply			
Comment	C	Incorrect Container	‡
Container with Headspace provided	8	Insufficient sample volume	È
BOD Overdiluted, therefore result indicative only	\$	BOD Underdiluted, therefore result indicative only	#
High Chloride concentration, COD could not be determined	§	Holding time exceeded due to sampled on date	@
Holding time exceeded in Lab	±	Holding time exceeded due to delayed instructions	&



Appendix C

In Waste Gas Monitoring Results



25/01/18

In-Waste Gas Well	CH ₄	CO ₂	O ₂	Suction
LEP B	55.5	39.2	3	-11.45
W1	62.3	42.6	0.8	-9.99
W2	65.5	48.4	1	-11.49
W3	66.4	49.3	0.6	-11.73
W4	62.8	44.2	0.5	-11.66
W5	30.9	25.5	11	-10.68
W6	53.6	40.7	3.9	-11.2
W7	62	47.9	1.6	-11.66
W12	61.1	44.4	1.4	-10.03
LEP A	-	-	-	-
W20	61.7	45.8	0.8	-7.92
LEW	67.4	44.6	0.8	-8.81
W15	58.7	45.2	0.7	-8.81
W19	61.4	44.5	0.4	-9.17
W18	66	46.4	0.4	-8.29
W22	62.4	46.2	0.3	-10.7
W8	66.5	49.3	0.6	-10.2
W9	62.3	47.5	1.4	-9.65
W13A	56.2	42.8	3.1	-9.67
W17	-	-	-	-
W16	60.8	45.8	1.2	-8.8
W21	66.8	46.9	0.3	-9.22
W14	60.2	47.1	1.5	-9.43
W10	48.2	39	5.2	-10.08



07/02/18

In-Waste Gas Well	CH ₄	CO ₂	O ₂	Suction
LEP B	51	37	3.3	-10.42
W1	52.9	38.6	1.4	-13.76
W2	66.5	48.7	1.4	-15.03
W3	66.4	49.3	1.2	-14.75
W4	49.2	37.3	1	-14.67
W5	35.5	29	10.2	-13.74
W6	66.2	49.1	1.3	-14.49
W7	66.2	49.6	0.7	-14.67
W12	34.3	35.2	3.6	-12.45
LEP A	-	-	-	-
W20	32	33.8	3.4	-12.14
LEW	63.8	42.9	1.5	-16.49
W15	40	32.7	1.3	-18.41
W19	46.7	37	1.4	-18.89
W18	51.9	38.6	1.5	-19.03
W22	44.2	39.1	0.7	-17.45
W8	66.9	48.8	0.8	-19.9
W9	63.8	47.4	1.5	-19.58
W13A	54	42.7	2.9	-17.4
W17	-	-	-	-
W16	45.1	39.1	0.9	-18.19
W21	36.5	43.6	1.2	-19.11
W14	66.1	49.4	0.5	-19.83
W10	46.8	37.4	6.1	-17.56



07/03/18

In-Waste Gas Well	CH ₄	CO ₂	O ₂	Suction
LEP B	65.9	47.4	0.7	3.37
W1	65.8	49	0.5	3.09
W2	65.5	49.5	0.5	3.35
W3	65.6	49.4	0.3	3.37
W4	65.5	48.2	0.4	3.51
W5	65.9	48.9	0.8	0.77
W6	65.6	49.4	0.3	3.09
W7	65.6	49.9	0.4	2.94
W12	64.9	49.8	0.8	0.31
LEP A	-	-	-	-
W20	65.6	49.3	0.6	1.1
LEW	60.9	46.6	0.4	2.75
W15	64.6	50.1	0.4	2.92
W19	65.6	49.4	0.4	2.85
W18	65.5	49.5	0.2	3.14
W22	65.3	49.2	0.9	0.45
W8	66	49.4	0.5	2.99
W9	65.5	49.7	0.5	3.52
W13A	65.3	49.7	0.9	2.66
W17	-	-	-	-
W16	65.4	49.8	0.2	3.11
W21	65.5	49.8	0.2	3.07
W14	65.2	49.8	0.6	3.04
W10	65.5	50	0.2	4.91



08/05/18

In-Waste Gas Well	CH ₄	CO ₂	O ₂	Suction
LEP B	-	-	-	-
W1	62.1	45.2	1.5	-14.5
W2	65.4	45.5	0.9	-17.8
W3	64.5	47.5	0.5	-17.13
W4	63.4	41.2	1.1	-16.8
W5	64.5	46.8	0.8	-14.8
W6	29.3	22.9	11.8	-17.8
W7	57.5	44.9	2.1	-15.15
W12	32.1	23.7	10.1	-13.4
LEP A	-	-	-	-
W20	63.5	46.4	0.5	-9.75
LEW	66.4	42.9	0.5	-15.04
W15	61.5	45.3	0.7	-15.7
W19	-	-	-	-
W18	62.1	42.3	0.9	-15.5
W22	36.7	27.4	8.7	-16.5
W8	52	39.4	4	-17.2
W9	53	41.7	3.6	-16.16
W13A	39.3	34	7	-
W17	58.4	31.7	3.4	-3.57
W16	55.5	33.1	4.2	-13
W21	63.6	44	0.9	-15.9
W14	53.7	42.6	3	-16.4
W10	46.4	36.3	5.5	-14.4



