



CONSTRUCTION EQUIPMENT

D12523 HALQUEST STON VOLVO L110E 61016 - HYDRAULIC SYSTEM



Sample No: VCP418917
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: D12523 HALQUEST STON



SAMPLE INFORMATION

Sample Number	VCP418917	---	---	---
Sample Date	12 Jul 2023	---	---	---
Machine Hours	13308	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	SEVERE	---	---	---

ARING EQUIPMENT COMPANY INC - MAIN (MILWAUKEE)
 13001 W SILVERE SPRING DR
 BUTLER, WI
 US 53007
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 T: (262)282-0715
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OIL CONDITION

Visc @ 40°C	cSt	█ 44.7	---	---	---
Acid Number (AN)	mg KOH/g	█ 0.26	---	---	---

CONTAMINATION

Particles >4µm		█ 105198	---	---	---
Particles >6µm		█ 20911	---	---	---
Particles >14µm		▲ 378	---	---	---
ISO 4406:1999 (c)		24/22/16	---	---	---
Silicon	ppm	█ 4	---	---	---
Sodium	ppm	█ <1	---	---	---
Potassium	ppm	█ <1	---	---	---

Diagnosis

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. All component wear rates are normal. There is a high amount of particulates (2 to 100 microns in size) present in the oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

WEAR METALS

Iron	ppm	█ 4	---	---	---
Copper	ppm	█ 1	---	---	---
Lead	ppm	█ 0	---	---	---
Tin	ppm	█ 0	---	---	---
Aluminum	ppm	█ 3	---	---	---
Chromium	ppm	█ 0	---	---	---
Molybdenum	ppm	█ 0	---	---	---
Nickel	ppm	█ 0	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	█ <1	---	---	---
Vanadium	ppm	<1	---	---	---

ADDITIVES

Calcium	ppm	█ 496	---	---	---
Magnesium	ppm	█ 6	---	---	---
Zinc	ppm	█ 529	---	---	---
Phosphorus	ppm	█ 430	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 9	---	---	---

Depot: VOLVO0069
Unique No: 10562570
Signed: Wes Davis
Report Date: 19 Jul 2023

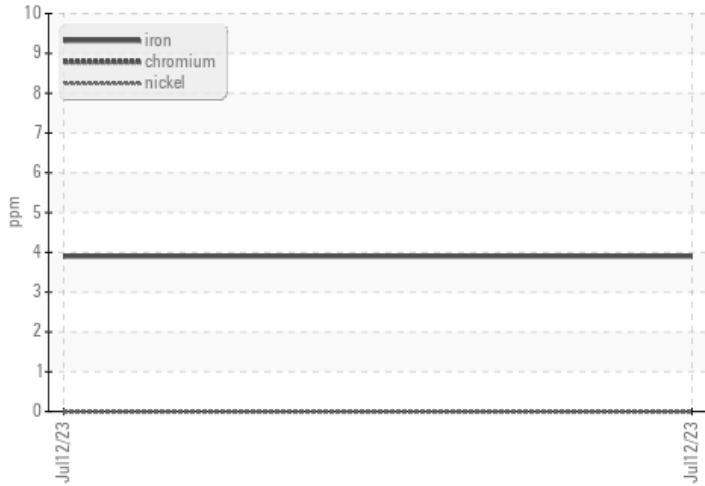


CONSTRUCTION EQUIPMENT

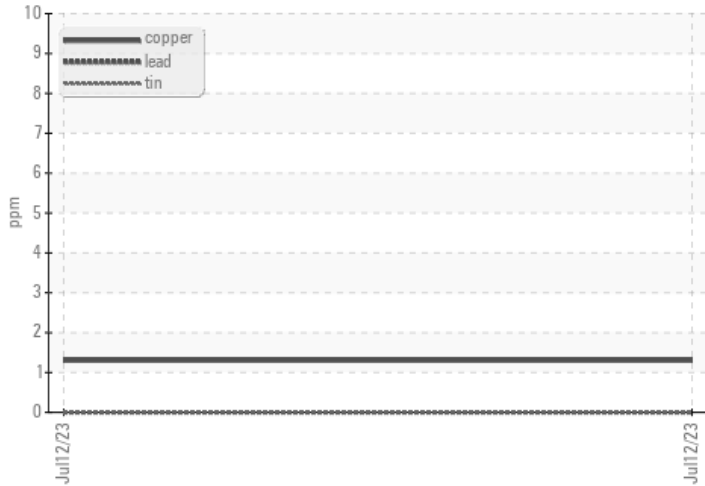


GRAPHS

Ferrous Alloys



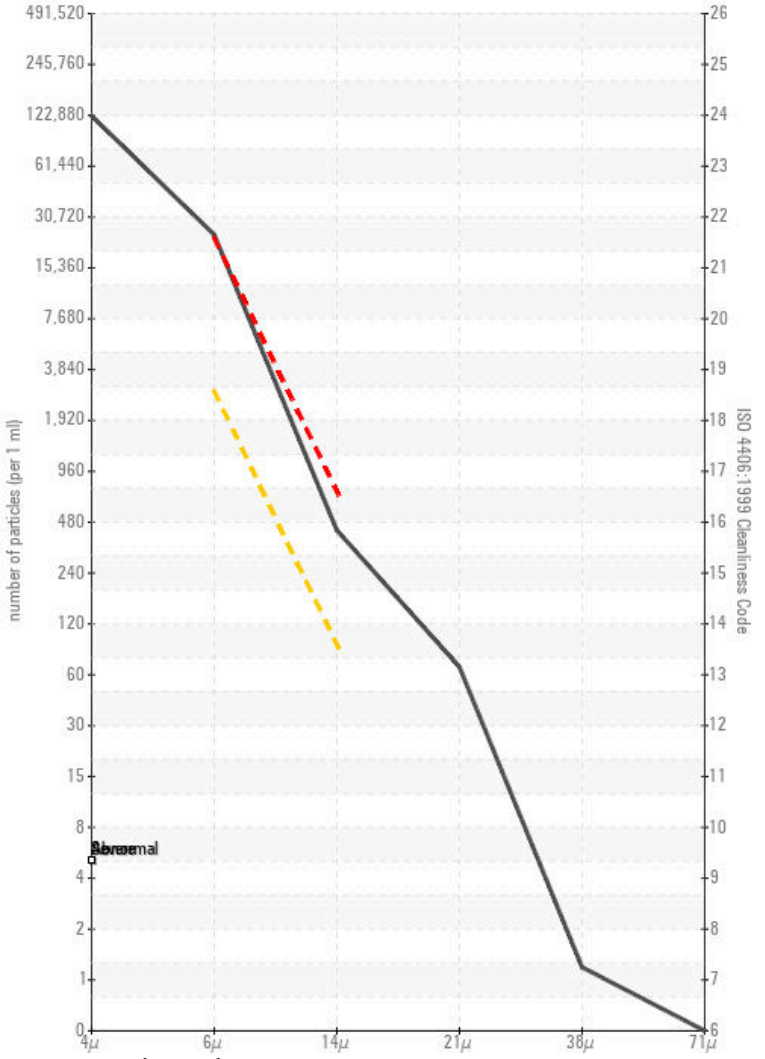
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

