



CERTIFICATE OF ANALYSIS

Work Order	: PR2582798	Issue Date	: 16-Jul-2025
Customer	: PETOWAL MINING COMPANY SA	Laboratory	: ALS Czech Republic, s.r.o.
Contact	: Olivier DIENE	Contact	: Client Service
Address	: Sa Villa Kandia zone 9 Route du Méridien Président Almadie Dakar	Address	: Na Harfe 336/9 Prague 9 - Vysocany 190 00 Czech Republic
E-mail	: olivier.diene@petowal.com	E-mail	: customer.support@alsglobal.com
Telephone	: ----	Telephone	: +420 226 226 228
Project	: MAKOG1284	Page	: 1 of 12
Order number	: 1153	Date Samples Received	: 02-Jul-2025
		Quote number	: PR2020PETWO-SN0001 (CZ-200-15-0000)
Site	: Mako Gold Project, Sénégal	Date of test	: 02-Jul-2025 - 16-Jul-2025
Sampled by	: customer, Olivier DIENE	QC Level	: ALS CR Standard Quality Control Schedule

General Comments

This report shall not be reproduced except in full, without prior written approval from the laboratory. The laboratory is not responsible for the sample data supplied by the customer and their impact on the validity of the result.

The laboratory declares that the test results relate only to the listed samples. If "ALS" is not included in the test report in the "Sampled by" section, then the results refer to the sample as received.

Sample(s) PR2582798/007-010, method W-NO2-IC - LOR for particular sample(s) raised due to matrix interference (high salinity / conductivity).

Sample(s) PR2580798/011, 012, method W-METMSFL - LOR for particular sample(s) raised due to matrix interference (high conductivity)

Responsible for accuracy

Testing Laboratory No. 1163
Accredited by CAI according to
CSN EN ISO/IEC 17025:2018

Signatories

Lubomír Pokorný

Position

Country Manager



The company is certified according to ČSN EN ISO 14001 (Environmental management systems) and ČSN ISO 45001 (Occupational health and safety management systems)



Analytical Results

Sub-Matrix: DRINKING WATER				Client sample ID		ST2S		ST3S		----	
				Laboratory sample ID		PR2582798003		PR2582798004		----	
				Client sampling date / time		24-Jun-2025 09:58		24-Jun-2025 11:16		----	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU		
Physical Parameters											
Electrical Conductivity @ 25°C	W-CON-PCT	10.0	µS/cm	82.4	± 10.0%	83.8	± 10.0%	----	----		
pH Value	W-PH-PCT	1.00	-	7.13	± 1.0%	7.17	± 1.0%	----	----		
Nonmetallic Inorganic Parameters											
Ammonia and ammonium ions as N	W-NH4-SPC	0.040	mg/L	0.103	± 15.0%	0.463	± 15.0%	----	----		
Ammonia and ammonium ions as NH4	W-NH4-SPC	0.050	mg/L	0.132	± 15.0%	0.596	± 15.0%	----	----		
Chloride	W-CL-IC	1.00	mg/L	3.53	± 15.0%	4.30	± 15.0%	----	----		
Nitrates	W-NO3-IC	2.00	mg/L	<2.00	----	<2.00	----	----	----		
Nitrites	W-NO2-IC	0.040	mg/L	<0.040	----	<0.040	----	----	----		
Sulphate as SO4 2-	W-SO4-IC	5.00	mg/L	<5.00	----	<5.00	----	----	----		
Base neutralizing capacity (acidity) pH 8.3	W-ACID-PCT	0.150	mmol/L	<0.150	----	<0.150	----	----	----		
Nitrate as N	W-NO3-IC	0.500	mg/L	<0.500	----	<0.500	----	----	----		
Nitrite as N	W-NO2-IC	0.010	mg/L	<0.010	----	<0.010	----	----	----		
Base neutralizing capacity (acidity) pH 4.5	W-ACID-PCT	0.150	mmol/L	<0.150	----	<0.150	----	----	----		
Suspended solids dried at 105 °C	W-TSS-GR	5.0	mg/L	<5.0	----	<5.0	----	----	----		
Acid neutralizing capacity (alkalinity) pH 4.5	W-ALK-PCT	0.150	mmol/L	0.770	± 12.0%	0.758	± 12.0%	----	----		
Acid neutralizing capacity (alkalinity) pH 8.3	W-ALK-PCT	0.150	mmol/L	<0.150	----	<0.150	----	----	----		
Dissolved Metals / Major Cations											
Aluminium	W-METMSPD	1.0	µg/L	109	± 10.0%	76.0	± 10.0%	----	----		
Antimony	W-METMSPD	0.10	µg/L	<0.10	----	<0.10	----	----	----		
Arsenic	W-METMSPD	0.50	µg/L	<0.50	----	<0.50	----	----	----		
Barium	W-METMSFL6	0.00050	mg/L	0.0118	± 10.0%	0.00989	± 10.0%	----	----		
Beryllium	W-METMSPD	0.10	µg/L	<0.10	----	<0.10	----	----	----		
Bismuth	W-METMSPD	0.50	µg/L	<0.50	----	<0.50	----	----	----		
Boron	W-METMSFL6	0.0100	mg/L	<0.0100	----	<0.0100	----	----	----		
Cadmium	W-METMSPD	0.050	µg/L	<0.050	----	<0.050	----	----	----		
Calcium	W-METMSFL6	0.0500	mg/L	6.64	± 10.0%	6.34	± 10.0%	----	----		
Chromium	W-METMSPD	0.50	µg/L	<0.50	----	<0.50	----	----	----		
Cobalt	W-METMSPD	0.10	µg/L	<0.10	----	<0.10	----	----	----		
Copper	W-METMSPD	0.10	µg/L	0.43	± 10.0%	0.49	± 10.0%	----	----		
Iron	W-METMSFL6	0.0020	mg/L	<0.0020	----	0.0892	± 10.0%	----	----		
Lead	W-METMSPD	0.10	µg/L	<0.10	----	<0.10	----	----	----		
Lithium	W-METMSPD	1.0	µg/L	<1.0	----	<1.0	----	----	----		
Magnesium	W-METMSFL6	0.0030	mg/L	3.25	± 10.0%	3.20	± 10.0%	----	----		
Manganese	W-METMSPD	0.10	µg/L	<0.10	----	0.81	± 10.0%	----	----		
Mercury	W-HG-AFSFLL	0.0020	µg/L	<0.0020	----	<0.0020	----	----	----		
Molybdenum	W-METMSPD	0.10	µg/L	<0.10	----	<0.10	----	----	----		
Nickel	W-METMSPD	0.50	µg/L	<0.50	----	<0.50	----	----	----		
Potassium	W-METMSFL6	0.0500	mg/L	0.946	± 10.0%	0.964	± 10.0%	----	----		
Selenium	W-METMSPD	1.0	µg/L	<1.0	----	<1.0	----	----	----		
Silicon	W-METMSFL6	0.0100	mg/L	7.37	± 10.0%	7.64	± 10.0%	----	----		
Silver	W-METMSPD	0.010	µg/L	<0.010	----	<0.010	----	----	----		
Sodium	W-METMSFL6	0.0300	mg/L	3.00	± 10.0%	3.60	± 10.0%	----	----		
Strontium	W-METMSFL6	0.0010	mg/L	0.0211	± 10.0%	0.0209	± 10.0%	----	----		
Sulphur	W-METMSFL6	0.500	mg/L	<0.500	----	<0.500	----	----	----		
Thallium	W-METMSPD	0.10	µg/L	<0.10	----	<0.10	----	----	----		
Tin	W-METMSPD	0.50	µg/L	<0.50	----	<0.50	----	----	----		
Titanium	W-METMSPD	1.0	µg/L	<1.0	----	<1.0	----	----	----		
Uranium	W-METMSPD	0.10	µg/L	<0.10	----	<0.10	----	----	----		
Vanadium	W-METMSPD	1.0	µg/L	2.1	± 10.0%	1.5	± 10.0%	----	----		
Zinc	W-METMSPD	1.0	µg/L	4.6	± 10.0%	38.0	± 10.0%	----	----		



