



CONSTRUCTION EQUIPMENT

VOLVO A40G VOLVO A40G (S/N NOT GIVEN) - HYDRAULIC SYSTEM



Sample No: VCP450560
Oil Type: AW HYDRAULIC OIL ISO 32
Job No:



SAMPLE INFORMATION

Sample Number	VCP450560	---	---	---
Sample Date	28 May 2024	---	---	---
Machine Hours	0	---	---	---
Oil Hours	200	---	---	---
Oil Changed	Not Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

NORTHERN IMPROVEMENT COMPANY
 4000 12 AVENUE N.W.
 FARGO, ND
 US 58108
 Contact: SERVICE MANAGER



OIL CONDITION

Visc @ 40°C	cSt	● 40.02	---	---	---
Acid Number (AN)	mg KOH/g	■ 0.44	---	---	---

T: (701)277-1173
 F: (701)277-1139



CONTAMINATION

Water	%	NEG	---	---	---
Particles >4µm		■ 10200	---	---	---
Particles >6µm		▲ 4089	---	---	---
Particles >14µm		▲ 688	---	---	---
ISO 4406:1999 (c)		21/19/17	---	---	---
Silicon	ppm	▲ 21	---	---	---
Sodium	ppm	■ 2	---	---	---
Potassium	ppm	■ 2	---	---	---

Diagnosis

We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.



WEAR METALS

Iron	ppm	■ 11	---	---	---
Copper	ppm	■ 7	---	---	---
Lead	ppm	■ 3	---	---	---
Tin	ppm	■ <1	---	---	---
Aluminum	ppm	■ 2	---	---	---
Chromium	ppm	■ <1	---	---	---
Molybdenum	ppm	■ 0	---	---	---
Nickel	ppm	■ 0	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	<1	---	---	---
Manganese	ppm	■ <1	---	---	---
Vanadium	ppm	<1	---	---	---



ADDITIVES

Calcium	ppm	■ 201	---	---	---
Magnesium	ppm	■ 3	---	---	---
Zinc	ppm	■ 465	---	---	---
Phosphorus	ppm	■ 366	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 2	---	---	---

Depot: NORFAR
Unique No: 11056041
Signed: Jonathan Hester
Report Date: 03 Jun 2024

