



CONSTRUCTION EQUIPMENT

VOLVO EC480EL 310291 - HYDRAULIC SYSTEM



Sample No: VCP370573
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No:



113 - ASCENDUM MACHINERY INC - GARNER
 3561 JONES SAUSAGE ROAD
 GARNER, NC
 US 27529
 Contact: TRENT BROADWELL
 trent.broadwell@ascendummachinery.com
 T: (919)661-8817
 F: (919)661-9038

SAMPLE INFORMATION

Sample Number	VCP370573	VCP424373	VCP408082	VCP388842
Sample Date	27 Jun 2023	31 May 2023	25 Apr 2023	22 Feb 2023
Machine Hours	0	13714	13538	13149
Oil Hours	0	0	0	0
Oil Changed	Not Chngd	Changed	Not Chngd	Not Chngd
Sample Status	ABNORMAL	ABNORMAL	ABNORMAL	ABNORMAL

OIL CONDITION

Visc @ 40°C	cSt	▲ 35.1	■ 42.2	■ 43.1	■ 42.1
Acid Number (AN)	mg KOH/g	■ 0.41	■ 0.36	■ 0.37	■ 0.39

CONTAMINATION

Particles >4µm		■ 13127	▲ 58574	■ 18418	■ 36040
Particles >6µm		■ 2018	■ 5445	■ 684	■ 2088
Particles >14µm		■ 138	■ 149	■ 11	■ 102
ISO 4406:1999 (c)		21/18/14	23/20/14	21/17/11	22/18/14
Silicon	ppm	■ 21	■ 41	■ 30	■ 41
Sodium	ppm	■ 2	■ 3	■ <1	■ 2
Potassium	ppm	■ 1	■ 3	■ <1	■ 0

WEAR METALS

Iron	ppm	▲ 48	▲ 80	▲ 59	▲ 77
Copper	ppm	■ 8	■ 14	■ 8	■ 8
Lead	ppm	■ 0	■ 0	■ 0	■ 0
Tin	ppm	■ 0	■ 0	■ 0	■ 0
Aluminum	ppm	■ 4	■ 11	■ 7	■ 10
Chromium	ppm	■ 2	■ 4	■ 3	■ 4
Molybdenum	ppm	■ 0	■ 0	■ <1	■ 0
Nickel	ppm	■ 0	■ 0	■ 0	■ 0
Titanium	ppm	<1	<1	0	<1
Silver	ppm	0	0	0	0
Manganese	ppm	■ <1	■ <1	■ <1	■ <1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	■ 43	■ 46	■ 60	■ 49
Magnesium	ppm	■ 0	■ 3	■ 2	■ <1
Zinc	ppm	■ 425	■ 371	■ 408	■ 402
Phosphorus	ppm	■ 354	■ 333	■ 333	■ 337
Barium	ppm	■ 0	■ 0	■ 0	■ 0
Boron	ppm	■ 0	■ 0	■ 0	■ 0

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. The iron level is abnormal. All other component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

Depot: VOLV00157
Unique No: 10539463
Signed: Don Baldrige
Report Date: 05 Jul 2023

