



CONSTRUCTION EQUIPMENT

VOLVO L45G 220049 - COOLANT



Sample No: VCP336010
Oil Type: CONVENTIONAL COOLANT
Job No:



SAMPLE INFORMATION

Sample Number	VCP336010	---	---	---
Sample Date	02 Sep 2023	---	---	---
Machine Hours	1675	---	---	---
Sample Status	ABNORMAL	---	---	---

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COOLANT CONDITION

Boron	ppm	14	---	---	---
Phosphorus	ppm	17	---	---	---
Sodium	ppm	3378	---	---	---
Potassium	ppm	922	---	---	---
Silicon	ppm	32	---	---	---
pH	Scale 0-14	7.06	---	---	---
Reserve Alkalinity	Scale 0-20	2.3	---	---	---
Molybdenum	ppm	37	---	---	---
Nitrites	ppm	280	---	---	---
Percentage Glycol	%	44.5	---	---	---
Freezing Point	°C	-21	---	---	---

Diagnosis

We recommend drain system, and refill with 50/50 antifreeze water mixture. We advise that you replenish the supplemental coolant additives (SCAs) and add per manufacturer's specifications. We recommend an early resample to monitor this condition. Aluminum and iron ppm levels are abnormal. The iron level is high indicating rust in the system which clogs the cooling system. The high metal levels indicate corrosion in the system. There is no indication of any contamination in the component (unconfirmed). The reserve alkalinity of this fluid is lower than acceptable. The coolant is cloudy indicating either an overconcentration of coolant additives, or a mixing of incompatible coolant technologies. The low nitrite level indicates reduced cavitation protection which leads to corrosion and ammonia formation. The pH is low which causes rust formation.



CONTAMINATION

Magnesium	ppm	4	---	---	---
Calcium	ppm	16	---	---	---
Coolant Appearance		Cloudy	---	---	---
Coolant Color		Other	---	---	---
Sand/Dirt	scalar	NONE	---	---	---
Debris	scalar	NONE	---	---	---
Precipitate	scalar	NONE	---	---	---
Silt	scalar	LIGHT	---	---	---



CORROSION

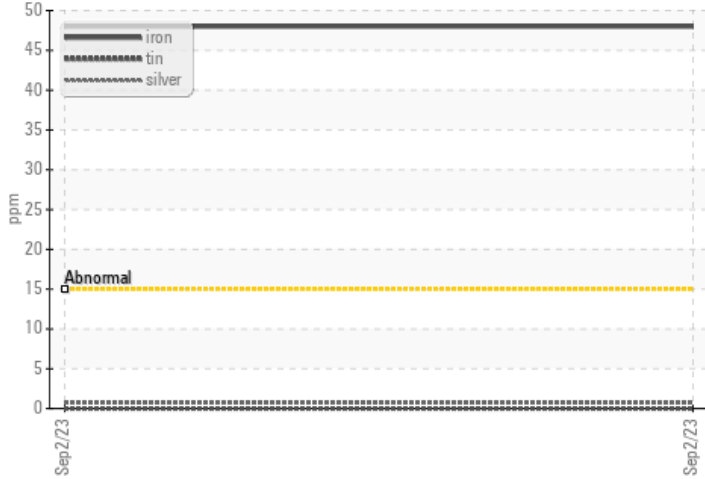
Iron	ppm	48	---	---	---
Aluminum	ppm	75	---	---	---
Copper	ppm	0	---	---	---
Lead	ppm	0	---	---	---
Tin	ppm	0	---	---	---

Depot: VOLVO3909
Unique No: 5643410
Signed: Bill Quesnel
Report Date: 18 Sep 2023

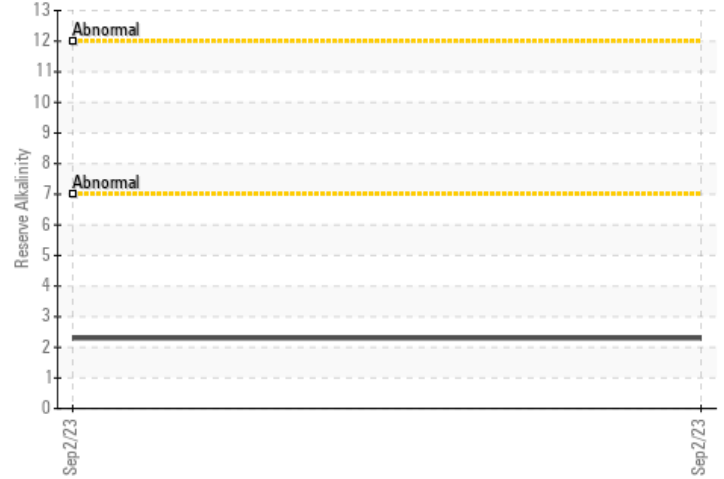


GRAPHS

▲ Iron/Tin/Silver



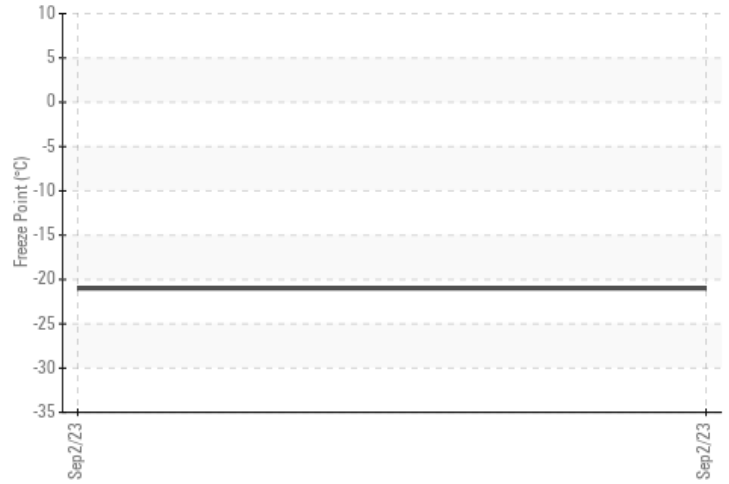
▲ Reserve Alkalinity



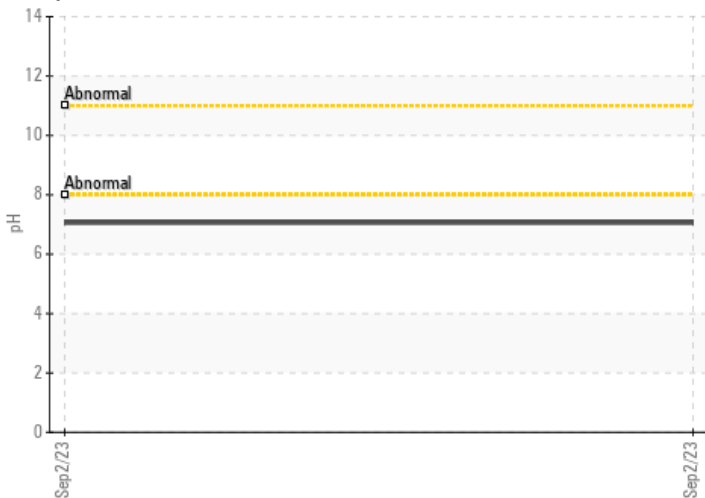
▲ Copper/Aluminum/Lead



Freeze Point



▲ pH



▲ Nitrites

