Reporting of Emission to Groundwater for the period from 1st January 2021 to 30th June 2021.

Operator : RWE Generation UK plc **Form:** Groundwater1

Location: Aberthaw Ash Disposal Site

Permit/Variation Number: DP3432SW

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH3	Aluminium, Dissolved		11.0 µg/l		29/04/2021	Sampling Amec / Testing ALS	
	Antimony, Dissolved		13.0 µg/l				
	Arsenic Dissolved	310	171.0 µg/l				
	Boron, Dissolved	60000	24000 µg/l				
	Cadmium, Dissolved	15	<0.20 µg/l				
	Calcium, Dissolved		509 mg/l				
	Chromium, Dissolved		<0.20 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		240 mg/l				
	Manganese, Dissolved		575 µg/l				
	Molybdenum, Dissolved	9000	2270 µg/l				
	Nickel, Dissolved		1.1 µg/l				
	Selenium Dissolved	350	n/t µg/l				
	Vanadium, Dissolved		53 µg/l				
	Mercury, Dissolved	20	<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		264 mg/l				
	Conductivity at 20C		6810 uS/cm				
	Potassium, Dissolved		130 mg/l				
	Sodium, Dissolved		1000 mg/l				
	Sulphate, Dissolved as SO4		1620 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		1560 mg/l				
	Fluoride		0.10 mg/l				
	Ammoniacal Nitrogen as N	6.6	0.16 mg/l				
	Carbon, Organic : Total as C :- {TOC}		<0.7 mg/l				
	pH		7.8 pH Units				
	Ionic Balance		5.09 %				
	Electrical Conductivity		4520 µS/cm	Field Measurements			
	Temperature		12.3 deg C				
	Dissolved Oxygen		0.1 mg/l				
	pH		7.9 pH Units				
	Groundwater Level		5.92 mAOD				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH3	Aluminium, Dissolved		22.0 µg/l		30/06/2021	Sampling Amec / Testing ALS	
	Antimony, Dissolved		12.0 µg/l				
	Arsenic Dissolved	310	145.0 µg/l				
	Boron, Dissolved	60000	24300 µg/l				
	Cadmium, Dissolved	15	<0.20 µg/l				
	Calcium, Dissolved		411 mg/l				
	Chromium, Dissolved		<0.20 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		224 mg/l				
	Manganese, Dissolved		393 µg/l				
	Molybdenum, Dissolved	9000	2020 µg/l				
	Nickel, Dissolved		<1.0 µg/l				
	Selenium Dissolved	350	n/t µg/l				
	Vanadium, Dissolved		52 µg/l				
	Mercury, Dissolved	20	<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		254 mg/l				
	Conductivity at 20C		4420 uS/cm				
	Potassium, Dissolved		93 mg/l				
	Sodium, Dissolved		450 mg/l				
	Sulphate, Dissolved as SO4		1680 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		668 mg/l				
	Fluoride		<0.1 mg/l				
	Ammoniacal Nitrogen as N	6.6	0.11 mg/l				
	Carbon, Organic : Total as C :- {TOC}		<0.7 mg/l				
	pH		7.8 pH Units				
	Ionic Balance		<0.7 %				
	Electrical Conductivity		4008 µS/cm	Field Measurements			
	Temperature		14.6 deg C				
	Dissolved Oxygen		5.3 mg/l				
	pH		7.6 pH Units				
	Groundwater Level		4.04 mAOD				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH5	Aluminium, Dissolved		<3.5 µg/l		29/04/2021	Sampling Amec / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		<0.20 µg/l				
	Boron, Dissolved		1030 µg/l				
	Cadmium, Dissolved		<0.02 µg/l				
	Calcium, Dissolved		256 mg/l				
	Chromium, Dissolved		<0.20 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		20 mg/l				
	Manganese, Dissolved		43 µg/l				
	Molybdenum, Dissolved		4 µg/l				
	Nickel, Dissolved		1.5 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		0 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		330 mg/l				
	Conductivity at 20C		1180 uS/cm				
	Potassium, Dissolved		2 mg/l				
	Sodium, Dissolved		47 mg/l				
	Sulphate, Dissolved as SO4		325 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		41 mg/l				
	Fluoride		0.10 mg/l				
	Ammoniacal Nitrogen as N		<0.06 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.5 mg/l				
	pH		7.1 pH Units				
	Ionic Balance		6.44 %				
	Electrical Conductivity		797 µS/cm	Field Measurements			
	Temperature		10.7 deg C				
	Dissolved Oxygen		12.5 mg/l				
	pH		7.8 pH Units				
	Groundwater Level		9.78 mAOD				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH5	Aluminium, Dissolved		<3.5 µg/l		30/06/2021	Sampling Amec / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		0.3 µg/l				
	Boron, Dissolved		1330 µg/l				
	Cadmium, Dissolved		0.02 µg/l				
	Calcium, Dissolved		319 mg/l				
	Chromium, Dissolved		<0.20 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		22 mg/l				
	Manganese, Dissolved		41 µg/l				
	Molybdenum, Dissolved		14 µg/l				
	Nickel, Dissolved		1.3 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		0.2 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		286 mg/l				
	Conductivity at 20C		1460 uS/cm				