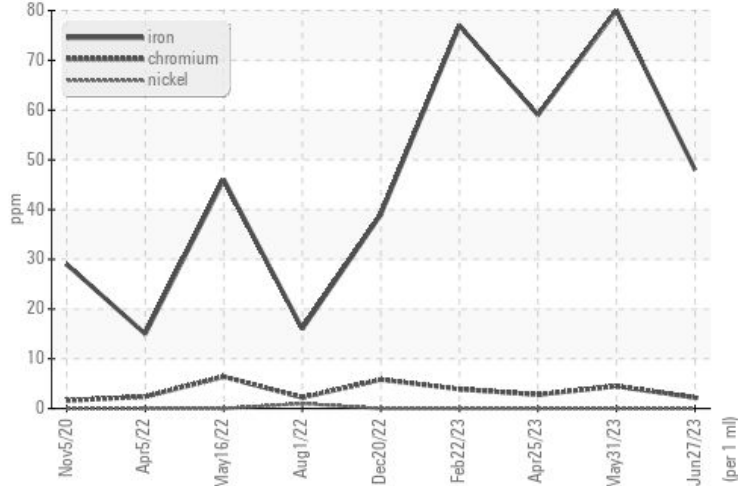


CONSTRUCTION EQUIPMENT

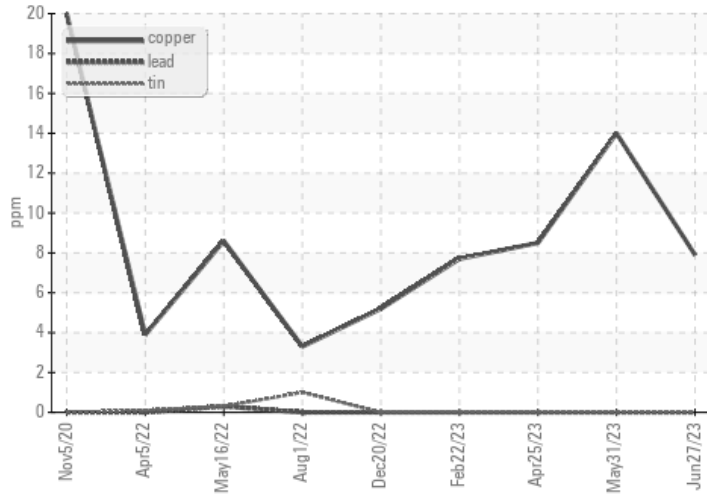


GRAPHS

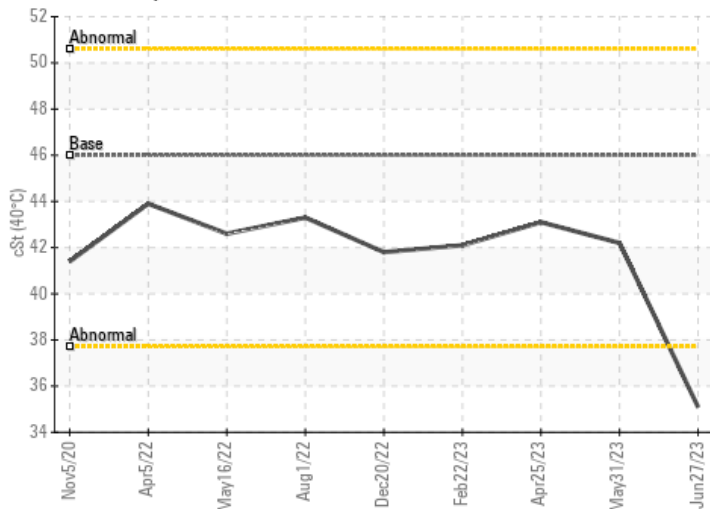
▲ Ferrous Alloys



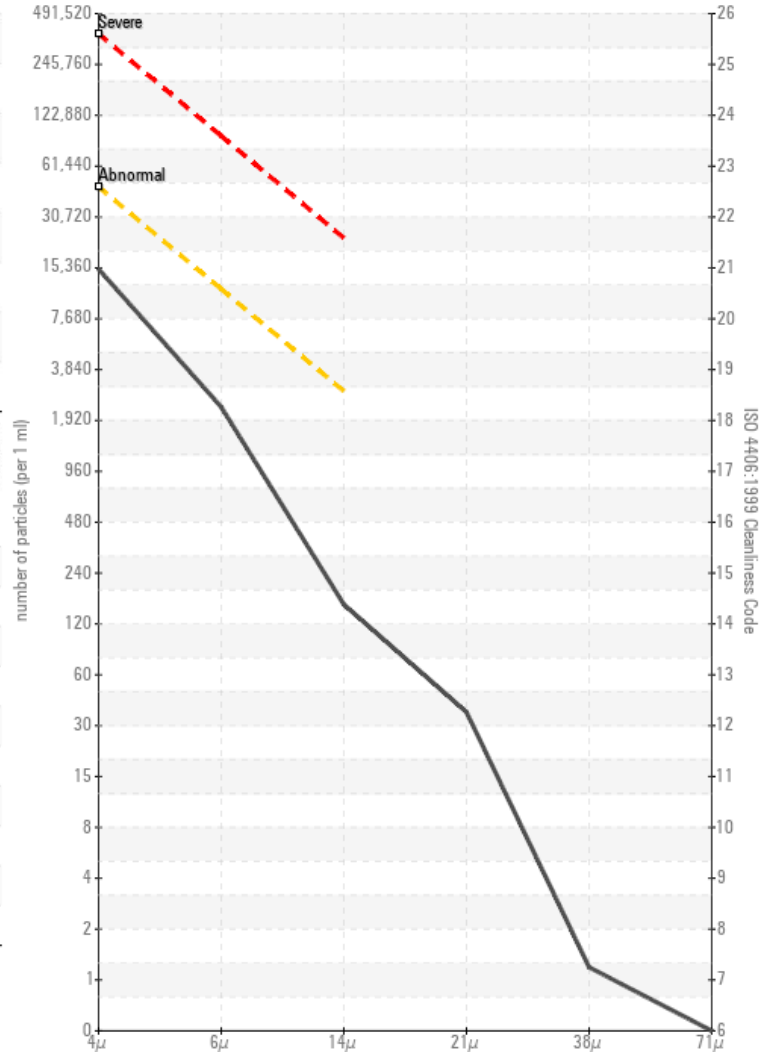
Non-ferrous Metals



▲ Viscosity @ 40°C



Particle Count



Acid Number

