



CONSTRUCTION EQUIPMENT

VOLVO EC380EL 311273 - HYDRAULIC SYSTEM



Sample No: VCP433671

Oil Type: BP AW 46

Job No:



SAMPLE INFORMATION

Sample Number	VCP433671	VCP432788	VCP383148	VCP358381
Sample Date	14 Jun 2024	25 Mar 2024	16 Sep 2023	06 Feb 2023
Machine Hours	6605	6130	6600	5125
Oil Hours	0	0	0	0
Oil Changed	Not Chngd	Not Chngd	Not Chngd	Not Chngd
Sample Status	NORMAL	NORMAL	ABNORMAL	NORMAL

LEONARDS CONTRACTING
 30850 STEPHENSON HWY
 MADISON HEIGHTS, MI
 US 48071
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OIL CONDITION

Visc @ 40°C	cSt	41.7	41.7	41.7	42.0
Acid Number (AN)	mg KOH/g	0.41	0.41	0.40	0.41



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		1761	2763	---	6981
Particles >6µm		385	472	---	290
Particles >14µm		19	33	---	5
ISO 4406:1999 (c)		18/16/11	19/16/12	---	20/15/10
Silicon	ppm	2	2	2	2
Sodium	ppm	0	0	1	0
Potassium	ppm	1	2	<1	1

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.



WEAR METALS

Iron	ppm	4	4	4	4
Copper	ppm	42	39	35	38
Lead	ppm	0	0	0	<1
Tin	ppm	0	<1	0	0
Aluminum	ppm	2	2	0	0
Chromium	ppm	3	2	3	3
Molybdenum	ppm	0	0	0	0
Nickel	ppm	0	0	0	0
Titanium	ppm	0	<1	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	0	<1	0
Vanadium	ppm	0	0	<1	0



ADDITIVES

Calcium	ppm	14	42	35	41
Magnesium	ppm	<1	1	0	<1
Zinc	ppm	329	309	362	392
Phosphorus	ppm	372	333	377	355
Barium	ppm	0	0	0	0
Boron	ppm	0	0	0	0

Depot: LEOMAD
Unique No: 11087441
Signed: Wes Davis
Report Date: 20 Jun 2024

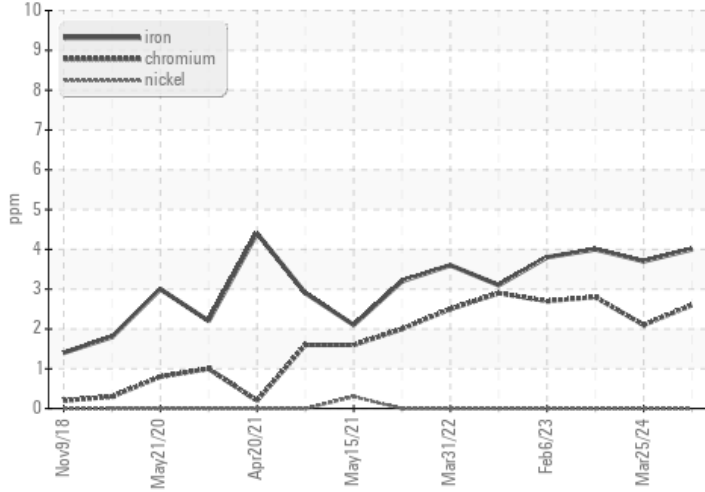


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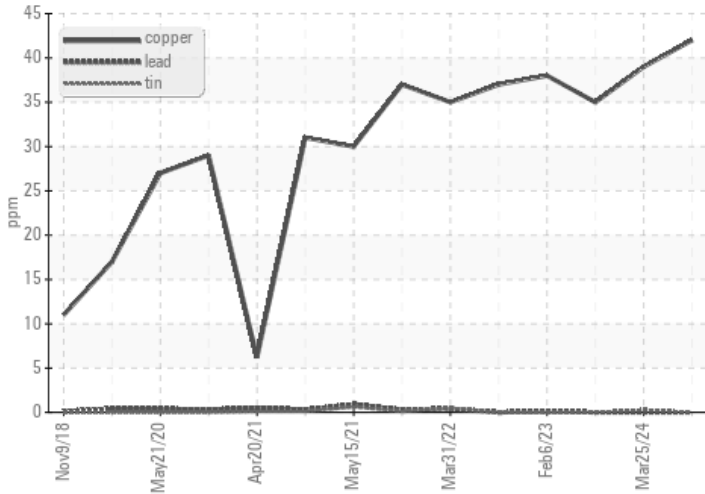


