



CONSTRUCTION EQUIPMENT

3025 VOLVO EC460CL 110315 - HYDRAULIC SYSTEM



Sample No: VCP401649
Oil Type: CASTROL HD AW ISO 46
Job No: 3025



SAMPLE INFORMATION

Sample Number	VCP401649	VCP393279	VCP379122	VCP343949
Sample Date	06 Oct 2023	23 May 2023	08 Nov 2022	27 May 2022
Machine Hours	11370	11000	10650	9930
Oil Hours	0	0	1000	0
Oil Changed	Not Chngd	Not Chngd	Not Chngd	Not Chngd
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

LEONARDS CONTRACTING
 30850 STEPHENSON HWY
 MADISON HEIGHTS, MI
 US 48071
 Contact: LARRY SCHRADER
 larry.schrade@sdevelop.com
 T: (810)499-1953
 F: x:



OIL CONDITION

Visc @ 40°C	cSt	45.1	45.0	44.7	44.7
Acid Number (AN)	mg KOH/g	0.32	0.27	0.30	0.35



CONTAMINATION

Particles >4µm	7171	8135	2952	1236	
Particles >6µm	1178	580	130	140	
Particles >14µm	70	39	9	11	
ISO 4406:1999 (c)	20/17/13	20/16/12	19/14/10	17/14/11	
Silicon	ppm	5	6	3	4
Sodium	ppm	2	3	0	2
Potassium	ppm	2	1	2	0

Diagnosis

Resample at the next service interval to monitor. All 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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



WEAR METALS

Iron	ppm	14	18	16	18
Copper	ppm	8	8	9	6
Lead	ppm	<1	<1	<1	<1
Tin	ppm	1	<1	<1	<1
Aluminum	ppm	1	2	2	<1
Chromium	ppm	7	8	8	7
Molybdenum	ppm	0	<1	0	<1
Nickel	ppm	<1	0	0	0
Titanium	ppm	0	<1	0	0
Silver	ppm	0	<1	3	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	68	68	67	76
Magnesium	ppm	8	13	6	6
Zinc	ppm	351	345	334	327
Phosphorus	ppm	265	268	260	281
Barium	ppm	0	0	0	0
Boron	ppm	0	0	<1	1

Depot: LEOMAD
Unique No: 10709058
Signed: Don Baldrige
Report Date: 25 Oct 2023

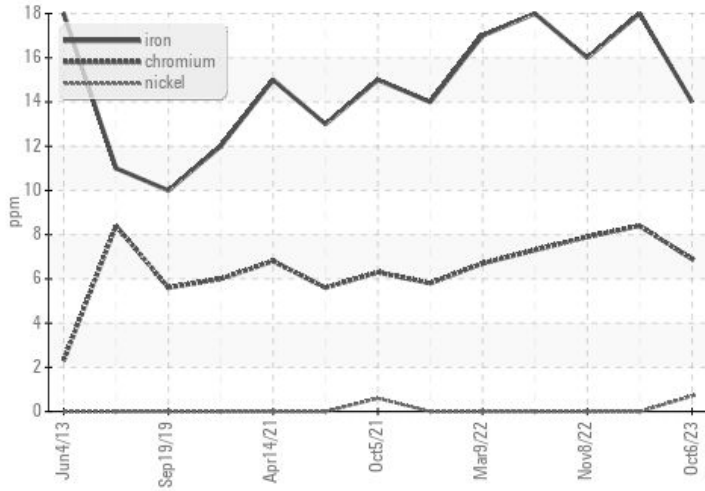


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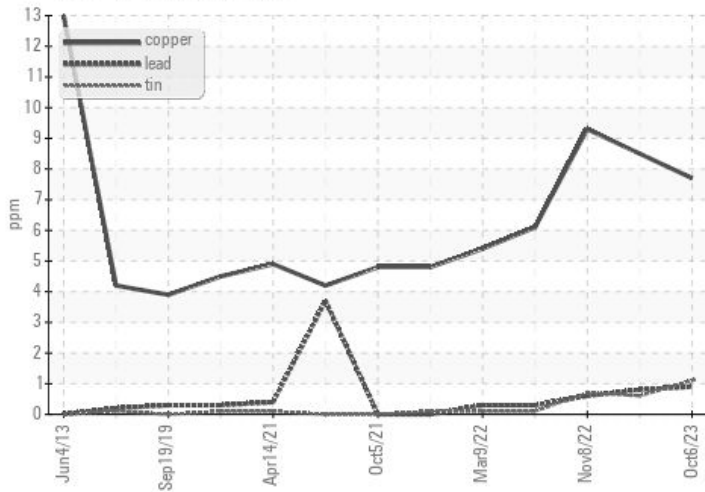