Sub-Matrix: GROUNDWATER				Client sample ID		GW3E		GW3F		GW3C	
				Laboratory sample ID		PR2582798005		PR2582798006		PR2582798007	
				Client sampling date / time		25-Jun-2025 15:31		25-Jun-2025 15:26		25-Jun-2025 15:12	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU		
Physical Parameters											
Electrical Conductivity @ 25°C	W-CON-PCT	10.0	µS/cm	209	± 10.0%	127	± 10.0%	660	± 10.0%		
pH Value	W-PH-PCT	1.00	-	7.78	± 1.0%	6.45	± 1.0%	7.55	± 1.0%		
Nonmetallic Inorganic Parameters											
Ammonia and ammonium ions as N	W-NH4-SPC	0.040	mg/L	0.075	± 15.0%	0.106	± 15.0%	0.075	± 15.0%		
Ammonia and ammonium ions as NH4	W-NH4-SPC	0.050	mg/L	0.097	± 15.0%	0.136	± 15.0%	0.096	± 15.0%		
Chloride	W-CL-IC	1.00	mg/L	1.98	± 15.0%	3.17	± 15.0%	12.4	± 15.0%		
Easily released cyanides	W-CNF-PHO	0.005	mg/L	<0.005	---	<0.005	---	<0.005	---		
Nitrates	W-NO3-IC	2.00	mg/L	5.14	± 15.0%	<2.00	---	12.3	± 15.0%		
Nitrites	W-NO2-IC	0.040	mg/L	<0.040	---	0.090	± 25.0%	<0.060	---		
Sulphate as SO4 2-	W-SO4-IC	5.00	mg/L	<5.00	---	<5.00	---	190	± 15.0%		
Total Cyanide	W-CNT-PHO	0.005	mg/L	<0.005	---	<0.005	---	<0.005	---		
Weak Acid Dissociable Cyanide	W-CNWAD-PHO	0.005	mg/L	<0.005	---	<0.005	---	<0.005	---		
Base neutralizing capacity (acidity) pH 8.3	W-ACID-PCT	0.150	mmol/L	<0.150	---	0.788	± 15.0%	0.156	± 15.0%		
Free Cyanide	W-CNF-PHO	0.005	mg/L	<0.005	---	<0.005	---	<0.005	---		
Nitrate as N	W-NO3-IC	0.500	mg/L	1.16	± 15.0%	<0.500	---	2.77	± 15.0%		
Nitrite as N	W-NO2-IC	0.010	mg/L	<0.010	---	0.028	± 25.0%	<0.015	---		
Base neutralizing capacity (acidity) pH 4.5	W-ACID-PCT	0.150	mmol/L	<0.150	---	<0.150	---	<0.150	---		
Suspended solids dried at 105 °C	W-TSS-GR	5.0	mg/L	5.3	± 12.8%	24.5	± 10.6%	<5.0	---		
Acid neutralizing capacity (alkalinity) pH 4.5	W-ALK-PCT	0.150	mmol/L	2.14	± 12.0%	1.17	± 12.0%	2.76	± 12.0%		
Acid neutralizing capacity (alkalinity) pH 8.3	W-ALK-PCT	0.150	mmol/L	<0.150	---	<0.150	---	<0.150	---		
Total Metals / Major Cations											
Calcium	W-METMSFX6	0.0500	mg/L	20.6	± 10.0%	9.50	± 10.0%	51.4	± 10.0%		
Iron	W-METMSFX6	0.0020	mg/L	0.0135	± 10.0%	0.0446	± 10.0%	0.0090	± 10.0%		
Magnesium	W-METMSFX6	0.0030	mg/L	7.74	± 10.0%	4.65	± 10.0%	24.7	± 10.0%		
Potassium	W-METMSFX6	0.0500	mg/L	1.22	± 10.0%	0.648	± 10.0%	0.546	± 10.0%		
Sodium	W-METMSFX6	0.0300	mg/L	8.68	± 10.0%	7.37	± 10.0%	42.7	± 10.0%		
Dissolved Metals / Major Cations											
Aluminium	W-METMSPD	1.0	µg/L	<1.0	---	<1.0	---	2.4	± 10.0%		
Antimony	W-METMSPD	0.10	µg/L	0.38	± 10.0%	<0.10	---	<0.10	---		
Arsenic	W-METMSPD	0.50	µg/L	<0.50	---	<0.50	---	<0.50	---		
Barium	W-METMSFL6	0.00050	mg/L	0.0162	± 10.0%	0.0157	± 10.0%	0.0110	± 10.0%		
Beryllium	W-METMSPD	0.10	µg/L	<0.10	---	<0.10	---	<0.10	---		
Bismuth	W-METMSPD	0.50	µg/L	<0.50	---	<0.50	---	<0.50	---		
Boron	W-METMSFL6	0.0100	mg/L	<0.0100	---	<0.0100	---	0.0145	± 10.0%		
Cadmium	W-METMSPD	0.050	µg/L	<0.050	---	<0.050	---	<0.050	---		
Calcium	W-METMSFL6	0.0500	mg/L	21.4	± 10.0%	9.41	± 10.0%	52.1	± 10.0%		
Chromium	W-METMSPD	0.50	µg/L	<0.50	---	0.54	± 10.0%	0.80	± 10.0%		
Cobalt	W-METMSPD	0.10	µg/L	<0.10	---	1.14	± 10.0%	1.00	± 10.0%		
Copper	W-METMSPD	0.10	µg/L	0.44	± 10.0%	0.15	± 10.0%	0.67	± 10.0%		
Iron	W-METMSFL6	0.0020	mg/L	0.0033	± 10.0%	0.0024	± 10.0%	0.0049	± 10.0%		
Lead	W-METMSPD	0.10	µg/L	<0.10	---	<0.10	---	<0.10	---		
Lithium	W-METMSPD	1.0	µg/L	31.1	± 10.0%	<1.0	---	<1.0	---		
Magnesium	W-METMSFL6	0.0030	mg/L	8.06	± 10.0%	4.77	± 10.0%	25.8	± 10.0%		
Manganese	W-METMSPD	0.10	µg/L	1.90	± 10.0%	66.4	± 10.0%	0.24	± 10.0%		
Mercury	W-HG-AFSFLL	0.0020	µg/L	<0.0020	---	<0.0020	---	<0.0020	---		
Molybdenum	W-METMSPD	0.10	µg/L	1.74	± 10.0%	0.59	± 10.0%	1.00	± 10.0%		
Nickel	W-METMSPD	0.50	µg/L	0.75	± 10.0%	0.57	± 10.0%	<0.50	---		
Potassium	W-METMSFL6	0.0500	mg/L	1.21	± 10.0%	0.437	± 10.0%	0.429	± 10.0%		
Selenium	W-METMSPD	1.0	µg/L	<1.0	---	<1.0	---	<1.0	---		
Silicon	W-METMSFL6	0.0100	mg/L	24.7	± 10.0%	20.1	± 10.0%	18.0	± 10.0%		
Silver	W-METMSPD	0.010	µg/L	<0.010	---	<0.010	---	<0.010	---		
Sodium	W-METMSFL6	0.0300	mg/L	8.32	± 10.0%	7.01	± 10.0%	43.9	± 10.0%		



Sub-Matrix: GROUNDWATER				Client sample ID		GW3E		GW3F		GW3C	
				Laboratory sample ID		PR2582798005		PR2582798006		PR2582798007	
				Client sampling date / time		25-Jun-2025 15:31		25-Jun-2025 15:26		25-Jun-2025 15:12	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU		
Dissolved Metals / Major Cations - Continued											
Strontium	W-METMSFL6	0.0010	mg/L	0.0515	± 10.0%	0.0354	± 10.0%	0.0982	± 10.0%		
Sulphur	W-METMSFL6	0.500	mg/L	<0.500	---	0.717	± 10.0%	61.2	± 10.0%		
Thallium	W-METMSPD	0.10	µg/L	<0.10	---	<0.10	---	<0.10	---		
Tin	W-METMSPD	0.50	µg/L	<0.50	---	<0.50	---	<0.50	---		
Titanium	W-METMSPD	1.0	µg/L	<1.0	---	<1.0	---	<1.0	---		
Uranium	W-METMSPD	0.10	µg/L	<0.10	---	<0.10	---	<0.10	---		
Vanadium	W-METMSPD	1.0	µg/L	1.8	± 10.0%	1.4	± 10.0%	16.5	± 10.0%		
Zinc	W-METMSPD	1.0	µg/L	224	± 10.0%	17.8	± 10.0%	2.3	± 10.0%		