	Potassium, Dissolved		2 mg/l				
	Sodium, Dissolved		65 mg/l				
	Sulphate, Dissolved as SO4		562 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		72 mg/l				
	Fluoride		0.10 mg/l				
	Ammoniacal Nitrogen as N		<0.06 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.2 mg/l				
	pH		7.3 pH Units				
	Ionic Balance		2.87 %				
	Electrical Conductivity		1493 µS/cm	Field Measurements			
	Temperature		14.8 deg C				
	Dissolved Oxygen		0.2 mg/l				
	pH		6.6 pH Units				
	Groundwater Level		1.70 mAOD				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH6	Aluminium, Dissolved		4.1 µg/l		29/04/2021	Sampling Amec / Testing ALS	
	Antimony, Dissolved		8.5 µg/l				
	Arsenic Dissolved		38.0 µg/l				
	Boron, Dissolved		24100 µg/l				
	Cadmium, Dissolved		0.37 µg/l				
	Calcium, Dissolved		706 mg/l				
	Chromium, Dissolved		<0.20 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		225 mg/l				
	Manganese, Dissolved		1430 µg/l				
	Molybdenum, Dissolved		4010 µg/l				
	Nickel, Dissolved		5.7 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		42 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		428 mg/l				
	Conductivity at 20C		7200 uS/cm				
	Potassium, Dissolved		98 mg/l				
	Sodium, Dissolved		1000 mg/l				
	Sulphate, Dissolved as SO4		1940 mg/l				
	Nitrogen : Total Oxidised as N		5.90 mg/l				
	Chloride		1480 mg/l				
	Fluoride		0.20 mg/l				
	Ammoniacal Nitrogen as N		0.39 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.8 mg/l				
	pH		7.4 pH Units				
	Ionic Balance		4.72 %				
	Electrical Conductivity		4904 µS/cm	Field Measurements			
	Temperature		12.8 deg C				
	Dissolved Oxygen		0.3 mg/l				
	pH		7.6 pH Units				
	Groundwater Level		8.80 mAOD				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH6	Aluminium, Dissolved		6.0 µg/l		30/06/2021	Sampling Amec / Testing ALS	
	Antimony, Dissolved		8.7 µg/l				
	Arsenic Dissolved		52.0 µg/l				
	Boron, Dissolved		22000 µg/l				
	Cadmium, Dissolved		<0.20 µg/l				
	Calcium, Dissolved		520 mg/l				
	Chromium, Dissolved		<0.20 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		218 mg/l				
	Manganese, Dissolved		823 µg/l				
	Molybdenum, Dissolved		3170 µg/l				
	Nickel, Dissolved		4.4 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		53 µg/l				
	Mercury, Dissolved		0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		423 mg/l				
	Conductivity at 20C		4650 uS/cm				
	Potassium, Dissolved		67 mg/l				
	Sodium, Dissolved		450 mg/l				
	Sulphate, Dissolved as SO4		1880 mg/l				
	Nitrogen : Total Oxidised as N		3.30 mg/l				
	Chloride		612 mg/l				
	Fluoride		0.20 mg/l				
	Ammoniacal Nitrogen as N		0.10 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.1 mg/l				
	pH		7.5 pH Units				
	Ionic Balance		0.20 %				
	Electrical Conductivity		5243 µS/cm	Field Measurements			
	Temperature		14.8 deg C				
	Dissolved Oxygen		0.3 mg/l				
	pH		7.1 pH Units				
	Groundwater Level		8.40 mAOD				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH7	Aluminium, Dissolved		<3.5 ug/l		29/04/2021	Sampling Amec / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved	310	16.0 µg/l				
	Boron, Dissolved	60000	20400 µg/l				
	Cadmium, Dissolved	15	<0.20 µg/l				
	Calcium, Dissolved		764 mg/l				
	Chromium, Dissolved		<0.20 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		114 mg/l				
	Manganese, Dissolved		1040 µg/l				
	Molybdenum, Dissolved	9000	2850 µg/l				
	Nickel, Dissolved		<1.0 µg/l				
	Selenium Dissolved	350	n/t µg/l				
	Vanadium, Dissolved		0.4 µg/l				
	Mercury, Dissolved	20	<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		342 mg/l				
	Conductivity at 20C		10700 uS/cm				
	Potassium, Dissolved		260 mg/l				
	Sodium, Dissolved		1800 mg/l				
	Sulphate, Dissolved as SO4		1460 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		3120 mg/l				
	Fluoride		0.40 mg/l				
	Ammoniacal Nitrogen as N	6.6	2.60 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.7 mg/l				
	pH		7.3 pH Units				
	Ionic Balance		2.77 %				
	Electrical Conductivity		7197 µS/cm	Field Measurements			
	Temperature		12.4 deg C				
	Dissolved Oxygen		0.2 mg/l				
	pH		7.4 pH Units				
	Groundwater Level		2.82 mAOD				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH7	Aluminium, Dissolved		<3.5 µg/l		30/06/2021	Sampling Amec / Testing ALS	
	Antimony, Dissolved		<13 µg/l				
	Arsenic Dissolved	310	4.9 µg/l				
	Boron, Dissolved	60000	21900 µg/l				
	Cadmium, Dissolved	15	0.39 µg/l				
	Calcium, Dissolved		776 mg/l				
	Chromium, Dissolved		0.2 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		120 mg/l				