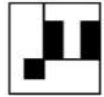
23/07/18

In-Waste Gas Well	CH ₄	CO ₂	O ₂	Suction
LEP B	25.8	21.5	8.6	-17.07
W1	33.7	30.6	0.3	-20.92
W2	54.5	38.3	1.1	-21.74
W3	57.9	40.5	0.6	-21.39
W4	40.8	32.1	0.6	-20.83
W5	12	18.1	5.1	-14.12
W6	59.3	41.1	0.1	-22.1
W7	48	35.4	3.3	-21.14
W12	40.2	33.4	0.6	-12
LEP A	-	-	-	-
W20	20.2	24.1	1.8	-11.88
LEW	5.5	3.8	17.9	-20.14
W15	35.4	31.4	0.8	-21.26
W19	27.6	22.9	0.3	-21.64
W18	39	31.9	0.8	-21.77
W22	31.5	28.9	1.4	-19.99
W8	56.9	39.6	1.2	-21.65
W9	58.7	41.1	0.4	-22.27
W13A	32.3	26.9	6.3	-11.08
W17	-	-	-	-
W16	29.5	26.6	2.3	-12.18
W21	45.1	33.6	0.4	-21.93
W14	59	41	0.4	-22.6
W10	58.1	40.7	0.6	-22.27



29/08/18

In-Waste Gas Well	CH ₄	CO ₂	O ₂	Suction
LEP B	25.8	21.5	8.6	-17.07
W1	33.7	30.6	0.3	-20.92
W2	54.5	38.3	1.1	-21.74
W3	57.9	40.5	0.6	-21.39
W4	40.8	32.1	0.6	-20.83
W5	12	18.1	5.1	-14.12
W6	59.3	41.1	0.1	-22.1
W7	48	35.4	3.3	-21.14
W12	40.2	33.4	0.6	-12
LEP A	-	-	-	-
W20	20.2	24.1	1.8	-11.88
LEW	5.5	3.8	17.9	-20.14
W15	35.4	31.4	0.8	-21.26
W19	27.6	22.9	0.3	-21.64
W18	39	31.9	0.8	-21.77
W22	31.5	28.9	1.4	-19.99
W8	56.9	39.6	1.2	-21.65
W9	58.7	41.1	0.4	-22.27
W13A	32.3	26.9	6.3	-11.08
W17	-	-	-	-
W16	29.5	26.6	2.3	-12.18
W21	45.1	33.6	0.4	-21.93
W14	59	41	0.4	-22.6
W10	58.1	40.7	0.6	-22.27



Appendix D

Settlement Assessment and Remaining Void Capacity



WDR & RT TAGGART

LISBANE LANDFILL SITE – SETTLEMENT AND VOID REPORT 2018

15047 – Armagh Power Generation Ltd.

Version 01 – January 2019

Architects
Civil Engineers
Structural Engineers
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TITLE	LISBANE LANDFILL SITE ANNUAL SETTLEMENT AND VOID REPORT – 2018	
PROJECT	15047 – LISBANE LANDFILL SITE	
CLIENT	ARMAGH POWER GENERATION LTD.	
DATE	JANUARY 2019	
STATUS	FINAL	
VERSION	01	
AUTHOR	[REDACTED]	

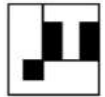


WDR & RT **TAGGART**

WDR & RT TAGGART

DOCUMENT CONTROL

VERSION	DESCRIPTION	STATUS	DATE	BY	CHECKED	APPROVED
01	FIRST ISSUE	FINAL	JAN 2019	[REDACTED]	[REDACTED]	[REDACTED]



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1	Introduction	1
2	Settlement Assessment	1
3	Remaining Landfill Void Capacity	1



1 Introduction

This document represents the annual Settlement and Void Capacity Report for Lisbane Landfill, Auglish Road, Tandragee, County Armagh.

2 Settlement Assessment

By comparing the levels of the most recent topographical survey carried out in January 2019 with previous surveys carried out in 2015, 2016 and 2017 the settlement behaviour across the landfill can be assessed. Using reference points as shown on Drawing 15047-102, the levels of settlement are summarised in Table 1 below.

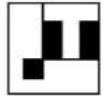
Table 1 Settlement Assessment

Reference	Easting	Northing	Level (mAOD) 13/04/2015	Level (mAOD) 18/04/2016	Level (mAOD) 16/03/2017	Level (mAOD) 21/11/2017	Level (mAOD) 17/01/2019	Settlement (m)
SR1	304834	344580	51.03	50.90	50.85	50.85	50.62	0.23
SR2	304879	344561	54.30	54.25	54.24	54.24	54.27	0
SR3	304905	344504	54.77	54.73	54.64	54.45	59.00	0
SR4	304876	344462	54.24	53.88	53.78	53.88	54.33	0
SR5	304829	344476	54.05	53.69	53.54	53.49	53.31	0.18
SR6	304775	344493	53.34	53.12	52.98	52.92	52.81	0.11
SR7	304728	344511	45.33	45.33	45.30	45.26	45.23	0.03
SR8	304714	344562	41.01	40.90	40.90	40.88	40.83	0.05
SR9	304774	344591	41.29	41.29	41.25	41.25	41.49	0
SR10	304756	344556	43.85	43.80	43.80	43.78	43.76	0.02
SR11	304804	344536	53.11	52.88	52.64	52.64	52.41	0.23
SR12	304855	344515	54.00	53.60	53.27	53.27	52.82	0.45

Lisbane landfill site experienced settlement across the reference points between 0-0.45m between November 2017 and January 2019. Please note that due to restoration works taking place on site, some levels have risen from previous readings and are unable to be used to assess settlement.

3 Restoration and Remaining Void Volumes

The landfill is currently dormant and has not accepted any waste since 2013, however, restoration activities began in December 2017. The volume of restoration material placed has been calculated using a recent topographical survey and is approximately 14,000m³.



The approximate remaining void capacity at Lisbane Landfill Site is calculated to be approximately 261,000m³