Sub-Matrix: GROUNDWATER				Client sample ID		GW3C (a)		GW3D		----	
				Laboratory sample ID		PR2582798008		PR2582798009		----	
				Client sampling date / time		25-Jun-2025 15:17		25-Jun-2025 15:04		----	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU		
Physical Parameters											
Electrical Conductivity @ 25°C	W-CON-PCT	10.0	µS/cm	686	± 10.0%	1040	± 10.0%	----	----		
pH Value	W-PH-PCT	1.00	-	7.43	± 1.0%	7.13	± 1.0%	----	----		
Nonmetallic Inorganic Parameters											
Ammonia and ammonium ions as N	W-NH4-SPC	0.040	mg/L	0.108	± 15.0%	0.179	± 15.0%	----	----		
Ammonia and ammonium ions as NH4	W-NH4-SPC	0.050	mg/L	0.139	± 15.0%	0.231	± 15.0%	----	----		
Chloride	W-CL-IC	1.00	mg/L	12.6	± 15.0%	16.0	± 15.0%	----	----		
Easily released cyanides	W-CNF-PHO	0.005	mg/L	<0.005	---	<0.005	---	----	----		
Nitrates	W-NO3-IC	2.00	mg/L	12.6	± 15.0%	<2.00	---	----	----		
Nitrites	W-NO2-IC	0.040	mg/L	<0.060	---	<0.060	---	----	----		
Sulphate as SO4 2-	W-SO4-IC	5.00	mg/L	197	± 15.0%	479	± 15.0%	----	----		
Total Cyanide	W-CNT-PHO	0.005	mg/L	<0.005	---	<0.005	---	----	----		
Weak Acid Dissociable Cyanide	W-CNWAD-PHO	0.005	mg/L	<0.005	---	<0.005	---	----	----		
Base neutralizing capacity (acidity) pH 8.3	W-ACID-PCT	0.150	mmol/L	0.158	± 15.0%	0.323	± 15.0%	----	----		
Free Cyanide	W-CNF-PHO	0.005	mg/L	<0.005	---	<0.005	---	----	----		
Nitrate as N	W-NO3-IC	0.500	mg/L	2.84	± 15.0%	<0.500	---	----	----		
Nitrite as N	W-NO2-IC	0.010	mg/L	<0.015	---	<0.015	---	----	----		
Base neutralizing capacity (acidity) pH 4.5	W-ACID-PCT	0.150	mmol/L	<0.150	---	<0.150	---	----	----		
Suspended solids dried at 105 °C	W-TSS-GR	5.0	mg/L	<5.0	---	6.9	± 12.2%	----	----		
Acid neutralizing capacity (alkalinity) pH 4.5	W-ALK-PCT	0.150	mmol/L	2.57	± 12.0%	3.52	± 12.0%	----	----		
Acid neutralizing capacity (alkalinity) pH 8.3	W-ALK-PCT	0.150	mmol/L	<0.150	---	<0.150	---	----	----		
Total Metals / Major Cations											
Calcium	W-METMSFX6	0.0500	mg/L	50.0	± 10.0%	100	± 10.0%	----	----		
Iron	W-METMSFX6	0.0020	mg/L	0.0138	± 10.0%	0.0233	± 10.0%	----	----		
Magnesium	W-METMSFX6	0.0030	mg/L	23.7	± 10.0%	50.4	± 10.0%	----	----		
Potassium	W-METMSFX6	0.0500	mg/L	0.546	± 10.0%	0.462	± 10.0%	----	----		
Sodium	W-METMSFX6	0.0300	mg/L	42.0	± 10.0%	55.5	± 10.0%	----	----		
Dissolved Metals / Major Cations											
Aluminium	W-METMSPD	1.0	µg/L	1.3	± 10.0%	1.3	± 10.0%	----	----		
Antimony	W-METMSPD	0.10	µg/L	<0.10	---	<0.10	---	----	----		
Arsenic	W-METMSPD	0.50	µg/L	<0.50	---	<0.50	---	----	----		
Barium	W-METMSFL6	0.00050	mg/L	0.0109	± 10.0%	0.0185	± 10.0%	----	----		
Beryllium	W-METMSPD	0.10	µg/L	<0.10	---	<0.10	---	----	----		
Bismuth	W-METMSPD	0.50	µg/L	<0.50	---	<0.50	---	----	----		
Boron	W-METMSFL6	0.0100	mg/L	0.0156	± 10.0%	0.0171	± 10.0%	----	----		
Cadmium	W-METMSPD	0.050	µg/L	<0.050	---	<0.050	---	----	----		
Calcium	W-METMSFL6	0.0500	mg/L	52.2	± 10.0%	107	± 10.0%	----	----		



Sub-Matrix: GROUNDWATER				Client sample ID		GW3C (a)		GW3D		----	
				Laboratory sample ID		PR2582798008		PR2582798009		----	
				Client sampling date / time		25-Jun-2025 15:17		25-Jun-2025 15:04		----	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU		
Dissolved Metals / Major Cations - Continued											
Chromium	W-METMSPD	0.50	µg/L	<0.50	---	<0.50	---	----	----		
Cobalt	W-METMSPD	0.10	µg/L	1.02	± 10.0%	1.27	± 10.0%	----	----		
Copper	W-METMSPD	0.10	µg/L	0.82	± 10.0%	0.91	± 10.0%	----	----		
Iron	W-METMSFL6	0.0020	mg/L	<0.0020	---	<0.0020	---	----	----		
Lead	W-METMSPD	0.10	µg/L	<0.10	---	<0.10	---	----	----		
Lithium	W-METMSPD	1.0	µg/L	<1.0	---	2.1	± 10.0%	----	----		
Magnesium	W-METMSFL6	0.0030	mg/L	25.5	± 10.0%	51.4	± 10.0%	----	----		
Manganese	W-METMSPD	0.10	µg/L	0.17	± 10.0%	32.7	± 10.0%	----	----		
Mercury	W-HG-AFSLL	0.0020	µg/L	<0.0020	---	<0.0020	---	----	----		
Molybdenum	W-METMSPD	0.10	µg/L	1.19	± 10.0%	1.34	± 10.0%	----	----		
Nickel	W-METMSPD	0.50	µg/L	<0.50	---	0.72	± 10.0%	----	----		
Potassium	W-METMSFL6	0.0500	mg/L	0.435	± 10.0%	0.331	± 10.0%	----	----		
Selenium	W-METMSPD	1.0	µg/L	<1.0	---	<1.0	---	----	----		
Silicon	W-METMSFL6	0.0100	mg/L	16.9	± 10.0%	19.0	± 10.0%	----	----		
Silver	W-METMSPD	0.010	µg/L	<0.010	---	<0.010	---	----	----		
Sodium	W-METMSFL6	0.0300	mg/L	43.7	± 10.0%	56.8	± 10.0%	----	----		
Strontium	W-METMSFL6	0.0010	mg/L	0.0984	± 10.0%	0.198	± 10.0%	----	----		
Sulphur	W-METMSFL6	0.500	mg/L	60.4	± 10.0%	149	± 10.0%	----	----		
Thallium	W-METMSPD	0.10	µg/L	<0.10	---	<0.10	---	----	----		
Tin	W-METMSPD	0.50	µg/L	<0.50	---	<0.50	---	----	----		
Titanium	W-METMSPD	1.0	µg/L	<1.0	---	<1.0	---	----	----		
Uranium	W-METMSPD	0.10	µg/L	<0.10	---	<0.10	---	----	----		
Vanadium	W-METMSPD	1.0	µg/L	17.6	± 10.0%	5.6	± 10.0%	----	----		
Zinc	W-METMSPD	1.0	µg/L	2.3	± 10.0%	3.1	± 10.0%	----	----		