	Manganese, Dissolved		1080 µg/l				
	Molybdenum, Dissolved	9000	3080 µg/l				
	Nickel, Dissolved		<1.0 µg/l				
	Selenium Dissolved	350	n/t µg/l				
	Vanadium, Dissolved		0.6 µg/l				
	Mercury, Dissolved	20	<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		277 mg/l				
	Conductivity at 20C		12100 uS/cm				
	Potassium, Dissolved		270 mg/l				
	Sodium, Dissolved		2100 mg/l				
	Sulphate, Dissolved as SO4		1760 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		3590 mg/l				
	Fluoride		0.40 mg/l				
	Ammoniacal Nitrogen as N	6.6	2.81 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.2 mg/l				
	pH		7.4 pH Units				
	Ionic Balance		1.15 %				
	Electrical Conductivity		12848 µS/cm	Field Measurements			
	Temperature		13.7 deg C				
	Dissolved Oxygen		0.1 mg/l				
	pH		7.2 pH Units				
	Groundwater Level		2.92 mAOD				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH8	Aluminium, Dissolved		<35 µg/l		29/04/2021	Sampling Amec / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		0.7 µg/l				
	Boron, Dissolved		2520 µg/l				
	Cadmium, Dissolved		<0.20 µg/l				
	Calcium, Dissolved		238 mg/l				
	Chromium, Dissolved		0.3 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		407 mg/l				
	Manganese, Dissolved		229 µg/l				
	Molybdenum, Dissolved		<25.0 µg/l				
	Nickel, Dissolved		1.9 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		1 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		649 mg/l				
	Conductivity at 20C		18600 uS/cm				
	Potassium, Dissolved		120 mg/l				
	Sodium, Dissolved		4100 mg/l				
	Sulphate, Dissolved as SO4		502 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		6380 mg/l				
	Fluoride		0.60 mg/l				
	Ammoniacal Nitrogen as N		6.23 mg/l				
	Carbon, Organic : Total as C :- {TOC}		3.3 mg/l				
	pH		7.4 pH Units				
	Ionic Balance		5.41 %				
	Electrical Conductivity		11746 µS/cm	Field Measurements			
	Temperature		12.1 deg C				
	Dissolved Oxygen		0.2 mg/l				
	pH		7.3 pH Units				
	Groundwater Level		3.52 mAOD				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH8	Aluminium, Dissolved		<3.5 µg/l		30/06/2021	Sampling Amec / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		0.4 µg/l				
	Boron, Dissolved		2080 µg/l				
	Cadmium, Dissolved		0.07 µg/l				
	Calcium, Dissolved		252 mg/l				
	Chromium, Dissolved		0.4 µg/l				
	Copper, Dissolved		140 µg/l				
	Magnesium, Dissolved		424 mg/l				
	Manganese, Dissolved		298 µg/l				
	Molybdenum, Dissolved		5.4 µg/l				
	Nickel, Dissolved		2.2 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		1.2 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		649 mg/l				
	Conductivity at 20C		19900 uS/cm				
	Potassium, Dissolved		120 mg/l				
	Sodium, Dissolved		4100 mg/l				
	Sulphate, Dissolved as SO4		447 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		6270 mg/l				
	Fluoride		0.60 mg/l				
	Ammoniacal Nitrogen as N		6.44 mg/l				
	Carbon, Organic : Total as C :- {TOC}		3.8 mg/l				
	pH		7.3 pH Units				
	Ionic Balance		6.9 %				
	Electrical Conductivity		21140 µS/cm	Field Measurements			
	Temperature		12.9 deg C				
	Dissolved Oxygen		0.0 mg/l				
	pH		6.8 pH Units				
	Groundwater Level		4.91 mAOD				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH9	Aluminium, Dissolved		3.7 µg/l		29/04/2021	Sampling Amec / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		<0.20 µg/l				
	Boron, Dissolved		209 µg/l				
	Cadmium, Dissolved		<0.02 µg/l				
	Calcium, Dissolved		164 mg/l				
	Chromium, Dissolved		0.2 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		29 mg/l				
	Manganese, Dissolved		8 µg/l				
	Molybdenum, Dissolved		8 µg/l				
	Nickel, Dissolved		<1.0 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		0.15 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		292 mg/l				
	Conductivity at 20C		967 uS/cm				
	Potassium, Dissolved		3 mg/l				
	Sodium, Dissolved		39 mg/l				
	Sulphate, Dissolved as SO4		102 mg/l				
	Nitrogen : Total Oxidised as N		4.30 mg/l				
	Chloride		117 mg/l				
	Fluoride		0.20 mg/l				
	Ammoniacal Nitrogen as N		<0.06 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.6 mg/l				
	pH		7.4 pH Units				
	Ionic Balance		4.50 %				
	Electrical Conductivity		654 µS/cm	Field Measurements			
	Temperature		11.0 deg C				
	Dissolved Oxygen		5.6 mg/l				
	pH		7.9 pH Units				
	Groundwater Level		4.49 mAOD				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH9	Aluminium, Dissolved		<3.5 µg/l		30/06/2021	Sampling Amec / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		<0.20 µg/l				
