Reporting of Emission to Groundwater for the period from 1st July 2022 to 31st December 2022.

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		8.0 µg/l		21/07/2022	Sampling WSP / Testing ALS	
	Antimony, Dissolved		6.2 µg/l				
	Arsenic Dissolved	310	114.0 µg/l				
	Boron, Dissolved	60000	26500 µg/l				
	Cadmium, Dissolved	15	<0.02 µg/l				
	Calcium, Dissolved		659 mg/l				
	Chromium, Dissolved		0.2 µg/l				
	Copper, Dissolved		37 µg/l				
	Magnesium, Dissolved		238 mg/l				
	Manganese, Dissolved		893 µg/l				
	Molybdenum, Dissolved	9000	3670 µg/l				
	Nickel, Dissolved		1.1 µg/l				
	Selenium Dissolved	350	n/t µg/l				
	Vanadium, Dissolved		25 µg/l				
	Mercury, Dissolved	20	0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		203 mg/l				
	Conductivity at 20C		12000 uS/cm				
	Potassium, Dissolved		230 mg/l				
	Sodium, Dissolved		2200 mg/l				
	Sulphate, Dissolved as SO4		1900 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		4040 mg/l				
	Fluoride		0.20 mg/l				
	Ammoniacal Nitrogen as N	6.6	1.64 mg/l				
	Carbon, Organic : Total as C :- {TOC}		0.9 mg/l				
	pH		7.6 pH Units				
	Ionic Balance		1.16 %				
	Electrical Conductivity		11453 µS/cm	Field Measurements			
	Temperature		14.2 deg C				
	Dissolved Oxygen		1.9 mg/l				
	pH		7.0 pH Units				
	Groundwater Level		3.87 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		3.7 µg/l		13/10/2022	Sampling WSP / Testing ALS	
	Antimony, Dissolved		3.4 µg/l				
	Arsenic Dissolved	310	55.0 µg/l				
	Boron, Dissolved	60000	25800 µg/l				
	Cadmium, Dissolved	15	<0.02 µg/l				
	Calcium, Dissolved		906 mg/l				
	Chromium, Dissolved		0.2 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		286 mg/l				
	Manganese, Dissolved		1680 µg/l				
	Molybdenum, Dissolved	9000	4980 µg/l				
	Nickel, Dissolved		1.9 µg/l				
	Selenium Dissolved	350	n/t µg/l				
	Vanadium, Dissolved		16 µg/l				
	Mercury, Dissolved	20	0.010 µg/l				
	Alkalinity to pH 4.5 as CaCO3		168 mg/l				
	Conductivity at 20C		19400 uS/cm				
	Potassium, Dissolved		340 mg/l				
	Sodium, Dissolved		3700 mg/l				
	Sulphate, Dissolved as SO4		2100 mg/l				
	Nitrogen : Total Oxidised as N		0.90 mg/l				
	Chloride		6200 mg/l				
	Fluoride		0.40 mg/l				
	Ammoniacal Nitrogen as N	6.6	2.77 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.7 mg/l				
	pH		7.3 pH Units				
	Ionic Balance		3.54 %				
	Electrical Conductivity		21004 µS/cm	Field Measurements			
	Temperature		13.3 deg C				
	Dissolved Oxygen		0.6 mg/l				
	pH		7.0 pH Units				
	Groundwater Level		3.85 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		21/07/2022	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		<0.20 µg/l				
	Boron, Dissolved		1470 µg/l				
	Cadmium, Dissolved		0.03 µg/l				
	Calcium, Dissolved		289 mg/l				
	Chromium, Dissolved		<0.20 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		20 mg/l				
	Manganese, Dissolved		2 µg/l				
	Molybdenum, Dissolved		<2.50 µg/l				
	Nickel, Dissolved		1.2 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		0.3 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		336 mg/l				
	Conductivity at 20C		1460 uS/cm				
	Potassium, Dissolved		1 mg/l				
	Sodium, Dissolved		47 mg/l				
	Sulphate, Dissolved as SO4		593 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		51 mg/l				
	Fluoride		0.10 mg/l				
	Ammoniacal Nitrogen as N		<0.06 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.4 mg/l				
	pH		7.1 pH Units				
	Ionic Balance		6.13 %				
	Electrical Conductivity		1376 µS/cm	Field Measurements			
	Temperature		12.5 deg C				
	Dissolved Oxygen		4.4 mg/l				
	pH		6.7 pH Units				
	Groundwater Level		8.65 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		14/10/2022	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		<0.20 µg/l				