Sub-Matrix: SURFACE WATER				Client sample ID		SW5		SW11		----	
				Laboratory sample ID		PR2582798001		PR2582798002		----	
				Client sampling date / time		25-Jun-2025 09:34		24-Jun-2025 15:45		----	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU		
Physical Parameters											
Electrical Conductivity @ 25°C	W-CON-PCT	10.0	µS/cm	72.1	± 10.0%	61.9	± 10.0%	----	----		
pH Value	W-PH-PCT	1.00	-	7.21	± 1.0%	7.34	± 1.0%	----	----		
Nonmetallic Inorganic Parameters											
Ammonia and ammonium ions as N	W-NH4-SPC	0.040	mg/L	0.134	± 15.0%	0.091	± 15.0%	----	----		
Ammonia and ammonium ions as NH4	W-NH4-SPC	0.050	mg/L	0.172	± 15.0%	0.117	± 15.0%	----	----		
Easily released cyanides	W-CNF-PHO	0.005	mg/L	<0.005	---	<0.005	---	----	----		
Nitrates	W-NO3-IC	2.00	mg/L	<2.00	---	<2.00	---	----	----		
Nitrites	W-NO2-IC	0.040	mg/L	<0.040	---	<0.040	---	----	----		
Sulphate as SO4 2-	W-SO4-IC	5.00	mg/L	<5.00	---	<5.00	---	----	----		
Total Cyanide	W-CNT-PHO	0.005	mg/L	<0.005	---	<0.005	---	----	----		
Weak Acid Dissociable Cyanide	W-CNWAD-PHO	0.005	mg/L	<0.005	---	<0.005	---	----	----		
Free Cyanide	W-CNF-PHO	0.005	mg/L	<0.005	---	<0.005	---	----	----		
Nitrate as N	W-NO3-IC	0.500	mg/L	<0.500	---	<0.500	---	----	----		
Nitrite as N	W-NO2-IC	0.010	mg/L	<0.010	---	<0.010	---	----	----		
Suspended solids dried at 105 °C	W-TSS-GR	5.0	mg/L	7.3	± 12.0%	12.7	± 11.2%	----	----		
Acid neutralizing capacity (alkalinity) pH 4.5	W-ALK-PCT	0.150	mmol/L	0.691	± 12.0%	0.597	± 12.0%	----	----		
Acid neutralizing capacity (alkalinity) pH 8.3	W-ALK-PCT	0.150	mmol/L	<0.150	---	<0.150	---	----	----		
Dissolved Metals / Major Cations											
Aluminium	W-METMSPD	1.0	µg/L	3.3	± 10.0%	8.8	± 10.0%	----	----		
Antimony	W-METMSPD	0.10	µg/L	<0.10	---	<0.10	---	----	----		
Arsenic	W-METMSPD	0.50	µg/L	1.11	± 10.0%	0.96	± 10.0%	----	----		
Barium	W-METMSFL6	0.00050	mg/L	0.0340	± 10.0%	0.0305	± 10.0%	----	----		



Sub-Matrix: SURFACE WATER				Client sample ID		SW5		SW11		----	
				Laboratory sample ID		PR2582798001		PR2582798002		----	
				Client sampling date / time		25-Jun-2025 09:34		24-Jun-2025 15:45		----	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU		
Dissolved Metals / Major Cations - Continued											
Beryllium	W-METMSPD	0.10	µg/L	<0.10	---	<0.10	---	----	----		
Bismuth	W-METMSPD	0.50	µg/L	<0.50	---	<0.50	---	----	----		
Boron	W-METMSFL6	0.0100	mg/L	<0.0100	---	<0.0100	---	----	----		
Cadmium	W-METMSPD	0.050	µg/L	<0.050	---	<0.050	---	----	----		
Calcium	W-METMSFL6	0.0500	mg/L	4.30	± 10.0%	4.22	± 10.0%	----	----		
Chromium	W-METMSPD	0.50	µg/L	<0.50	---	<0.50	---	----	----		
Cobalt	W-METMSPD	0.10	µg/L	0.12	± 10.0%	<0.10	---	----	----		
Copper	W-METMSPD	0.10	µg/L	0.55	± 10.0%	0.65	± 10.0%	----	----		
Iron	W-METMSFL6	0.0020	mg/L	0.0100	± 10.0%	0.0147	± 10.0%	----	----		
Lead	W-METMSPD	0.10	µg/L	<0.10	---	<0.10	---	----	----		
Lithium	W-METMSPD	1.0	µg/L	<1.0	---	<1.0	---	----	----		
Magnesium	W-METMSFL6	0.0030	mg/L	3.07	± 10.0%	2.82	± 10.0%	----	----		
Manganese	W-METMSPD	0.10	µg/L	<0.10	---	<0.10	---	----	----		
Mercury	W-HG-AFSFLL	0.0020	µg/L	0.0022	± 10.0%	<0.0020	---	----	----		
Molybdenum	W-METMSPD	0.10	µg/L	0.19	± 10.0%	0.14	± 10.0%	----	----		
Nickel	W-METMSPD	0.50	µg/L	<0.50	---	<0.50	---	----	----		
Potassium	W-METMSFL6	0.0500	mg/L	1.52	± 10.0%	1.24	± 10.0%	----	----		
Selenium	W-METMSPD	1.0	µg/L	<1.0	---	<1.0	---	----	----		
Silicon	W-METMSFL6	0.0100	mg/L	8.05	± 10.0%	6.93	± 10.0%	----	----		
Silver	W-METMSPD	0.010	µg/L	<0.010	---	<0.010	---	----	----		
Sodium	W-METMSFL6	0.0300	mg/L	3.54	± 10.0%	2.40	± 10.0%	----	----		
Strontium	W-METMSFL6	0.0010	mg/L	0.0241	± 10.0%	0.0220	± 10.0%	----	----		
Sulphur	W-METMSFL6	0.500	mg/L	<0.500	---	<0.500	---	----	----		
Thallium	W-METMSPD	0.10	µg/L	<0.10	---	<0.10	---	----	----		
Tin	W-METMSPD	0.50	µg/L	<0.50	---	<0.50	---	----	----		
Titanium	W-METMSPD	1.0	µg/L	<1.0	---	<1.0	---	----	----		
Uranium	W-METMSPD	0.10	µg/L	<0.10	---	<0.10	---	----	----		
Vanadium	W-METMSPD	1.0	µg/L	<1.0	---	<1.0	---	----	----		
Zinc	W-METMSPD	1.0	µg/L	<1.0	---	<1.0	---	----	----		

Sub-Matrix: WASTEWATER				Client sample ID		TMF-SUMP		TMF		UD	
				Laboratory sample ID		PR2582798010		PR2582798011		PR2582798012	
				Client sampling date / time		25-Jun-2025 15:45		24-Jun-2025 10:33		24-Jun-2025 10:54	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU		
Physical Parameters											
Electrical Conductivity @ 25°C	W-CON-PCT	10.0	µS/cm	2740	± 10.0%	5220	± 10.0%	4540	± 10.0%		
pH Value	W-PH-PCT	1.00	-	7.70	± 1.0%	8.40	± 1.0%	7.26	± 1.0%		
Nonmetallic Inorganic Parameters											
Ammonia and ammonium ions as N	W-NH4-SPC	0.040	mg/L	<0.040	---	27.9	± 15.0%	15.8	± 15.0%		
Ammonia and ammonium ions as NH4	W-NH4-SPC	0.050	mg/L	<0.050	---	36.0	± 15.0%	20.4	± 15.0%		
Biochemical Oxygen Demand (BOD 5)	W-BOD5-OXYL	1.0	mg/L	<1.0	---	<1.0	---	<1.0	---		
Chemical Oxygen Demand (COD-Cr)	W-COD-SPC	5.0	mg/L	<5.0	---	9.1	± 26.0%	<5.0	---		
Chloride	W-CL-IC	1.00	mg/L	40.8	± 15.0%	51.2	± 15.0%	----	----		
Easily released cyanides	W-CNF-PHO	0.005	mg/L	<0.005	---	0.283	± 20.0%	0.012	± 34.8%		
Fluoride	W-F-IC	0.200	mg/L	<0.200	---	<0.200	---	1.89	± 15.0%		
Nitrates	W-NO3-IC	2.00	mg/L	136	± 15.0%	350	± 15.0%	<2.00	---		
Nitrites	W-NO2-IC	0.040	mg/L	<0.300	---	18.9	± 25.0%	1.73	± 25.0%		
Phosphorus (as P2O5)	W-PTOT-SPC	0.120	mg/L	<0.120	---	<0.120	---	<0.120	---		
Sulphate as SO4 2-	W-SO4-IC	5.00	mg/L	1350	± 15.0%	2500	± 15.0%	2330	± 15.0%		
Total Cyanide	W-CNT-PHO	0.005	mg/L	0.022	± 21.8%	0.480	± 15.0%	0.723	± 15.0%		
Total Phosphorus as P	W-PTOT-SPC	0.050	mg/L	<0.050	---	<0.050	---	<0.050	---		
Total Phosphorus as PO4 3-	W-PTOT-SPC	0.150	mg/L	<0.150	---	<0.150	---	<0.150	---		