	Boron, Dissolved		378 µg/l				
	Cadmium, Dissolved		<0.02 µg/l				
	Calcium, Dissolved		173 mg/l				
	Chromium, Dissolved		<0.20 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		29 mg/l				
	Manganese, Dissolved		4.1 µg/l				
	Molybdenum, Dissolved		11 µg/l				
	Nickel, Dissolved		<1.0 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		0.2 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		282 mg/l				
	Conductivity at 20C		1080 uS/cm				
	Potassium, Dissolved		3 mg/l				
	Sodium, Dissolved		44 mg/l				
	Sulphate, Dissolved as SO4		126 mg/l				
	Nitrogen : Total Oxidised as N		3.40 mg/l				
	Chloride		145 mg/l				
	Fluoride		0.20 mg/l				
	Ammoniacal Nitrogen as N		<0.06 mg/l				
	Carbon, Organic : Total as C :- {TOC}		0.9 mg/l				
	pH		7.4 pH Units				
	Ionic Balance		2.54 %				
	Electrical Conductivity		1073 µS/cm	Field Measurements			
	Temperature		11.6 deg C				
	Dissolved Oxygen		4.0 mg/l				
	pH		7.1 pH Units				
	Groundwater Level		3.49 mAOD				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH10	Aluminium, Dissolved		<3.5 µg/l		29/04/2021	Sampling Amec / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		18.0 µg/l				
	Boron, Dissolved		15000 µg/l				
	Cadmium, Dissolved		<0.20 µg/l				
	Calcium, Dissolved		420 mg/l				
	Chromium, Dissolved		0.4 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		424 mg/l				
	Manganese, Dissolved		773 µg/l				
	Molybdenum, Dissolved		922 µg/l				
	Nickel, Dissolved		<1.0 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		2.6 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		826 mg/l				
	Conductivity at 20C		15700 uS/cm				
	Potassium, Dissolved		150 mg/l				
	Sodium, Dissolved		3300 mg/l				
	Sulphate, Dissolved as SO4		1040 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		5110 mg/l				
	Fluoride		0.20 mg/l				
	Ammoniacal Nitrogen as N		21.00 mg/l				
	Carbon, Organic : Total as C :- {TOC}		4.5 mg/l				
	pH		7.7 pH Units				
	Ionic Balance		5.40 %				
	Electrical Conductivity		8456 µS/cm	Field Measurements			
	Temperature		12.7 deg C				
	Dissolved Oxygen		0.2 mg/l				
	pH		7.5 pH Units				
	Groundwater Level		2.28 mAOD				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH10	Aluminium, Dissolved		<3.5 µg/l		30/06/2021	Sampling Amec / Testing ALS	
	Antimony, Dissolved		<13 µg/l				
	Arsenic Dissolved		42.0 µg/l				
	Boron, Dissolved		12700 µg/l				
	Cadmium, Dissolved		<0.20 µg/l				
	Calcium, Dissolved		363 mg/l				
	Chromium, Dissolved		0.5 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		395 mg/l				
	Manganese, Dissolved		637 µg/l				
	Molybdenum, Dissolved		917 µg/l				
	Nickel, Dissolved		<1.0 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		2.4 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		794 mg/l				
	Conductivity at 20C		15900 uS/cm				
	Potassium, Dissolved		140 mg/l				
	Sodium, Dissolved		3100 mg/l				
	Sulphate, Dissolved as SO4		1040 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		4770 mg/l				
	Fluoride		0.20 mg/l				
	Ammoniacal Nitrogen as N		21.30 mg/l				
	Carbon, Organic : Total as C :- {TOC}		5.2 mg/l				
	pH		7.6 pH Units				
	Ionic Balance		4.7 %				
	Electrical Conductivity		16688 µS/cm	Field Measurements			
	Temperature		13.5 deg C				
	Dissolved Oxygen		0.0 mg/l				
	pH		7.2 pH Units				
	Groundwater Level		1.59 mAOD				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH11	Aluminium, Dissolved		<3.5 µg/l		29/04/2021	Sampling Amec / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		29.0 µg/l				
	Boron, Dissolved		12200 µg/l				
	Cadmium, Dissolved		<0.20 µg/l				
	Calcium, Dissolved		416 mg/l				
	Chromium, Dissolved		<0.20 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		179 mg/l				
	Manganese, Dissolved		1520 µg/l				
	Molybdenum, Dissolved		611 µg/l				
	Nickel, Dissolved		<1.0 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		0.8 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		665 mg/l				
	Conductivity at 20C		7000 uS/cm				
	Potassium, Dissolved		120 mg/l				
	Sodium, Dissolved		1200 mg/l				
	Sulphate, Dissolved as SO4		838 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		1810 mg/l				
	Fluoride		0.40 mg/l				
	Ammoniacal Nitrogen as N		6.44 mg/l				
	Carbon, Organic : Total as C :- {TOC}		5.8 mg/l				
	pH		7.5 pH Units				
	Ionic Balance		5.16 %				
	Electrical Conductivity		4817 µS/cm	Field Measurements			
	Temperature		13.2 deg C				
	Dissolved Oxygen		0.2 mg/l				
	pH		7.5 pH Units				
	Groundwater Level		4.47 mAOD				