GRAPHS

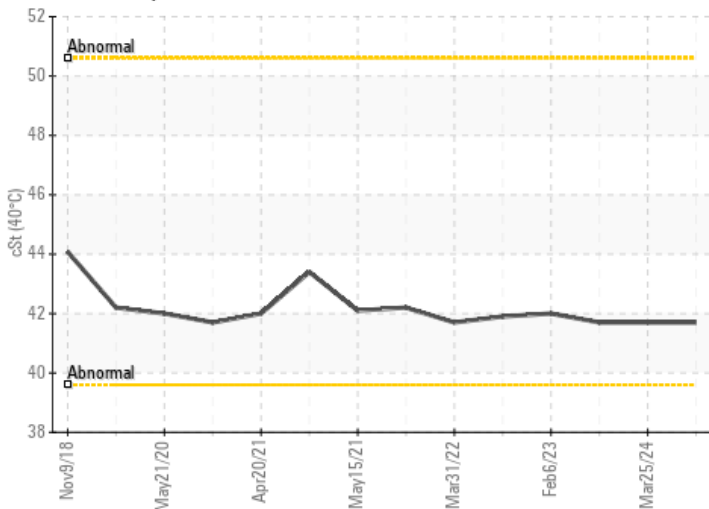
Ferrous Alloys



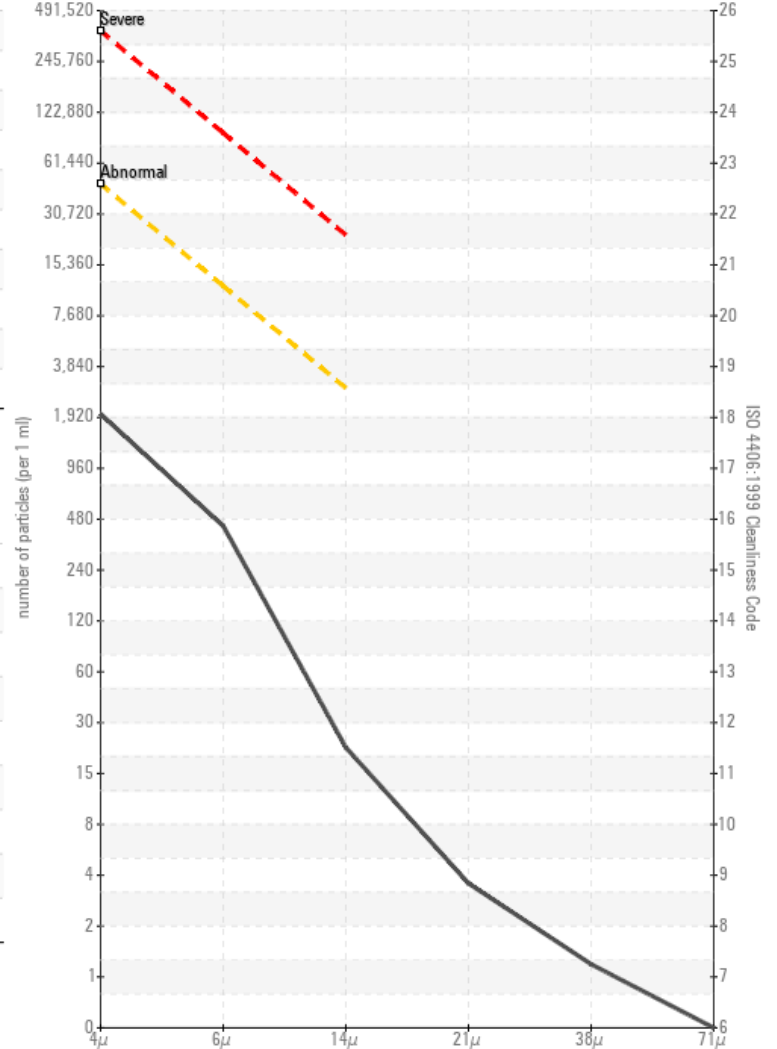
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

