LIEBHERR
CONSTRUCTION EQUIPMENT

117010 - Coolant

Sample No: LH0274472

Oil Type: EXTENDED LIFE COOLANT

SAMPLE INFORMATION

Sample Number		**LH0274472**	---	---	---
Sample Date		**26 Jul 2023**	---	---	---
Machine Hours		**3035**	---	---	---
Sample Status		**ABNORMAL**	---	---	---

COOLANT CONDITION

Boron	ppm	**57**	---	---	---
Phosphorus	ppm	**14**	---	---	---
Sodium	ppm	**3964**	---	---	---
Potassium	ppm	**882**	---	---	---
Silicon	ppm	**6**	---	---	---
pH	Scale 0-14	**8.20**	---	---	---
Reserve Alkalinity	Scale 0-20	**7.0**	---	---	---
Molybdenum	ppm	**49**	---	---	---
Nitrites	ppm	**360**	---	---	---
Percentage Glycol	%	**51.4**	---	---	---
Freezing Point	°C	**-38**	---	---	---

CONTAMINATION

Magnesium	ppm	**3**	---	---	---
Calcium	ppm	**23**	---	---	---
Coolant Appearance		**Cloudy**	---	---	---
Coolant Color		**Orange**	---	---	---
Sand/Dirt	scalar	**NONE**	---	---	---
Debris	scalar	**VLITE**	---	---	---
Precipitate	scalar	**NONE**	---	---	---
Silt	scalar	**NONE**	---	---	---

CORROSION

Iron	ppm	**2**	---	---	---
Aluminum	ppm	**<1**	---	---	---
Copper	ppm	**2**	---	---	---
Lead	ppm	**<1**	---	---	---
Tin	ppm	**<1**	---	---	---

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Diagnosis

We recommend that you drain the system and refill with a 50/50 long-life coolant/water mixture. Resample at the next service interval to monitor.All metal levels are normal indicating no corrosion in the cooling system. There is no indication of any contamination in the coolant. The coolant is cloudy indicating either an overconcentration of coolant additives, or a mixing of incompatible coolant technologies. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable.

Depot: LIEMIS
Unique No: 5619392
Signed: Kevin Marson
Report Date: 08 Aug 2023

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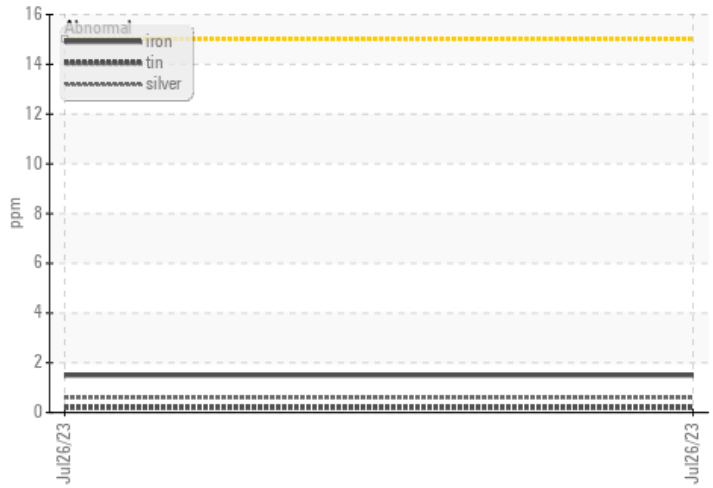
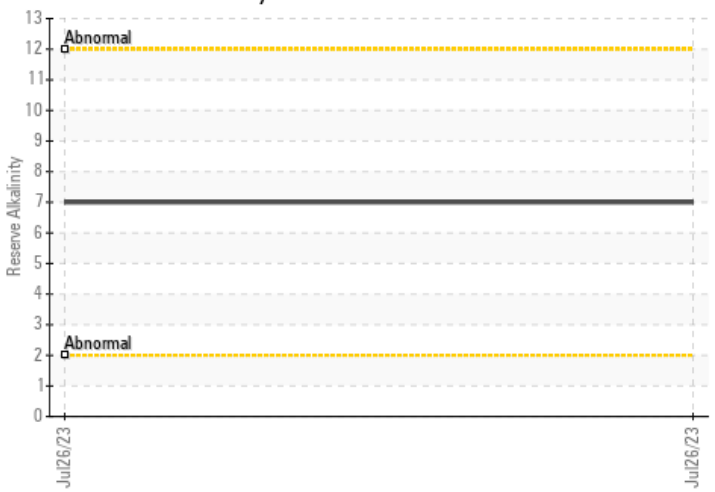
GRAPHS

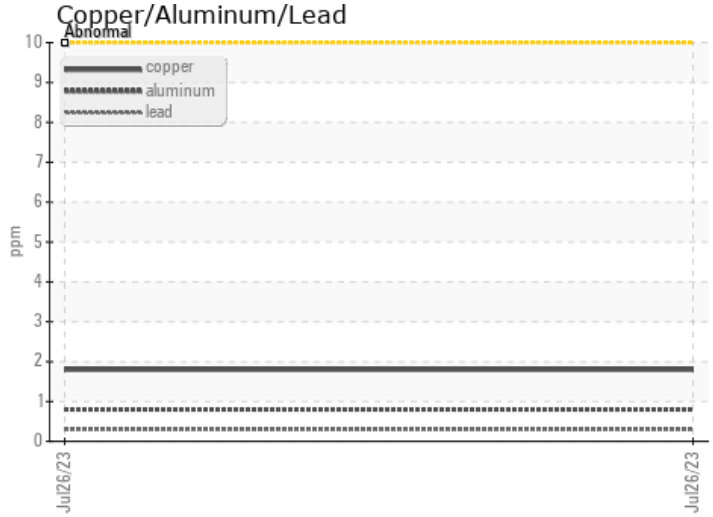
Iron/Tin/Silver



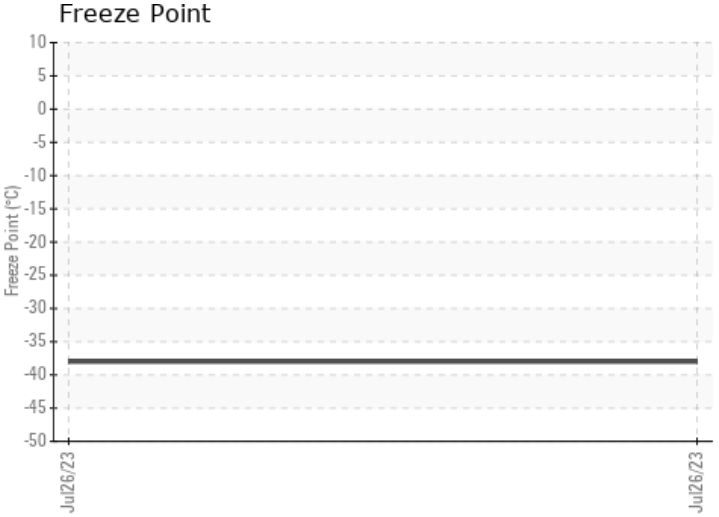
Reserve Alkalinity



Copper/Aluminum/Lead



Freeze Point



pH

Nitrites