SWEDAC
Styrelsen för ackreditering och teknisk kontroll
Swedish Board for Accreditation and Conformity Assessment

Appendix 1

Date: 2023-07-04

Reference: 2022/1125

Scope of accreditation

Testing according to SS-EN ISO/IEC 17025:2018

SSAB EMEA AB — Oxelösund — Accreditation number: 1083

Kemiskt laboratorium — *A001897-001*

Chemical analysis

Technical area	*Parameter*	*Method*	*Technique*	*Measure*	*Material*	*Field*
Inorganic chemistry	**Aluminium, Al**	**ASTM E415:2021**	**OES**	**0,002-0,2 %**	**Steel**	**No**
	Antimony, Sb	**ASTM E415:2021**	**OES**	**0,003-0,1 %**	**Steel**	**No**
	Arsenic, As	**ASTM E415:2021**	**OES**	**0,002-0,1 %**	**Steel**	**No**
	Boron, B	**ASTM E415:2021**	**OES**	**0,0002-0,011 %**	**Steel**	**No**
	Cadmium, Cd	SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,003 mg/l	Drinking water	No
			ICP-AES	> 0,003 mg/l	Fresh water	No
			ICP-AES	> 0,003 mg/l	Sea water	No
			ICP-AES	> 0,003 mg/l	Waste water/Leach water	No
	Calcium, Ca	**ASTM E415:2021**	**OES**	**0,0003-0,012 %**	**Steel**	**No**
	Carbon, C	ASTM E1019:2018	Combustion	0,02 – 1 %	Steel	No
			Combustion	1 – 6 %	Iron/Iron alloys	No
		ASTM E415:2021	**OES**	**0,002-1 %**	**Steel**	**No**
	Chromium, Cr	**ASTM E415:2021**	**OES**	**0,002-4,8 %**	**Steel**	**No**
		SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,003 mg/l	Drinking water	No
			ICP-AES	> 0,003 mg/l	Fresh water	No
			ICP-AES	> 0,003 mg/l	Sea water	No
			ICP-AES	> 0,003 mg/l	Waste water/Leach water	No
	Cobalt, Co	**ASTM E415:2021**	**OES**	**0,001-0,2 %**	**Steel**	**No**
	Copper, Cu	**ASTM E415:2021**	**OES**	**0,002-1 %**	**Steel**	**No**

Technical area	*Parameter*	*Method*	*Technique*	*Measure*	*Material*	*Field*
Inorganic chemistry	**Copper, Cu**	SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,003 mg/l	Drinking water	No
			ICP-AES	> 0,003 mg/l	Fresh water	No
			ICP-AES	> 0,003 mg/l	Sea water	No
			ICP-AES	> 0,003 mg/l	Waste water/Leach water	No
	Iron, Fe	SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,004 mg/l	Drinking water	No
			ICP-AES	> 0,004 mg/l	Fresh water	No
			ICP-AES	> 0,004 mg/l	Sea water	No
			ICP-AES	> 0,004 mg/l	Waste water/Leach water	No
	Lead, Pb	**ASTM E415:2021**	**OES**	**0,005-0,016 %**	**Steel**	**No**
		SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,004 mg/l	Drinking water	No
			ICP-AES	> 0,004 mg/l	Fresh water	No
			ICP-AES	> 0,004 mg/l	Sea water	No
			ICP-AES	> 0,004 mg/l	Waste water/Leach water	No
	Manganese, Mn	**ASTM E415:2021**	**OES**	**0,002-3 %**	**Steel**	**No**
		SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,003 mg/l	Drinking water	No
			ICP-AES	> 0,003 mg/l	Fresh water	No
			ICP-AES	> 0,003 mg/l	Sea water	No
			ICP-AES	> 0,003 mg/l	Waste water/Leach water	No
	Molybdenum, Mo	**ASTM E415:2021**	**OES**	**0,002-1 %**	**Steel**	**No**
	Nickel, Ni	**ASTM E415:2021**	**OES**	**0,002-3 %**	**Steel**	**No**
		SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,003 mg/l	Drinking water	No
			ICP-AES	> 0,003 mg/l	Fresh water	No
			ICP-AES	> 0,003 mg/l	Sea water	No
			ICP-AES	> 0,003 mg/l	Waste water/Leach water	No