Sub-Matrix: WASTEWATER				Client sample ID		TMF-SUMP		TMF		UD	
				Laboratory sample ID		PR2582798010		PR2582798011		PR2582798012	
				Client sampling date / time		25-Jun-2025 15:45		24-Jun-2025 10:33		24-Jun-2025 10:54	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU		
Nonmetallic Inorganic Parameters - Continued											
Weak Acid Dissociable Cyanide	W-CNWAD-PHO	0.005	mg/L	<0.005	---	0.289	± 20.0%	0.010	± 38.1%		
Free Cyanide	W-CNF-PHO	0.005	mg/L	<0.005	---	0.283	± 20.0%	0.012	± 34.8%		
Nitrate as N	W-NO3-IC	0.500	mg/L	30.7	± 15.0%	79.0	± 15.0%	<0.500	---		
Nitrite as N	W-NO2-IC	0.010	mg/L	<0.075	---	5.74	± 25.0%	0.526	± 25.0%		
Total Nitrogen as N	W-NTOT-CL	0.10	mg/L	38.0	± 30.0%	122	± 30.0%	18.4	± 30.0%		
Suspended solids dried at 105 °C	W-TSS-GR	5.0	mg/L	<5.0	---	10.0	± 11.5%	5.6	± 12.6%		
Acid neutralizing capacity (alkalinity) pH 4.5	W-ALK-PCT	0.150	mmol/L	2.45	± 12.0%	2.53	± 12.0%	1.19	± 12.0%		
Acid neutralizing capacity (alkalinity) pH 8.3	W-ALK-PCT	0.150	mmol/L	<0.150	---	<0.150	---	<0.150	---		
Total Metals / Major Cations											
Calcium	W-METMSFX6	0.0500	mg/L	257	± 10.0%	200	± 10.0%	112	± 10.0%		
Iron	W-METMSFX6	0.0020	mg/L	0.0193	± 10.0%	0.197	± 10.0%	0.524	± 10.0%		
Magnesium	W-METMSFX6	0.0030	mg/L	108	± 10.0%	34.7	± 10.0%	4.78	± 10.0%		
Potassium	W-METMSFX6	0.0500	mg/L	1.92	± 10.0%	66.3	± 10.0%	14.2	± 10.0%		
Sodium	W-METMSFX6	0.0300	mg/L	262	± 10.0%	891	± 10.0%	890	± 10.0%		
Dissolved Metals / Major Cations											
Aluminium	W-METMSPD	1.0	µg/L	3.8	± 10.0%	49.2	± 10.0%	<2.0	---		
Antimony	W-METMSPD	0.10	µg/L	<0.10	---	30.8	± 10.0%	<0.20	---		
Arsenic	W-METMSPD	0.50	µg/L	<0.50	---	104	± 10.0%	4.01	± 10.0%		
Barium	W-METMSFL6	0.00050	mg/L	0.0282	± 10.0%	0.0761	± 10.0%	0.0357	± 10.0%		
Beryllium	W-METMSPD	0.10	µg/L	<0.10	---	<0.20	---	<0.20	---		
Bismuth	W-METMSPD	0.50	µg/L	<0.50	---	<1.00	---	<1.00	---		
Boron	W-METMSFL6	0.0100	mg/L	0.0426	± 10.0%	0.157	± 10.0%	0.140	± 10.0%		
Cadmium	W-METMSPD	0.050	µg/L	<0.050	---	0.100	± 10.0%	0.118	± 10.0%		
Calcium	W-METMSFL6	0.0500	mg/L	268	± 10.0%	204	± 10.0%	112	± 10.0%		
Chromium	W-METMSPD	0.50	µg/L	<0.50	---	<1.00	---	<1.00	---		
Cobalt	W-METMSPD	0.10	µg/L	20.2	± 10.0%	56.3	± 10.0%	24.4	± 10.0%		
Copper	W-METMSPD	0.10	µg/L	0.36	± 10.0%	101	± 10.0%	0.77	± 10.0%		
Iron	W-METMSFL6	0.0020	mg/L	0.0075	± 10.0%	0.0588	± 10.0%	0.164	± 10.0%		
Lead	W-METMSPD	0.10	µg/L	<0.10	---	<0.20	---	<0.20	---		
Lithium	W-METMSPD	1.0	µg/L	3.6	± 10.0%	5.6	± 10.0%	<2.0	---		
Magnesium	W-METMSFL6	0.0030	mg/L	104	± 10.0%	35.8	± 10.0%	4.42	± 10.0%		
Manganese	W-METMSPD	0.10	µg/L	5.90	± 10.0%	3.03	± 10.0%	1760	± 10.0%		
Mercury	W-HG-AFSFLL	0.0020	µg/L	<0.0020	---	<0.0020	---	<0.0020	---		
Molybdenum	W-METMSPD	0.10	µg/L	4.03	± 10.0%	303	± 10.0%	398	± 10.0%		
Nickel	W-METMSPD	0.50	µg/L	0.60	± 10.0%	2.30	± 10.0%	<1.00	---		
Potassium	W-METMSFL6	0.0500	mg/L	1.69	± 10.0%	69.4	± 10.0%	14.2	± 10.0%		
Selenium	W-METMSPD	1.0	µg/L	1.0	± 10.0%	7.7	± 10.0%	<2.0	---		
Silicon	W-METMSFL6	0.0100	mg/L	20.9	± 10.0%	6.09	± 10.0%	6.75	± 10.0%		
Silver	W-METMSPD	0.010	µg/L	<0.010	---	<0.020	---	<0.020	---		
Sodium	W-METMSFL6	0.0300	mg/L	279	± 10.0%	944	± 10.0%	934	± 10.0%		
Strontium	W-METMSFL6	0.0010	mg/L	0.702	± 10.0%	0.856	± 10.0%	0.402	± 10.0%		
Sulphur	W-METMSFL6	0.500	mg/L	457	± 10.0%	781	± 10.0%	731	± 10.0%		
Thallium	W-METMSPD	0.10	µg/L	<0.10	---	<0.20	---	<0.20	---		
Tin	W-METMSPD	0.50	µg/L	<0.50	---	<1.00	---	<1.00	---		
Titanium	W-METMSPD	1.0	µg/L	<1.0	---	<2.0	---	<2.0	---		
Uranium	W-METMSPD	0.10	µg/L	<0.10	---	0.39	± 10.0%	<0.20	---		
Vanadium	W-METMSPD	1.0	µg/L	6.8	± 10.0%	5.0	± 10.0%	<2.0	---		
Zinc	W-METMSPD	1.0	µg/L	7.6	± 10.0%	3.6	± 10.0%	11.3	± 10.0%		

Sub-Matrix: WASTEWATER				Client sample ID		PW		EU2-S		SCS TMF	
				Laboratory sample ID		PR2582798013		PR2582798014		PR2582798015	
				Client sampling date / time		26-Jun-2025 13:56		24-Jun-2025 09:51		25-Jun-2025 15:24	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU		
Physical Parameters											