	Boron, Dissolved		1370 µg/l				
	Cadmium, Dissolved		0.04 µg/l				
	Calcium, Dissolved		414 mg/l				
	Chromium, Dissolved		<0.20 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		27 mg/l				
	Manganese, Dissolved		54 µg/l				
	Molybdenum, Dissolved		27 µg/l				
	Nickel, Dissolved		1.4 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		234 mg/l				
	Conductivity at 20C		1910 uS/cm				
	Potassium, Dissolved		3 mg/l				
	Sodium, Dissolved		95 mg/l				
	Sulphate, Dissolved as SO4		778 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		173 mg/l				
	Fluoride		0.10 mg/l				
	Ammoniacal Nitrogen as N		0.37 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.7 mg/l				
	pH		6.9 pH Units				
	Ionic Balance		2.48 %				
	Electrical Conductivity		1910 µS/cm	Field Measurements			
	Temperature		* deg C				
	Dissolved Oxygen		* mg/l				
	pH		6.9 pH Units				
	Groundwater Level		6.95 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		4.6 µg/l		21/07/2022	Sampling WSP / Testing ALS	
	Antimony, Dissolved		15.0 µg/l				
	Arsenic Dissolved		81.0 µg/l				
	Boron, Dissolved		24400 µg/l				
	Cadmium, Dissolved		<0.02 µg/l				
	Calcium, Dissolved		559 mg/l				
	Chromium, Dissolved		<0.20 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		234 mg/l				
	Manganese, Dissolved		519 µg/l				
	Molybdenum, Dissolved		3340 µg/l				
	Nickel, Dissolved		2.4 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		88.0 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		379 mg/l				
	Conductivity at 20C		4160 uS/cm				
	Potassium, Dissolved		61 mg/l				
	Sodium, Dissolved		370 mg/l				
	Sulphate, Dissolved as SO4		1940 mg/l				
	Nitrogen : Total Oxidised as N		0.70 mg/l				
	Chloride		513 mg/l				
	Fluoride		0.20 mg/l				
	Ammoniacal Nitrogen as N		0.33 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.4 mg/l				
	pH		7.9 pH Units				
	Ionic Balance		1.82 %				
	Electrical Conductivity		4887 µS/cm	Field Measurements			
	Temperature		13.7 deg C				
	Dissolved Oxygen		4.3 mg/l				
	pH		7.2 pH Units				
	Groundwater Level		7.59 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		<3.5 µg/l		13/10/2022	Sampling WSP / Testing ALS	
	Antimony, Dissolved		9.6 µg/l				
	Arsenic Dissolved		47.0 µg/l				
	Boron, Dissolved		24500 µg/l				
	Cadmium, Dissolved		<0.02 µg/l				
	Calcium, Dissolved		593 mg/l				
	Chromium, Dissolved		<0.20 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		231 mg/l				
	Manganese, Dissolved		1770 µg/l				
	Molybdenum, Dissolved		3110 µg/l				
	Nickel, Dissolved		4.4 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		61 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		443 mg/l				
	Conductivity at 20C		5320 uS/cm				
	Potassium, Dissolved		74 mg/l				
	Sodium, Dissolved		580 mg/l				
	Sulphate, Dissolved as SO4		1770 mg/l				
	Nitrogen : Total Oxidised as N		4.50 mg/l				
	Chloride		876 mg/l				
	Fluoride		0.20 mg/l				
	Ammoniacal Nitrogen as N		0.59 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.6 mg/l				
	pH		7.7 pH Units				
	Ionic Balance		3.59 %				
	Electrical Conductivity		5320 µS/cm	Field Measurements			
	Temperature		* deg C				
	Dissolved Oxygen		* mg/l				
	pH		7.7 pH Units				
	Groundwater Level		7.54 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		<35 ug/l		21/07/2022	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<13 µg/l				
	Arsenic Dissolved	310	<2.0 µg/l				
	Boron, Dissolved	60000	23500 µg/l				
	Cadmium, Dissolved	15	<0.20 µg/l				
	Calcium, Dissolved		847 mg/l				
	Chromium, Dissolved		<2.0 µg/l				
	Copper, Dissolved		<40 µg/l				
	Magnesium, Dissolved		113 mg/l				
	Manganese, Dissolved		1050 µg/l				
	Molybdenum, Dissolved	9000	3640 µg/l				
	Nickel, Dissolved		<10.0 µg/l				