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH11	Aluminium, Dissolved		<3.5 µg/l		30/06/2021	Sampling Amec / Testing ALS	
	Antimony, Dissolved		<13 µg/l				
	Arsenic Dissolved		10.0 µg/l				
	Boron, Dissolved		12100 µg/l				
	Cadmium, Dissolved		<0.20 µg/l				
	Calcium, Dissolved		396 mg/l				
	Chromium, Dissolved		<0.20 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		156 mg/l				
	Manganese, Dissolved		1210 µg/l				
	Molybdenum, Dissolved		745 µg/l				
	Nickel, Dissolved		<1.0 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		0.8 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		687 mg/l				
	Conductivity at 20C		7760 uS/cm				
	Potassium, Dissolved		120 mg/l				
	Sodium, Dissolved		1300 mg/l				
	Sulphate, Dissolved as SO4		929 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		2080 mg/l				
	Fluoride		0.6 mg/l				
	Ammoniacal Nitrogen as N		6.7 mg/l				
	Carbon, Organic : Total as C :- {TOC}		5.2 mg/l				
	pH		7.5 pH Units				
	Ionic Balance		0.22 %				
	Electrical Conductivity		7795 µS/cm	Field Measurements			
	Temperature		18.3 deg C				
	Dissolved Oxygen		0.2 mg/l				
	pH		7.3 pH Units				
	Groundwater Level		4.19 mAOD				

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. colorimetry.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements, or flow/time proportional samples, the percentage of the process operating time covered by the monitoring is given.

[4] The accreditation status of the equipment and/or the monitoring organisation, as appropriate, for the methods used for both sampling and analysis.

[5] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

[6] The emission limit values for all substances is expressed as a maximum individual value, unless otherwise stated.

Signed …… …… Date 17/09/2021 (reissued 26/01/2022)

(authorised to sign as representative of the Operator)