Sub-Matrix: WASTEWATER				Client sample ID		PW		EU2-S		SCS TMF	
Laboratory sample ID				PR2582798013		PR2582798014		PR2582798015			
Client sampling date / time				26-Jun-2025 13:56		24-Jun-2025 09:51		25-Jun-2025 15:24			
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU		
Physical Parameters - Continued											
Electrical Conductivity @ 25°C	W-CON-PCT	10.0	µS/cm	1980	± 10.0%	628	± 10.0%	512	± 10.0%		
pH Value	W-PH-PCT	1.00	-	7.98	± 1.0%	7.31	± 1.0%	7.48	± 1.0%		
Agregate Parameters											
Total Extractable Compounds	W-TEC-GR	5.0	mg/L	----	----	<5.0	----	<5.0	----		
Nonmetallic Inorganic Parameters											
Ammonia and ammonium ions as N	W-NH4-SPC	0.040	mg/L	4.93	± 15.0%	----	----	0.142	± 15.0%		
Ammonia and ammonium ions as NH4	W-NH4-SPC	0.050	mg/L	6.35	± 15.0%	----	----	0.183	± 15.0%		
Biochemical Oxygen Demand (BOD 5)	W-BOD5-OXY	1.0	mg/L	----	----	----	----	<1.0	----		
Biochemical Oxygen Demand (BOD 5)	W-BOD5-OXYL	1.0	mg/L	<1.0	----	3.8	± 20.2%	----	----		
Chemical Oxygen Demand (COD-Cr)	W-COD-SPC	5.0	mg/L	<5.0	----	37.0	± 17.7%	8.7	± 26.5%		
Chloride	W-CL-IC	1.00	mg/L	----	----	----	----	5.52	± 15.0%		
Easily released cyanides	W-CNF-PHO	0.005	mg/L	<0.005	----	----	----	<0.005	----		
Fluoride	W-F-IC	0.200	mg/L	0.442	± 15.0%	<0.200	----	0.324	± 15.0%		
Nitrates	W-NO3-IC	2.00	mg/L	253	± 15.0%	----	----	11.8	± 15.0%		
Nitrites	W-NO2-IC	0.040	mg/L	2.51	± 25.0%	----	----	0.190	± 25.0%		
Phosphorus (as P2O5)	W-PTOT-SPC	0.120	mg/L	<0.120	----	11.8	± 20.0%	<0.120	----		
Sulphate as SO4 2-	W-SO4-IC	5.00	mg/L	747	± 15.0%	----	----	168	± 15.0%		
Total Cyanide	W-CNT-PHO	0.005	mg/L	<0.005	----	<0.005	----	<0.005	----		
Total Phosphorus as P	W-PTOT-SPC	0.050	mg/L	<0.050	----	5.16	± 20.0%	<0.050	----		
Total Phosphorus as PO4 3-	W-PTOT-SPC	0.150	mg/L	<0.150	----	15.8	± 20.0%	<0.150	----		
Weak Acid Dissociable Cyanide	W-CNWAD-PHO	0.005	mg/L	<0.005	----	----	----	<0.005	----		
Free Cyanide	W-CNF-PHO	0.005	mg/L	<0.005	----	----	----	<0.005	----		
Nitrate as N	W-NO3-IC	0.500	mg/L	57.2	± 15.0%	----	----	2.66	± 15.0%		
Nitrite as N	W-NO2-IC	0.010	mg/L	0.763	± 25.0%	----	----	0.058	± 25.0%		
Total Nitrogen as N	W-NTOT-CL	0.10	mg/L	72.8	± 30.0%	42.9	± 30.0%	3.13	± 30.0%		
Suspended solids dried at 105 °C	W-TSS-GR	5.0	mg/L	<5.0	----	6.4	± 12.4%	9.2	± 11.6%		
Acid neutralizing capacity (alkalinity) pH 4.5	W-ALK-PCT	0.150	mmol/L	2.09	± 12.0%	----	----	1.17	± 12.0%		
Acid neutralizing capacity (alkalinity) pH 8.3	W-ALK-PCT	0.150	mmol/L	<0.150	----	----	----	<0.150	----		
Total Metals / Major Cations											
Calcium	W-METMSFX6	0.0500	mg/L	246	± 10.0%	----	----	79.6	± 10.0%		
Iron	W-METMSFX6	0.0020	mg/L	0.118	± 10.0%	----	----	0.0457	± 10.0%		
Magnesium	W-METMSFX6	0.0030	mg/L	47.6	± 10.0%	----	----	22.5	± 10.0%		
Potassium	W-METMSFX6	0.0500	mg/L	7.92	± 10.0%	----	----	4.16	± 10.0%		
Sodium	W-METMSFX6	0.0300	mg/L	124	± 10.0%	----	----	55.9	± 10.0%		
Dissolved Metals / Major Cations											
Aluminium	W-METMSPD	1.0	µg/L	17.8	± 10.0%	5.3	± 10.0%	2.7	± 10.0%		
Antimony	W-METMSPD	0.10	µg/L	3.45	± 10.0%	<0.10	----	<0.10	----		
Arsenic	W-METMSPD	0.50	µg/L	9.65	± 10.0%	0.61	± 10.0%	<0.50	----		
Barium	W-METMSFL6	0.00050	mg/L	0.0414	± 10.0%	0.0131	± 10.0%	0.0802	± 10.0%		
Beryllium	W-METMSPD	0.10	µg/L	<0.10	----	<0.10	----	<0.10	----		
Bismuth	W-METMSPD	0.50	µg/L	<0.50	----	<0.50	----	<0.50	----		
Boron	W-METMSFL6	0.0100	mg/L	0.0725	± 10.0%	0.0168	± 10.0%	0.0304	± 10.0%		
Cadmium	W-METMSPD	0.050	µg/L	<0.050	----	<0.050	----	<0.050	----		
Calcium	W-METMSFL6	0.0500	mg/L	220	± 10.0%	13.4	± 10.0%	56.5	± 10.0%		
Chromium	W-METMSPD	0.50	µg/L	<0.50	----	0.94	± 10.0%	<0.50	----		
Cobalt	W-METMSPD	0.10	µg/L	3.97	± 10.0%	0.15	± 10.0%	0.77	± 10.0%		
Copper	W-METMSPD	0.10	µg/L	0.79	± 10.0%	<0.10	----	1.35	± 10.0%		
Iron	W-METMSFL6	0.0020	mg/L	<0.0020	----	0.367	± 10.0%	<0.0020	----		
Lead	W-METMSPD	0.10	µg/L	<0.10	----	<0.10	----	<0.10	----		
Lithium	W-METMSPD	1.0	µg/L	21.8	± 10.0%	<1.0	----	<1.0	----		
Magnesium	W-METMSFL6	0.0030	mg/L	50.0	± 10.0%	5.09	± 10.0%	9.89	± 10.0%		



Sub-Matrix: WASTEWATER				Client sample ID		PW		EU2-S		SCS TMF	
				Laboratory sample ID		PR2582798013		PR2582798014		PR2582798015	
				Client sampling date / time		26-Jun-2025 13:56		24-Jun-2025 09:51		25-Jun-2025 15:24	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU		
Dissolved Metals / Major Cations - Continued											
Manganese	W-METMSPD	0.10	µg/L	222	± 10.0%	57.4	± 10.0%	21.8	± 10.0%		
Mercury	W-HG-AFSFL	0.0020	µg/L	<0.0020	---	0.0034	± 10.0%	<0.0020	---		
Molybdenum	W-METMSPD	0.10	µg/L	61.1	± 10.0%	<0.10	---	5.36	± 10.0%		
Nickel	W-METMSPD	0.50	µg/L	0.55	± 10.0%	4.69	± 10.0%	<0.50	---		
Potassium	W-METMSFL6	0.0500	mg/L	8.30	± 10.0%	13.1	± 10.0%	5.01	± 10.0%		
Selenium	W-METMSPD	1.0	µg/L	7.6	± 10.0%	<1.0	---	<1.0	---		
Silicon	W-METMSFL6	0.0100	mg/L	9.13	± 10.0%	9.41	± 10.0%	2.52	± 10.0%		
Silver	W-METMSPD	0.010	µg/L	<0.010	---	<0.010	---	<0.010	---		
Sodium	W-METMSFL6	0.0300	mg/L	124	± 10.0%	38.4	± 10.0%	27.9	± 10.0%		
Strontium	W-METMSFL6	0.0010	mg/L	1.26	± 10.0%	0.0380	± 10.0%	0.228	± 10.0%		
Sulphur	W-METMSFL6	0.500	mg/L	260	± 10.0%	2.81	± 10.0%	59.9	± 10.0%		
Thallium	W-METMSPD	0.10	µg/L	<0.10	---	<0.10	---	<0.10	---		
Tin	W-METMSPD	0.50	µg/L	<0.50	---	<0.50	---	<0.50	---		
Titanium	W-METMSPD	1.0	µg/L	<1.0	---	<1.0	---	<1.0	---		
Uranium	W-METMSPD	0.10	µg/L	1.21	± 10.0%	<0.10	---	<0.10	---		
Vanadium	W-METMSPD	1.0	µg/L	6.6	± 10.0%	<1.0	---	<1.0	---		
Zinc	W-METMSPD	1.0	µg/L	<1.0	---	1.8	± 10.0%	1.8	± 10.0%		