	Selenium Dissolved	350	n/t µg/l				
	Vanadium, Dissolved		<1.5 µg/l				
	Mercury, Dissolved	20	<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		214 mg/l				
	Conductivity at 20C		13400 uS/cm				
	Potassium, Dissolved		270 mg/l				
	Sodium, Dissolved		2300 mg/l				
	Sulphate, Dissolved as SO4		1900 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		3980 mg/l				
	Fluoride		0.40 mg/l				
	Ammoniacal Nitrogen as N	6.6	3.05 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.5 mg/l				
	pH		7.0 pH Units				
	Ionic Balance		0.74 %				
	Electrical Conductivity		13171 µS/cm	Field Measurements			
	Temperature		13.8 deg C				
	Dissolved Oxygen		2.8 mg/l				
	pH		7.1 pH Units				
	Groundwater Level		2.96 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		13/10/2022	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved	310	3.7 µg/l				
	Boron, Dissolved	60000	21200 µg/l				
	Cadmium, Dissolved	15	<0.02 µg/l				
	Calcium, Dissolved		935 mg/l				
	Chromium, Dissolved		<0.20 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		131 mg/l				
	Manganese, Dissolved		1220 µg/l				
	Molybdenum, Dissolved	9000	3970 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		186 mg/l				
	Conductivity at 20C		15300 uS/cm				
	Potassium, Dissolved		370 mg/l				
	Sodium, Dissolved		2600 mg/l				
	Sulphate, Dissolved as SO4		1990 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		4830 mg/l				
	Fluoride		0.40 mg/l				
	Ammoniacal Nitrogen as N	6.6	3.45 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.5 mg/l				
	pH		7.2 pH Units				
	Ionic Balance		0.41 %				
	Electrical Conductivity		16292 µS/cm	Field Measurements			
	Temperature		13.3 deg C				
	Dissolved Oxygen		0.1 mg/l				
	pH		7.2 pH Units				
	Groundwater Level		3.64 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		21/07/2022	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<13 µg/l				
	Arsenic Dissolved		<2.0 µg/l				
	Boron, Dissolved		3270 µg/l				
	Cadmium, Dissolved		<0.20 µg/l				
	Calcium, Dissolved		579 mg/l				
	Chromium, Dissolved		<2.0 µg/l				
	Copper, Dissolved		<40 µg/l				
	Magnesium, Dissolved		478 mg/l				
	Manganese, Dissolved		266 µg/l				
	Molybdenum, Dissolved		93 µg/l				
	Nickel, Dissolved		<10.0 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		<1.5 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		466 mg/l				
	Conductivity at 20C		20400 uS/cm				
	Potassium, Dissolved		120 mg/l				
	Sodium, Dissolved		3800 mg/l				
	Sulphate, Dissolved as SO4		792 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		7550 mg/l				
	Fluoride		0.50 mg/l				
	Ammoniacal Nitrogen as N		7.49 mg/l				
	Carbon, Organic : Total as C :- {TOC}		3.0 mg/l				
	pH		7.7 pH Units				
	Ionic Balance		0.49 %				
	Electrical Conductivity		20150 µS/cm	Field Measurements			
	Temperature		13.8 deg C				
	Dissolved Oxygen		1.4 mg/l				
	pH		6.8 pH Units				
	Groundwater Level		6.27 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		13/10/2022	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		0.6 µg/l				
	Boron, Dissolved		2280 µg/l				
	Cadmium, Dissolved		<0.02 µg/l				
	Calcium, Dissolved		676 mg/l				
	Chromium, Dissolved		0.3 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		516 mg/l				
	Manganese, Dissolved		358 µg/l				
	Molybdenum, Dissolved		26.0 µg/l				
	Nickel, Dissolved		<1.0 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		0.8 µg/l				
	Mercury, Dissolved		N/S µg/l				
	Alkalinity to pH 4.5 as CaCO3		451 mg/l				
	Conductivity at 20C		21000 uS/cm				
	Potassium, Dissolved		150 mg/l				
	Sodium, Dissolved		4000 mg/l				
	Sulphate, Dissolved as SO4		838 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		7460 mg/l				
	Fluoride		0.40 mg/l				
	Ammoniacal Nitrogen as N		7.68 mg/l				
