



CONSTRUCTION EQUIPMENT

A11336 FREEDOM VOLVO EC160E 314382 - HYDRAULIC SYSTEM



Sample No: VCP434106
Oil Type: MOBIL HYDRAULIC OIL AW 46
Job No: A11336 FREEDOM



HOFFMAN EQUIPMENT - LIONVILLE
 120 GORDON DRIVE
 LIONVILLE, PA
 US 19341
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 F: (610)594-0829

SAMPLE INFORMATION

Sample Number	VCP434106	VCP410780	VCP364104	---
Sample Date	27 Oct 2023	27 Mar 2023	24 Aug 2022	---
Machine Hours	3255	2125	512	---
Oil Hours	1000	2000	0	---
Oil Changed	Not Changd	Changed	Not Changd	---
Sample Status	NORMAL	NORMAL	ABNORMAL	---

OIL CONDITION

Visc @ 40°C	cSt	43.2	41.0	42.6	---
Acid Number (AN)	mg KOH/g	0.51	0.57	0.58	---

CONTAMINATION

Particles >4µm		30373	8941	▲ 116531	---
Particles >6µm		1259	1936	▲ 33042	---
Particles >14µm		7	134	2237	---
ISO 4406:1999 (c)		22/17/10	20/18/14	24/22/18	---
Silicon	ppm	5	8	4	---
Sodium	ppm	2	1	1	---
Potassium	ppm	<1	<1	0	---

WEAR METALS

Iron	ppm	1	2	<1	---
Copper	ppm	15	20	8	---
Lead	ppm	<1	<1	0	---
Tin	ppm	0	<1	0	---
Aluminum	ppm	<1	<1	<1	---
Chromium	ppm	0	<1	0	---
Molybdenum	ppm	0	<1	0	---
Nickel	ppm	<1	<1	0	---
Titanium	ppm	0	0	0	---
Silver	ppm	0	0	0	---
Manganese	ppm	<1	0	0	---
Vanadium	ppm	0	0	0	---

ADDITIVES

Calcium	ppm	169	77	100	---
Magnesium	ppm	8	<1	0	---
Zinc	ppm	505	536	527	---
Phosphorus	ppm	391	435	416	---
Barium	ppm	0	<1	<1	---
Boron	ppm	0	0	0	---

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Depot: VOLVO8879
Unique No: 10737945
Signed: Wes Davis
Report Date: 13 Nov 2023

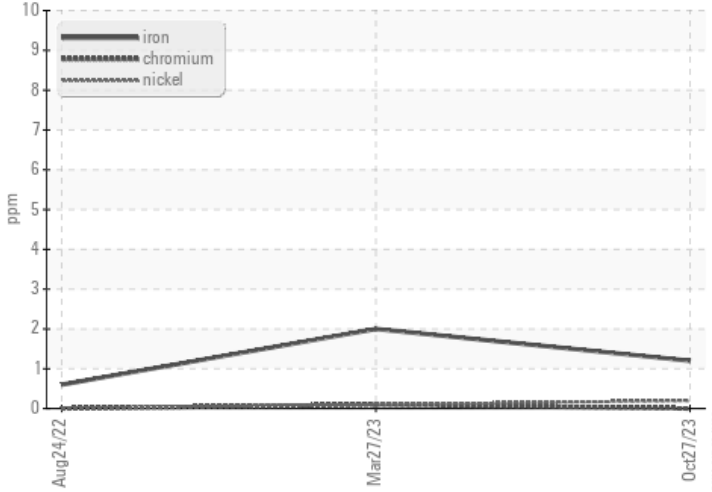


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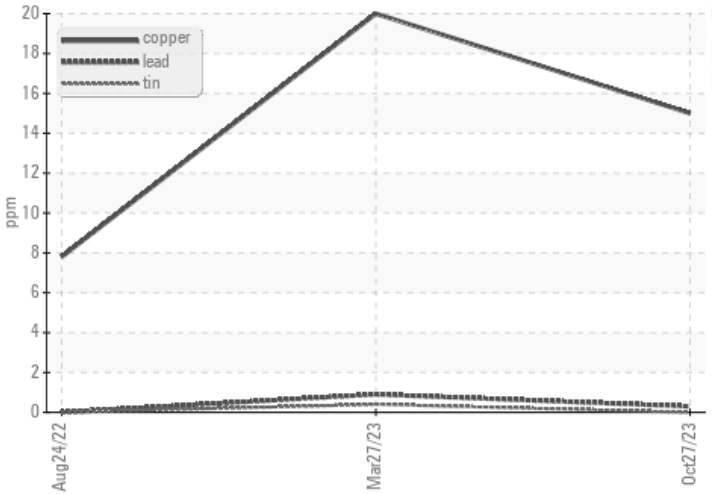