Sub-Matrix: WASTEWATER				Client sample ID		SCS PLANT		----		----	
				Laboratory sample ID		PR2582798016		----		----	
				Client sampling date / time		25-Jun-2025 15:52		----		----	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU		
Physical Parameters											
Electrical Conductivity @ 25°C	W-CON-PCT	10.0	µS/cm	269	± 10.0%	----	----	----	----		
pH Value	W-PH-PCT	1.00	-	7.33	± 1.0%	----	----	----	----		
Agregate Parameters											
Total Extractable Compounds	W-TEC-GR	5.0	mg/L	<5.0	---	----	----	----	----		
Nonmetallic Inorganic Parameters											
Ammonia and ammonium ions as N	W-NH4-SPC	0.040	mg/L	0.047	± 15.0%	----	----	----	----		
Ammonia and ammonium ions as NH4	W-NH4-SPC	0.050	mg/L	0.060	± 15.0%	----	----	----	----		
Biochemical Oxygen Demand (BOD 5)	W-BOD5-OXY	1.0	mg/L	<1.0	---	----	----	----	----		
Chemical Oxygen Demand (COD-Cr)	W-COD-SPC	5.0	mg/L	11.9	± 23.4%	----	----	----	----		
Chloride	W-CL-IC	1.00	mg/L	2.64	± 15.0%	----	----	----	----		
Easily released cyanides	W-CNF-PHO	0.005	mg/L	<0.005	---	----	----	----	----		
Fluoride	W-F-IC	0.200	mg/L	0.441	± 15.0%	----	----	----	----		
Nitrates	W-NO3-IC	2.00	mg/L	13.9	± 15.0%	----	----	----	----		
Nitrites	W-NO2-IC	0.040	mg/L	0.220	± 25.0%	----	----	----	----		
Phosphorus (as P2O5)	W-PTOT-SPC	0.120	mg/L	<0.120	---	----	----	----	----		
Sulphate as SO4 2-	W-SO4-IC	5.00	mg/L	66.9	± 15.0%	----	----	----	----		
Total Cyanide	W-CNT-PHO	0.005	mg/L	<0.005	---	----	----	----	----		
Total Phosphorus as P	W-PTOT-SPC	0.050	mg/L	<0.050	---	----	----	----	----		
Total Phosphorus as PO4 3-	W-PTOT-SPC	0.150	mg/L	<0.150	---	----	----	----	----		
Weak Acid Dissociable Cyanide	W-CNWAD-PHO	0.005	mg/L	<0.005	---	----	----	----	----		
Free Cyanide	W-CNF-PHO	0.005	mg/L	<0.005	---	----	----	----	----		
Nitrate as N	W-NO3-IC	0.500	mg/L	3.14	± 15.0%	----	----	----	----		
Nitrite as N	W-NO2-IC	0.010	mg/L	0.067	± 25.0%	----	----	----	----		
Total Nitrogen as N	W-NTOT-CL	0.10	mg/L	3.34	± 30.0%	----	----	----	----		
Suspended solids dried at 105 °C	W-TSS-GR	5.0	mg/L	66.0	± 10.2%	----	----	----	----		
Acid neutralizing capacity (alkalinity) pH 4.5	W-ALK-PCT	0.150	mmol/L	0.838	± 12.0%	----	----	----	----		
Acid neutralizing capacity (alkalinity) pH 8.3	W-ALK-PCT	0.150	mmol/L	<0.150	---	----	----	----	----		



Sub-Matrix: WASTEWATER				Client sample ID		SCS PLANT		----		----	
				Laboratory sample ID		PR2582798016		----		----	
				Client sampling date / time		25-Jun-2025 15:52		----		----	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU	Result	MU
Total Metals / Major Cations											
Calcium	W-METAXDG1	0.050	mg/L	38.3	± 10.0%	----	----	----	----	----	----
Iron	W-METAXDG1	0.0050	mg/L	8.00	± 10.0%	----	----	----	----	----	----
Magnesium	W-METAXDG1	0.020	mg/L	6.75	± 10.0%	----	----	----	----	----	----
Potassium	W-METAXDG1	0.015	mg/L	1.77	± 10.0%	----	----	----	----	----	----
Sodium	W-METAXDG1	0.030	mg/L	13.9	± 10.0%	----	----	----	----	----	----
Dissolved Metals / Major Cations											
Aluminium	W-METMSPD	1.0	µg/L	2.7	± 10.0%	----	----	----	----	----	----
Antimony	W-METMSPD	0.10	µg/L	<0.10	---	----	----	----	----	----	----
Arsenic	W-METMSPD	0.50	µg/L	<0.50	---	----	----	----	----	----	----
Barium	W-METMSFL6	0.00050	mg/L	0.00946	± 10.0%	----	----	----	----	----	----
Beryllium	W-METMSPD	0.10	µg/L	<0.10	---	----	----	----	----	----	----
Bismuth	W-METMSPD	0.50	µg/L	<0.50	---	----	----	----	----	----	----
Boron	W-METMSFL6	0.0100	mg/L	0.0161	± 10.0%	----	----	----	----	----	----
Cadmium	W-METMSPD	0.050	µg/L	<0.050	---	----	----	----	----	----	----
Calcium	W-METMSFL6	0.0500	mg/L	32.3	± 10.0%	----	----	----	----	----	----
Chromium	W-METMSPD	0.50	µg/L	<0.50	---	----	----	----	----	----	----
Cobalt	W-METMSPD	0.10	µg/L	0.48	± 10.0%	----	----	----	----	----	----
Copper	W-METMSPD	0.10	µg/L	1.71	± 10.0%	----	----	----	----	----	----
Iron	W-METMSFL6	0.0020	mg/L	<0.0020	---	----	----	----	----	----	----
Lead	W-METMSPD	0.10	µg/L	<0.10	---	----	----	----	----	----	----
Lithium	W-METMSPD	1.0	µg/L	<1.0	---	----	----	----	----	----	----
Magnesium	W-METMSFL6	0.0030	mg/L	4.26	± 10.0%	----	----	----	----	----	----
Manganese	W-METMSPD	0.10	µg/L	9.13	± 10.0%	----	----	----	----	----	----
Mercury	W-HG-AFSFLL	0.0020	µg/L	<0.0020	---	----	----	----	----	----	----
Molybdenum	W-METMSPD	0.10	µg/L	13.1	± 10.0%	----	----	----	----	----	----
Nickel	W-METMSPD	0.50	µg/L	0.66	± 10.0%	----	----	----	----	----	----
Potassium	W-METMSFL6	0.0500	mg/L	1.56	± 10.0%	----	----	----	----	----	----
Selenium	W-METMSPD	1.0	µg/L	<1.0	---	----	----	----	----	----	----
Silicon	W-METMSFL6	0.0100	mg/L	2.30	± 10.0%	----	----	----	----	----	----
Silver	W-METMSPD	0.010	µg/L	<0.010	---	----	----	----	----	----	----
Sodium	W-METMSFL6	0.0300	mg/L	9.41	± 10.0%	----	----	----	----	----	----
Strontium	W-METMSFL6	0.0010	mg/L	0.0666	± 10.0%	----	----	----	----	----	----
Sulphur	W-METMSFL6	0.500	mg/L	22.2	± 10.0%	----	----	----	----	----	----
Thallium	W-METMSPD	0.10	µg/L	<0.10	---	----	----	----	----	----	----
Tin	W-METMSPD	0.50	µg/L	<0.50	---	----	----	----	----	----	----
Titanium	W-METMSPD	1.0	µg/L	<1.0	---	----	----	----	----	----	----
Uranium	W-METMSPD	0.10	µg/L	<0.10	---	----	----	----	----	----	----
Vanadium	W-METMSPD	1.0	µg/L	1.5	± 10.0%	----	----	----	----	----	----
Zinc	W-METMSPD	1.0	µg/L	6.3	± 10.0%	----	----	----	----	----	----

When sampling date is not provided by the client, the laboratory determines it for procedural reasons, then it is equal to the date of receipt of the sample to the laboratory and is displayed in brackets. Measurement uncertainty is expressed as expanded measurement uncertainty with coverage factor k = 2, representing 95% confidence level.