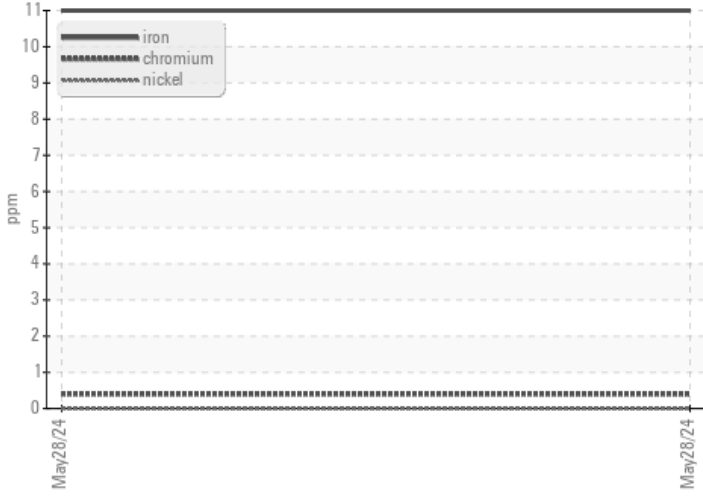


CONSTRUCTION EQUIPMENT

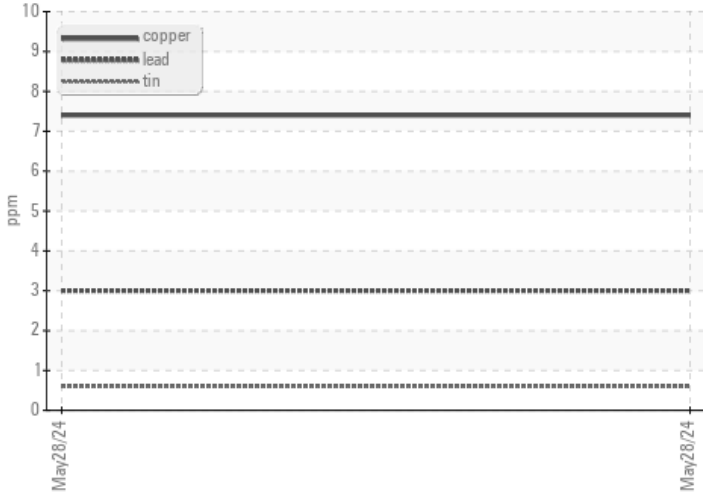


GRAPHS

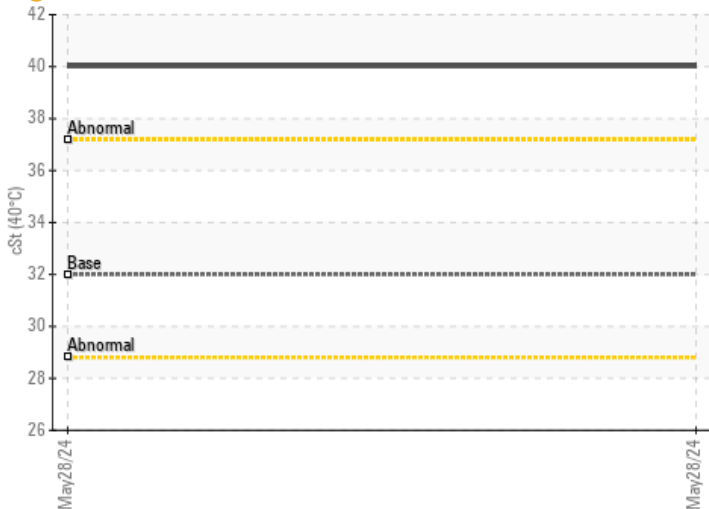
Ferrous Alloys



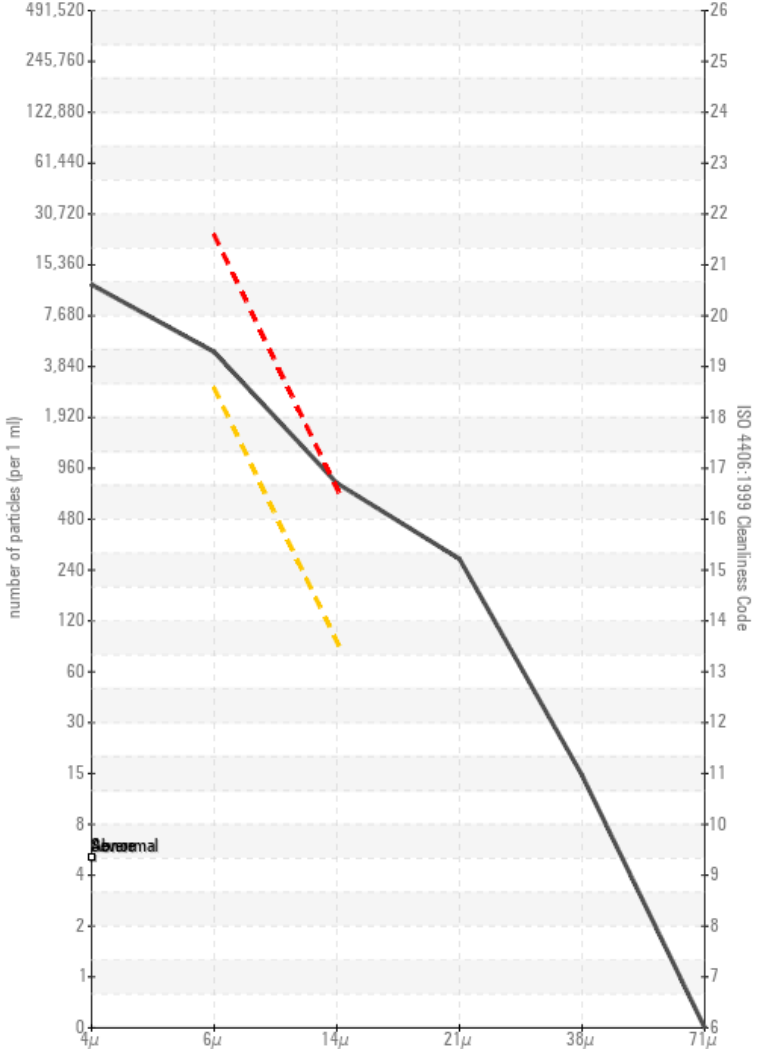
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