GRAPHS

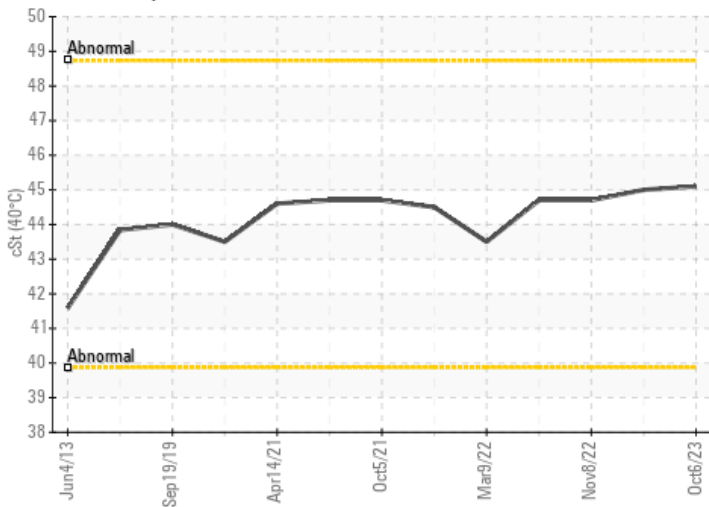
Ferrous Alloys



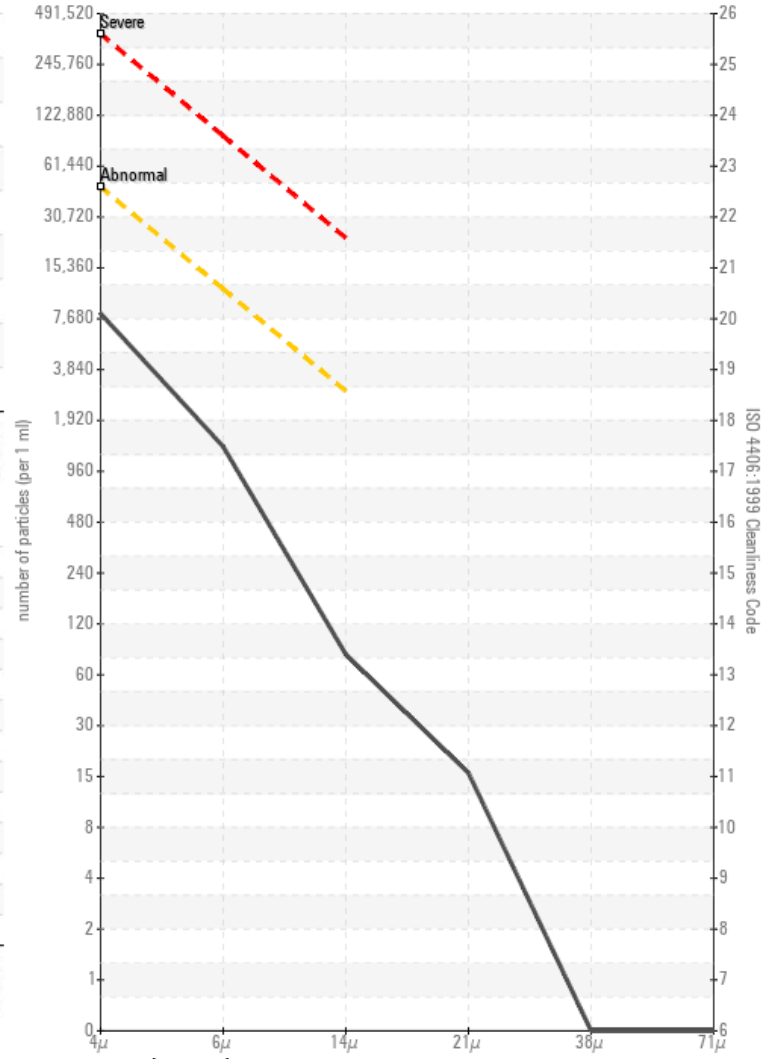
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