Key: LOR = Limit of reporting; MU = Measurement Uncertainty. The MU does not include sampling uncertainty.

Brief Method Summaries

Analytical Methods	Method Descriptions
Location of test performance: Na Harfe 336/9 Prague 9 - Vysocany Czech Republic 190 00	
W-ACID-PCT	CZ_SOP_D06_02_073 (CSN 75 73 72) Determination of base neutralizing capacity (acidity) by potentiometric titration.
W-ALK-PCT	CZ_SOP_D06_02_072 (CSN EN ISO 9963-1, CSN EN ISO 9963-2, CSN 75 7373, SM2320) Determination of acid neutralizing capacity (alkalinity) by potentiometric titration and calculation of the carbonate hardness and CO2 forms from measured values including the calculation of total mineralization
W-BOD5-OXY	CZ_SOP_D06_02_077 (CSN EN ISO 5815-1, SM 5210B) Determination of biochemical oxygen demand electrochemically after n days (BODn) by dilution method with allylthiourea addition.



Analytical Methods	Method Descriptions
W-BOD5-OXYL	CZ_SOP_D06_02_078 (CSN EN 1899-2, ISO 5815-2, SM 5210B). Determination of biochemical oxygen demand electrochemically after n days (BODn) by method for undiluted samples.
W-CL-IC	CZ_SOP_D06_02_068 (CSN EN ISO 10304-1) Determination of dissolved fluoride, chloride, nitrite, bromide, nitrate and sulphate by ion liquid chromatography and calculation of nitrite nitrogen and nitrate nitrogen and sulphate sulphur from measured values including the calculation of total mineralization.
W-CNF-PHO	CZ_SOP_D06_02_090.A (CSN ISO 6703-2, CSN EN ISO 14403-2, SM 4500 CN) Determination of easily releasable cyanide (free cyanide) and cyanide dissociated by weak acid by spectrophotometry.
W-CNT-PHO	CZ_SOP_D06_02_089.A (CSN 75 7415, CSN EN ISO 14403-2) Determination of total cyanide by spectrophotometry and calculation of complex-forming cyanides from measure values.
W-CNWAD-PHO	CZ_SOP_D06_02_090.A (CSN ISO 6703-2, CSN EN ISO 14403-2, SM 4500 CN) Determination of easily releasable cyanide (free cyanide) and cyanide dissociated by weak acid by spectrophotometry.
W-COD-SPC	CZ_SOP_D06_02_076 (CSN ISO 15705) Determination of chemical oxygen demand using dichromate (COD-Cr) by photometry.
W-CON-PCT	CZ_SOP_D06_02_075 (ČSN EN 27 888, SM 2520 B) Determination of electrical conductivity by conductometer and calculation of salinity.
W-F-IC	CZ_SOP_D06_02_068 (CSN EN ISO 10304-1) Determination of dissolved fluoride, chloride, nitrite, bromide, nitrate and sulphate by ion liquid chromatography and calculation of nitrite nitrogen and nitrate nitrogen and sulphate sulphur from measured values including the calculation of total mineralization.
W-HG-AFSFLL	CZ_SOP_D06_02_096 (US EPA Method 245.7, CSN EN ISO 17852) - Determination of Mercury by Fluorescence Spectrometry. Sample was filtered by microfilter with porosity 0.45 µm followed by nitric acid addition prior to analysis.
W-METAXDG1	CZ_SOP_D06_02_001 (US EPA Method 200.7, CSN EN ISO 11885, US EPA Method 6010, SM 3120, CSN 75 7358) - Determination of elements by atomic emission spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values including the calculation of total mineralization and calculating the sum of Ca+Mg. Sample was homogenized and mineralized by nitric acid in autoclave under high pressure and temperature prior to analysis.
W-METMSFL6	CZ_SOP_D06_02_002 (US EPA Method 200.8, CSN EN ISO 17294-2, US EPA Method 6020A, CSN 75 7358) - Determination of elements by mass spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values including the calculation of total mineralization and calculating the sum of Ca +Mg. Sample was filtered by microfilter with porosity 0.45 µm followed by nitric acid addition prior to analysis.
W-METMSFX6	CZ_SOP_D06_02_002 (US EPA Method 200.8, CSN EN ISO 17294-2, US EPA Method 6020A, CSN 75 7358) - Determination of elements by mass spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values including the calculation of total mineralization and calculating the sum of Ca +Mg. Sample was fixed by nitric acid addition prior to analysis.
W-METMSPD	CZ_SOP_D06_02_002 (US EPA Method 200.8, CSN EN ISO 17294-2, US EPA Method 6020A, CSN 75 7358) - Determination of elements by mass spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values including the calculation of total mineralization and calculating the sum of Ca +Mg. Sample was filtered by microfilter with porosity 0.45 µm followed by nitric acid addition prior to analysis.
W-NH4-SPC	CZ_SOP_D06_02_019 (CSN ISO 15923-1) Determination of sum of ammonium and ammonium ions, nitrite and the sum of nitrite and nitrate ions by discrete spectrophotometry and calculation of nitrite, nitrate, ammonia, inorganic, organic, total nitrogen, free ammonia and dissociated ammonium ions from measured values including the calculation of total mineralization
W-NO2-IC	CZ_SOP_D06_02_068 (ČSN EN ISO 10304-1) Determination of dissolved fluoride, chloride, nitrite, bromide, nitrate and sulphate by ion liquid chromatography and calculation of nitrite nitrogen and nitrate nitrogen and sulphate sulphur from measured values including the calculation of total mineralization.
W-NO3-IC	CZ_SOP_D06_02_068 (ČSN EN ISO 10304-1) Determination of dissolved fluoride, chloride, nitrite, bromide, nitrate and sulphate by ion liquid chromatography and calculation of nitrite nitrogen and nitrate nitrogen and sulphate sulphur from measured values including the calculation of total mineralization.
W-NTOT-CL	CZ_SOP_D06_02_094.A (CSN EN ISO 20236) Determination of bound nitrogen (TNb) after oxidation to nitrogen oxides by chemiluminiscence detection.
W-PH-PCT	CZ_SOP_D06_02_105 (CSN ISO 10523, US EPA Method 150.1, SM 4500-H+ B) Determination of pH by potentiometry
W-PTOT-SPC	CZ_SOP_D06_02_080 Determination of total phosphorus by discrete spectrophotometry and calculation of phosphorus as P2O5 and PO43-from measured values. (CSN EN ISO 6878 and CSN ISO 15681-1).
W-SO4-IC	CZ_SOP_D06_02_068 (CSN EN ISO 10304-1) Determination of dissolved fluoride, chloride, nitrite, bromide, nitrate and sulphate by ion liquid chromatography and calculation of nitrite nitrogen and nitrate nitrogen and sulphate sulphur from measured values including the calculation of total mineralization.
W-TEC-GR	CZ_SOP_D06_03_100 (CSN 75 7508, SM 5520B) Determination of extractable substances by gravimetry.
W-TSS-GR	CZ_SOP_D06_02_070 (CSN EN 872, CSN 757350, SM 2540 D) Determination of dry suspended solids and annealed suspended solids by gravimetry and calculation of loss of ignition of suspended solids and total solids from measured values (glass microfibre filter of porosity 1,2 µm).

The symbol "*" for the method indicates a test outside the scope of accreditation of the laboratory or subcontractor. If the UNICO-SUB code is stated in the method table, this only informs that the tests have been performed by a subcontractor and the results are given in an annex to the test report, including information on test accreditation. If the lab used for matrix outside the scope of accreditation or non-standard sample matrix procedure specified in the accredited method and issues non-accredited results, this fact is stated on the title page of this protocol in the section "Notes". If the test report shows the results of subcontracting, the place of performance of the test is outside the laboratories of ALS Czech Republic, s.r.o.

The method for calculating of the summation parameters is available on request in the customer service.

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Work Order : PR2582798
Customer : PETOWAL MINING COMPANY SA



The end of the certificate of analysis