



CONSTRUCTION EQUIPMENT

VOLVO EC250EL 310111 - HYDRAULIC SYSTEM



Sample No: VCP447488
Oil Type: MOBIL DTE 10 EXCEL 46
Job No:



SAMPLE INFORMATION

Sample Number	VCP447488	VCP433634	VCP416954	VCP406124
Sample Date	09 May 2024	22 Mar 2024	08 Feb 2024	07 Aug 2023
Machine Hours	6410	6235	6098	5474
Oil Hours	175	1970	1833	1209
Oil Changed	Not Changd	Changed	Not Changd	Not Changd
Sample Status	SEVERE	ABNORMAL	ABNORMAL	ABNORMAL

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OIL CONDITION

Visc @ 40°C	cSt	44.5	44.2	34.0	43.4
Acid Number (AN)	mg KOH/g	0.19	0.24	0.28	0.29



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		▲ 190093	▲ 352471	---	---
Particles >6µm		▲ 91151	▲ 256641	---	---
Particles >14µm		■ 133	▲ 16600	---	---
ISO 4406:1999 (c)		25/24/14	26/25/21	---	---
Silicon	ppm	■ 4	■ 6	■ 6	■ 3
Sodium	ppm	■ 2	■ 3	■ 4	■ 2
Potassium	ppm	■ <1	■ 2	■ 0	■ 0

Diagnosis

Check seals and/or filters for points of contaminant entry. 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. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. All component wear rates are normal. There is a high amount of silt (particulates < 14 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	■ 9	■ 7	■ 5
Copper	ppm	■ 55	■ 73	■ 67	■ 37
Lead	ppm	■ 0	■ 0	■ <1	■ 0
Tin	ppm	■ 0	■ <1	■ 0	■ 0
Aluminum	ppm	■ 13	▲ 26	▲ 23	■ 10
Chromium	ppm	■ 0	■ 0	■ 0	■ 0
Molybdenum	ppm	■ <1	■ <1	■ 0	■ 0
Nickel	ppm	■ 0	■ <1	■ 0	■ 0
Titanium	ppm	<1	<1	<1	0
Silver	ppm	<1	0	0	0
Manganese	ppm	■ 0	■ <1	■ 0	■ <1
Vanadium	ppm	<1	0	0	<1



ADDITIVES

Calcium	ppm	■ 224	■ 362	■ 324	■ 422
Magnesium	ppm	■ 5	■ 5	■ 0	■ 2
Zinc	ppm	■ 172	■ 261	■ 224	■ 260
Phosphorus	ppm	■ 288	■ 397	■ 419	■ 490
Barium	ppm	■ 0	■ 0	■ 0	■ 0
Boron	ppm	■ <1	■ 0	■ 0	■ 0

Depot: SCHGRE
Unique No: 11032588
Signed: Wes Davis
Report Date: 17 May 2024

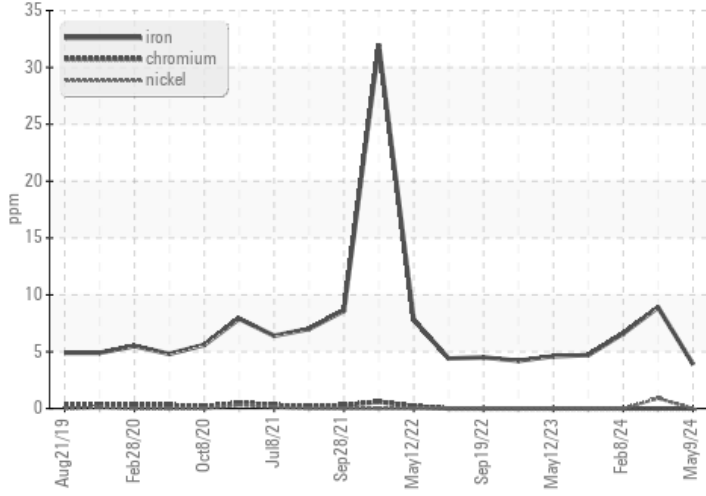


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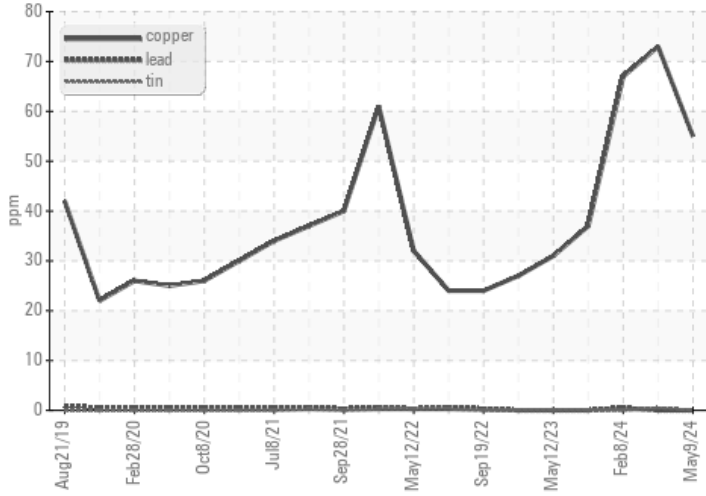