	Carbon, Organic : Total as C :- {TOC}		3.2 mg/l				
	pH		7.1 pH Units				
	Ionic Balance		3.5 %				
	Electrical Conductivity		21000 µS/cm	Field Measurements			
	Temperature		* deg C				
	Dissolved Oxygen		* mg/l				
	pH		7.1 pH Units				
	Groundwater Level		5.93 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		21/07/2022	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		<0.20 µg/l				
	Boron, Dissolved		336 µg/l				
	Cadmium, Dissolved		<0.02 µg/l				
	Calcium, Dissolved		130 mg/l				
	Chromium, Dissolved		<0.20 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		26 mg/l				
	Manganese, Dissolved		24 µg/l				
	Molybdenum, Dissolved		11.0 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		299 mg/l				
	Conductivity at 20C		1000 uS/cm				
	Potassium, Dissolved		2 mg/l				
	Sodium, Dissolved		39 mg/l				
	Sulphate, Dissolved as SO4		114 mg/l				
	Nitrogen : Total Oxidised as N		2.50 mg/l				
	Chloride		112 mg/l				
	Fluoride		0.20 mg/l				
	Ammoniacal Nitrogen as N		<0.06 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.3 mg/l				
	pH		7.2 pH Units				
	Ionic Balance		5.21 %				
	Electrical Conductivity		1022 µS/cm	Field Measurements			
	Temperature		14.9 deg C				
	Dissolved Oxygen		3.0 mg/l				
	pH		6.9 pH Units				
	Groundwater Level		3.04 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		n/t µg/l		03/11/2022	Sampling WSP / Testing ALS ***BH9 sample not analysed due to labelling error. Field measurements also not undertaken by contractor.***	
	Antimony, Dissolved		n/t µg/l				
	Arsenic Dissolved		n/t µg/l				
	Boron, Dissolved		n/t µg/l				
	Cadmium, Dissolved		n/t µg/l				
	Calcium, Dissolved		n/t mg/l				
	Chromium, Dissolved		n/t µg/l				
	Copper, Dissolved		n/t µg/l				
	Magnesium, Dissolved		n/t mg/l				
	Manganese, Dissolved		n/t µg/l				
	Molybdenum, Dissolved		n/t µg/l				
	Nickel, Dissolved		n/t µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		n/t µg/l				
	Mercury, Dissolved		n/t µg/l				
	Alkalinity to pH 4.5 as CaCO3		n/t mg/l				
	Conductivity at 20C		n/t uS/cm				
	Potassium, Dissolved		n/t mg/l				
	Sodium, Dissolved		n/t mg/l				
	Sulphate, Dissolved as SO4		n/t mg/l				
	Nitrogen : Total Oxidised as N		n/t mg/l				
	Chloride		n/t mg/l				
	Fluoride		n/t mg/l				
	Ammoniacal Nitrogen as N		n/t mg/l				
	Carbon, Organic : Total as C :- {TOC}		n/t mg/l				
	pH		n/t pH Units				
	Ionic Balance		n/t %				
	Electrical Conductivity		n/t µS/cm	Field Measurements			
	Temperature		n/t deg C				
	Dissolved Oxygen		n/t mg/l				
	pH		n/t pH Units				
	Groundwater Level		2.50 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		<35 µg/l		21/07/2022	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<13 µg/l				
	Arsenic Dissolved		21.0 µg/l				
	Boron, Dissolved		10200 µg/l				
	Cadmium, Dissolved		<0.20 µg/l				
	Calcium, Dissolved		328 mg/l				
	Chromium, Dissolved		<2.0 µg/l				
	Copper, Dissolved		<40 µg/l				
	Magnesium, Dissolved		483 mg/l				
	Manganese, Dissolved		443 µg/l				
	Molybdenum, Dissolved		445 µg/l				
	Nickel, Dissolved		<10.0 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		1.8 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		957 mg/l				
	Conductivity at 20C		18900 uS/cm				
	Potassium, Dissolved		160 mg/l				
	Sodium, Dissolved		3900 mg/l				
	Sulphate, Dissolved as SO4		979 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		7150 mg/l				
	Fluoride		0.20 mg/l				
	Ammoniacal Nitrogen as N		37.40 mg/l				
	Carbon, Organic : Total as C :- {TOC}		7.7 mg/l				
	pH		7.9 pH Units				
	Ionic Balance		2.4 %				
	Electrical Conductivity		21008 µS/cm	Field Measurements			
	Temperature		13.4 deg C				
	Dissolved Oxygen		2.6 mg/l				
	pH		7.1 pH Units				