VOLVO GRAPHS

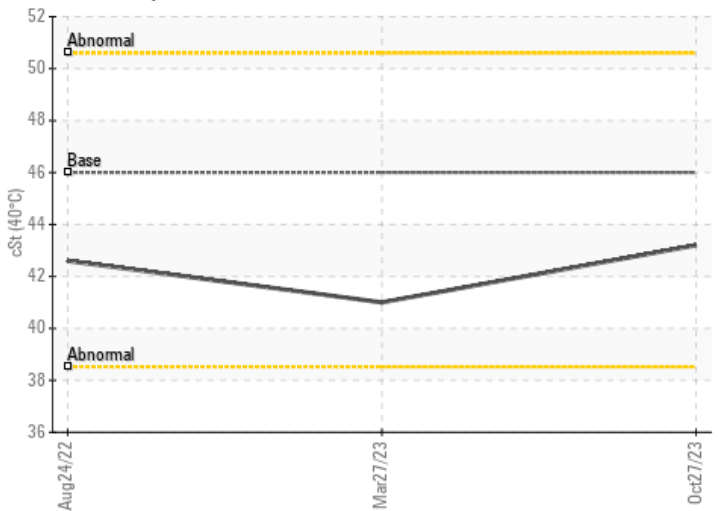
Ferrous Alloys



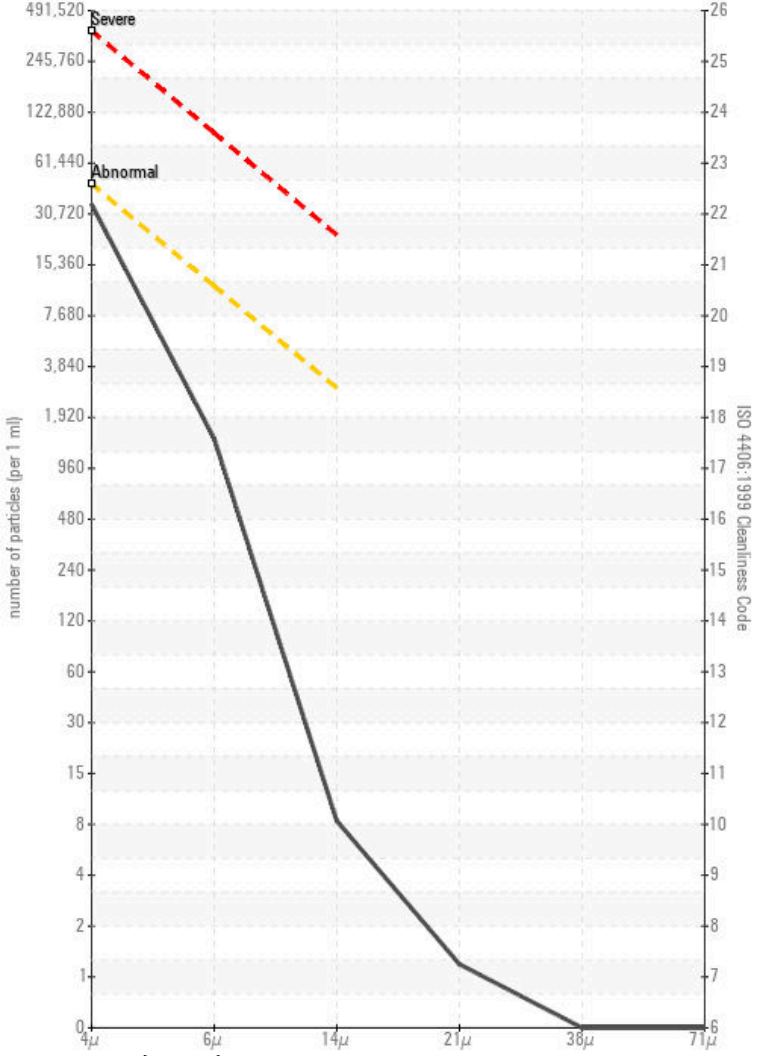
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

