

LIEBHERR

CONSTRUCTION EQUIPMENT



[[593756]] LIEBHERR HS8100HD 184996 - Coolant

Sample No: LH0284985

Oil Type: EXTENDED LIFE COOLANT



SAMPLE INFORMATION

Sample Number	LH0284985	LH0270413	LH0261255	---
Sample Date	26 Jan 2024	07 Sep 2023	04 May 2023	---
Machine Hours	12043	11071	10190	---
Sample Status	SEVERE	SEVERE	SEVERE	---

HIGGS & HIGGS

RR # 4

ST THOMAS, ON

CA N5P 3S8

Contact: Bernie Higgs



COOLANT CONDITION

Boron	ppm	16	20	27	---
Phosphorus	ppm	9	11	10	---
Sodium	ppm	9062	9218	3682	---
Potassium	ppm	313	353	451	---
Silicon	ppm	12	15	21	---
pH	Scale 0-14	6.68	6.59	7.06	---
Reserve Alkalinity	Scale 0-20	2.4	4.3	4.3	---
Molybdenum	ppm	33	9	10	---
Nitrites	ppm	800	520	800	---
Percentage Glycol	%	51.9	51.7	52.1	---
Freezing Point	°C	-39	-38	-40	---

T: (519)631-4095

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Diagnosis

Clean cooling system with an acid-based cleaner according to directions, and flush with water afterwards thoroughly. Refill with 50/50 premix of manufacturer recommended coolant. Resample in 30 days. All metal levels are normal indicating no corrosion in the cooling system. Hardness is critically elevated. Elevated hardness can allow scale formation that will reduce cooling system effectiveness. The coolant is cloudy indicating either an overconcentration of coolant additives, or a mixing of incompatible coolant technologies. The nitrite level is acceptable. The pH is low which causes rust formation. The reserve alkalinity of this fluid is acceptable.



CONTAMINATION

Magnesium	ppm	14	16	24	---
Calcium	ppm	49	47	50	---
Coolant Appearance		Clear	Cloudy	Clear	---
Coolant Color		Red	Orange	Red	---
Sand/Dirt	scalar	NONE	NONE	NONE	---
Debris	scalar	NONE	NONE	NONE	---
Precipitate	scalar	NONE	NONE	NONE	---
Silt	scalar	NONE	NONE	NONE	---



CORROSION

Iron	ppm	0	<1	2	---
Aluminum	ppm	1	2	2	---
Copper	ppm	5	7	11	---
Lead	ppm	0	0	1	---
Tin	ppm	0	0	<1	---