GRAPHS

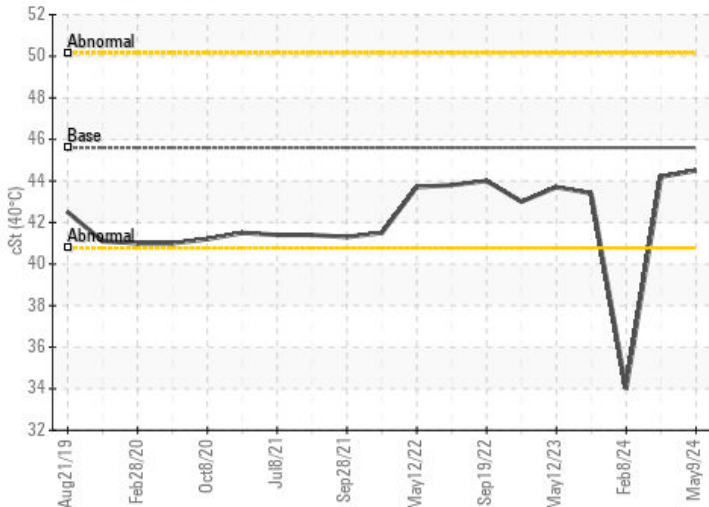
Ferrous Alloys



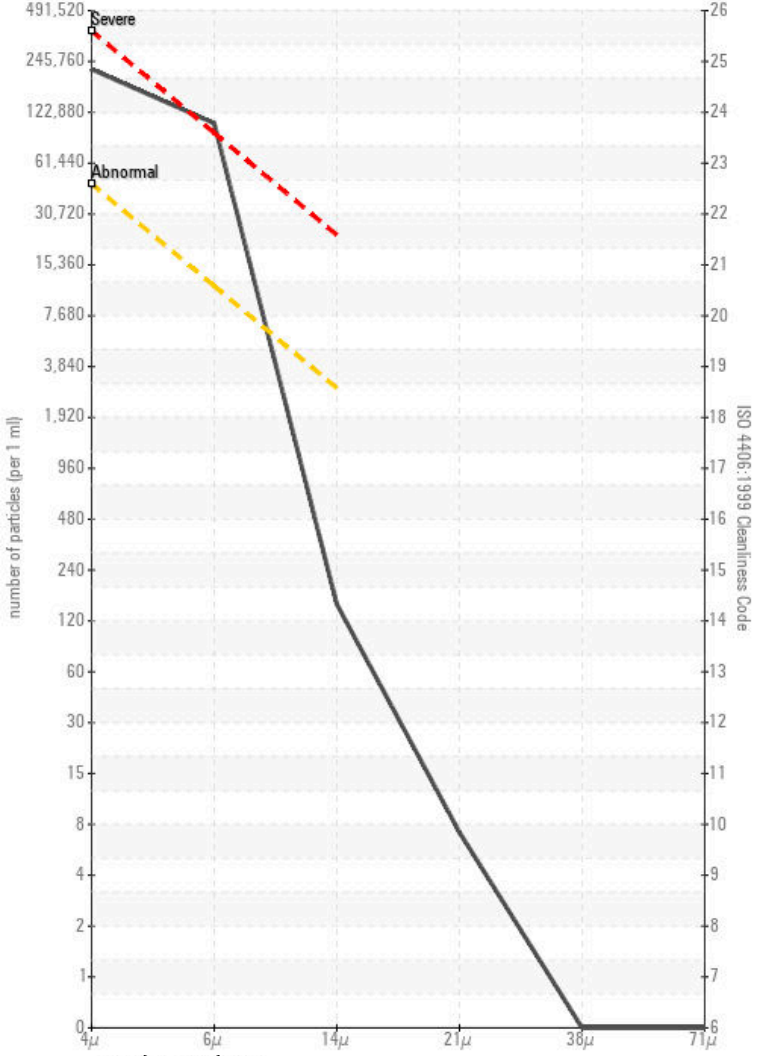
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