Technical area	*Parameter*	*Method*	*Technique*	*Measure*	*Material*	*Field*
Inorganic chemistry	**Niob, Nb**	**ASTM E415:2021**	**OES**	**0,001-0,2 %**	**Steel**	**No**
	Nitrogen, N	ASTM E1019:2018	Combustion	0,0015-0,02%	Steel	No
	Phosphorus, P	**ASTM E415:2021**	**OES**	**0,002-0,1 %**	**Steel**	**No**
	Silicon, Si	**ASTM E415:2021**	**OES**	**0,002-3 %**	**Steel**	**No**
	Sulfur, S	**ASTM E415:2021**	**OES**	**0,001-0,12 %**	**Steel**	**No**
	Tin, Sn	**ASTM E415:2021**	**OES**	**0,002-0,1 %**	**Steel**	**No**
	Titanium, Ti	**ASTM E415:2021**	**OES**	**0,001-0,25 %**	**Steel**	**No**
	Tungsten, W	**ASTM E415:2021**	**OES**	**0,002-0,5 %**	**Steel**	**No**
	Vanadium, V	**ASTM E415:2021**	**OES**	**0,001-0,5 %**	**Steel**	**No**
		SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,004 mg/l	Drinking water	No
			ICP-AES	> 0,004 mg/l	Fresh water	No
			ICP-AES	> 0,004 mg/l	Sea water	No
			ICP-AES	> 0,004 mg/l	Waste water/Leach water	No
	Zinc, Zn	SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,004 mg/l	Drinking water	No
			ICP-AES	> 0,004 mg/l	Fresh water	No
			ICP-AES	> 0,004 mg/l	Sea water	No
			ICP-AES	> 0,004 mg/l	Waste water/Leach water	No
	Zirconium, Zr	**ASTM E415:2021**	**OES**	**0,002-0,1 %**	**Steel**	**No**
Sampling	Avloppsvatten, provtagning	SS 028148, utg 1				Yes
	Dricks- och badvatten, provtagning, kemi	SS 028185, utg 1/ISO 5667-5:2006				Yes
	Grundvatten, provtagning	ISO 5667-11:2009				Yes
	Marina vatten, provtagning	ISO 5667-9:1992				Yes
	Sjöar, provtagning	ISO 5667-4:2016				Yes
Water analysis	**Ammonium as nitrogen**	**Hach Lange LCK 303**	**Photometry**	**2-47 mg/l**	**Waste water/Leach water**	**No**

Technical area	*Parameter*	*Method*	*Technique*	*Measure*	*Material*	*Field*
Water analysis	**Ammonium as nitrogen**	**Hach Lange LCK 304**	**Photometry**	**0,015-2 mg/l**	**Waste water/Leach water**	**No**
		Std Methods 4500-NH3 B/E	Titration	5-120 mg/l	Waste water/Leach water	No
	Conductivity	SS-EN 27888, utg 1	Electrode	1 – 2000 mS/m	Drinking water	No
			Electrode	1 – 2000 mS/m	Fresh water	No
			Electrode	1 – 2000 mS/m	Sea water	No
			Electrode	1 – 2000 mS/m	Waste water/Leach water	No
	Cyanide, accessible	SS 028177, utg 1	Photometry	0,01 – 0,25 mg/l	Waste water/Leach water	No
	Cyanide, total	SS 028176, utg 1	Photometry	0,01 – 0,25 mg/l	Waste water/Leach water	No
	Nitrate nitrogen	Hach Lange LCK 339	Photometry	0,23 - 13,5 mg/l	Waste water/Leach water	No
		Hach Lange LCK 340	Photometry	5,0 - 35 mg/l	Waste water/Leach water	No
	Nitrite nitrogen	**Hach Lange LCK 341**	**Photometry**	**0,015-0,6 mg/l**	**Waste water/Leach water**	**No**
		Hach Lange LCK 342	Photometry	0,6 - 6 mg/l	Waste water/Leach water	No
	Nitrogen, total	**Hach Lange LCK 138**	**Photometry**	**1-16 mg/l**	**Waste water/Leach water**	**No**
		Hach Lange LCK 238	**Photometry**	**5-40 mg/l**	**Waste water/Leach water**	**No**
	pH	SS-EN ISO 10523:2012	Electrode	4-10 pH-enheter	Drinking water	No
			Electrode	4-10 pH-enheter	Fresh water	No
			Electrode	4-10 pH-enheter	Sea water	No
			Electrode	4-10 pH-enheter	Waste water/Leach water	No

Technical area	*Parameter*	*Method*	*Technique*	*Measure*	*Material*	*Field*
Water analysis	Phenols	SS 028128, utg 1	Photometry	0,1-3,0 mg/l	Waste water/Leach water	No
	Phosphorous, total	**SS-EN ISO 6878:2005**	**Photometry**	**0,005-0,8 mg/l**	**Waste water/Leach water**	**No**
	Suspended solids	SS-EN 872:2005	Gravimetry	> 1 mg/l	Fresh water	No
			Gravimetry	> 1 mg/l	Sea water	No
			Gravimetry	> 1 mg/l	Waste water/Leach water	No
	Tiocyanat	SS 028177, utg 1	Photometry	0,05 – 0,4 mg/l	Waste water/Leach water	No
	Total organic carbon, TOC	Hach Lange LCK 385	Photometry	10 – 30 mg/l	Waste water/Leach water	No
		Hach Lange LCK 386	Photometry	30 – 300 mg/l	Waste water/Leach water	No

Changes in the scope of accreditation are in bold.