Depot: HIGSTT

Unique No: 5737158

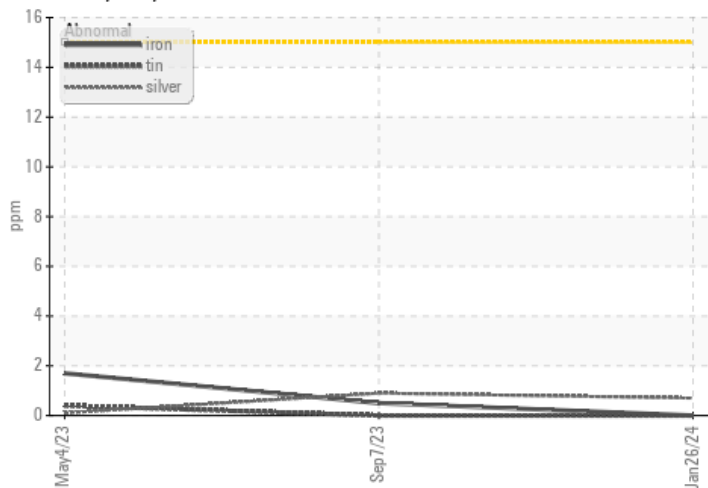
Signed: Kevin Marson

Report Date: 06 Mar 2024

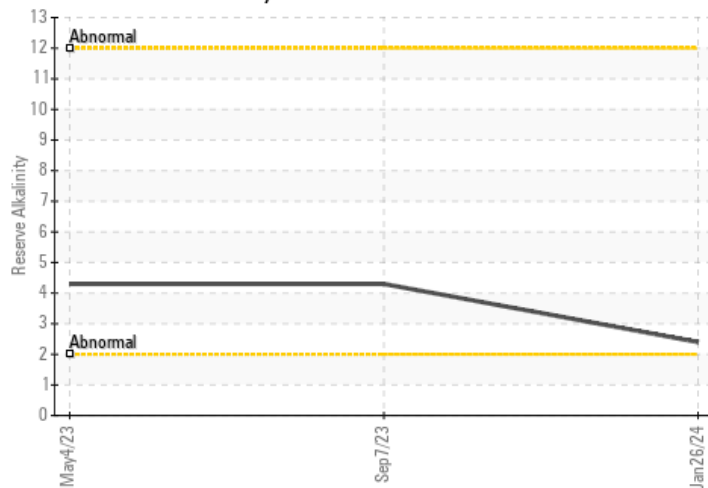


GRAPHS

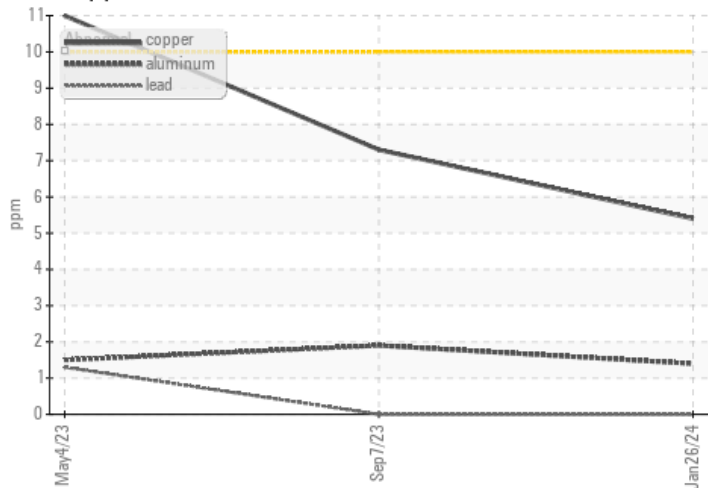
Iron/Tin/Silver



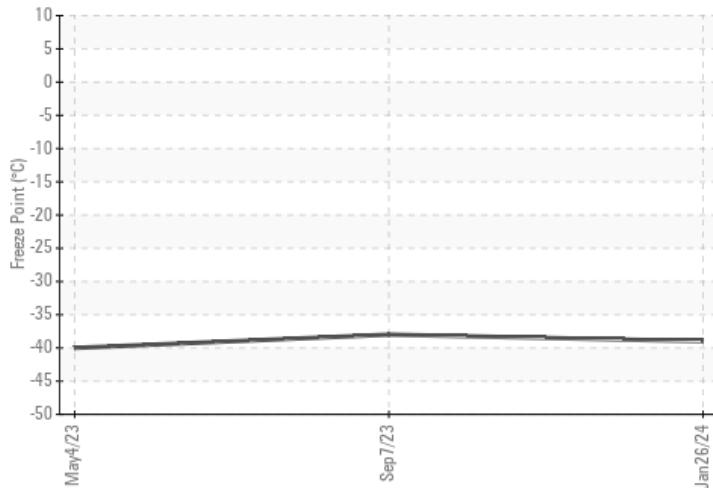
Reserve Alkalinity



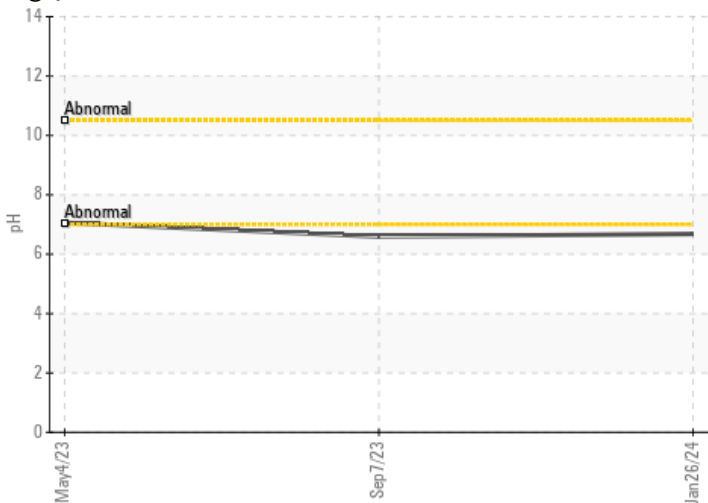
Copper/Aluminum/Lead



Freeze Point



pH



Nitrites