	Groundwater Level		1.50 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		13/10/2022	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<1.3 µg/l				
	Arsenic Dissolved		13.0 µg/l				
	Boron, Dissolved		9270 µg/l				
	Cadmium, Dissolved		<0.02 µg/l				
	Calcium, Dissolved		373 mg/l				
	Chromium, Dissolved		0.3 µg/l				
	Copper, Dissolved		<4.0 µg/l				
	Magnesium, Dissolved		499 mg/l				
	Manganese, Dissolved		532 µg/l				
	Molybdenum, Dissolved		526 µg/l				
	Nickel, Dissolved		<1.0 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		1.7 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		786 mg/l				
	Conductivity at 20C		19300 uS/cm				
	Potassium, Dissolved		180 mg/l				
	Sodium, Dissolved		4000 mg/l				
	Sulphate, Dissolved as SO4		1010 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		6270 mg/l				
	Fluoride		0.20 mg/l				
	Ammoniacal Nitrogen as N		27.40 mg/l				
	Carbon, Organic : Total as C :- {TOC}		6.9 mg/l				
	pH		7.9 pH Units				
	Ionic Balance		5.4 %				
	Electrical Conductivity		20083 µS/cm	Field Measurements			
	Temperature		13.8 deg C				
	Dissolved Oxygen		0.0 mg/l				
	pH		7.3 pH Units				
	Groundwater Level		2.66 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		<35 µg/l		21/07/2022	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<13 µg/l				
	Arsenic Dissolved		14.0 µg/l				
	Boron, Dissolved		12900 µg/l				
	Cadmium, Dissolved		<0.20 µg/l				
	Calcium, Dissolved		402 mg/l				
	Chromium, Dissolved		<2.0 µg/l				
	Copper, Dissolved		<40 µg/l				
	Magnesium, Dissolved		154 mg/l				
	Manganese, Dissolved		1020 µg/l				
	Molybdenum, Dissolved		792 µg/l				
	Nickel, Dissolved		<10.0 µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		<1.5 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		645 mg/l				
	Conductivity at 20C		7380 uS/cm				
	Potassium, Dissolved		130 mg/l				
	Sodium, Dissolved		1300 mg/l				
	Sulphate, Dissolved as SO4		978 mg/l				
	Nitrogen : Total Oxidised as N		<0.7 mg/l				
	Chloride		2210 mg/l				
	Fluoride		0.6 mg/l				
	Ammoniacal Nitrogen as N		7.0 mg/l				
	Carbon, Organic : Total as C :- {TOC}		5.7 mg/l				
	pH		7.9 pH Units				
	Ionic Balance		1.62 %				
	Electrical Conductivity		*8352* µS/cm	Field Measurements			
	Temperature		*14.8* deg C				
	Dissolved Oxygen		3.6 mg/l				
	pH		7.2 pH Units				
	Groundwater Level		4.01 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		n/s µg/l		13/10/2022	Sampling WSP / Testing ALS ***BH11 samples not taken by contractor due to time constraints.***	
	Antimony, Dissolved		n/s µg/l				
	Arsenic Dissolved		n/s µg/l				
	Boron, Dissolved		n/s µg/l				
	Cadmium, Dissolved		n/s µg/l				
	Calcium, Dissolved		n/s mg/l				
	Chromium, Dissolved		n/s µg/l				
	Copper, Dissolved		n/s µg/l				
	Magnesium, Dissolved		n/s mg/l				
	Manganese, Dissolved		n/s µg/l				
	Molybdenum, Dissolved		n/s µg/l				
	Nickel, Dissolved		n/s µg/l				
	Selenium Dissolved		n/t µg/l				
	Vanadium, Dissolved		n/s µg/l				
	Mercury, Dissolved		n/s µg/l				
	Alkalinity to pH 4.5 as CaCO3		n/s mg/l				
	Conductivity at 20C		n/s uS/cm				
	Potassium, Dissolved		n/s mg/l				
	Sodium, Dissolved		n/s mg/l				
	Sulphate, Dissolved as SO4		n/s mg/l				
	Nitrogen : Total Oxidised as N		n/s mg/l				
	Chloride		n/s mg/l				
	Fluoride		n/s mg/l				
	Ammoniacal Nitrogen as N		n/s mg/l				
	Carbon, Organic : Total as C :- {TOC}		n/s mg/l				
	pH		n/s pH Units				
	Ionic Balance		n/s %				
	Electrical Conductivity		n/s µS/cm	Field Measurements			
	Temperature		n/s deg C				
	Dissolved Oxygen		n/s mg/l				
	pH		n/s pH Units				
	Groundwater Level		3.22 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 24/02/2023 (authorised to sign as representative of the Operator)

(authorised to sign as representative of the Operator)