



CONSTRUCTION EQUIPMENT

VOLVO L150H 5363 - HYDRAULIC SYSTEM



Sample No: VCP409007
Oil Type: ESSO NUTO H ISO 46
Job No:



SAMPLE INFORMATION

Sample Number	VCP409007	VCP366586	VCP383690	VCP364911
Sample Date	28 Jun 2023	17 Feb 2023	26 Dec 2022	02 Nov 2022
Machine Hours	8740	8239	8011	7749
Oil Hours	740	250	4011	3749
Oil Changed	Not Changd	Not Changd	Changed	Not Changd
Sample Status	NORMAL	NORMAL	ABNORMAL	NORMAL

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OIL CONDITION

Visc @ 40°C	cSt	41.7	41.9	40.9	41.1
Acid Number (AN)	mg KOH/g	0.40	0.43	0.491	0.47



CONTAMINATION

Particles >4µm	378	1923	▲ 11189	2922
Particles >6µm	113	268	687	748
Particles >14µm	12	32	17	94
ISO 4406:1999 (c)	16/14/11	18/15/12	21/17/11	19/17/14
Silicon	ppm	1	2	2
Sodium	ppm	4	3	6
Potassium	ppm	4	<1	<1

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	5	4	8	2
Copper	ppm	3	2	5	25
Lead	ppm	<1	0	2	<1
Tin	ppm	0	0	<1	0
Aluminum	ppm	1	0	<1	<1
Chromium	ppm	<1	<1	2	0
Molybdenum	ppm	1	1	3	0
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	0
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	190	168	259	80
Magnesium	ppm	11	14	22	0
Zinc	ppm	480	458	493	513
Phosphorus	ppm	382	352	407	411
Barium	ppm	0	0	0	0
Boron	ppm	1	2	4	0

Depot: MARDIC
Unique No: 10559341
Signed: Don Baldrige
Report Date: 17 Jul 2023

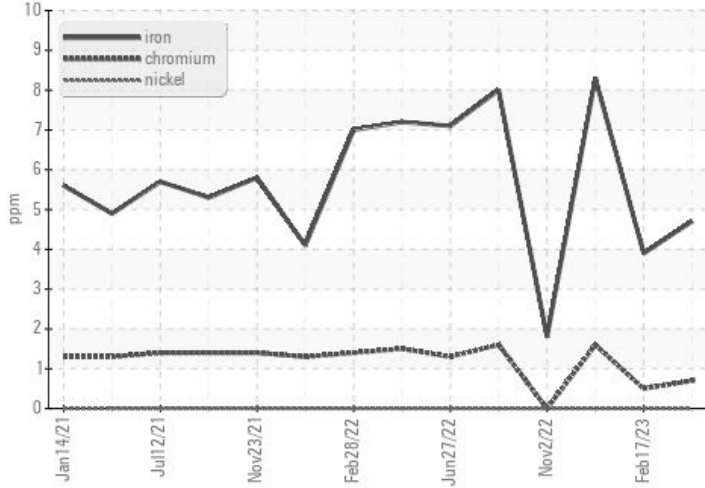


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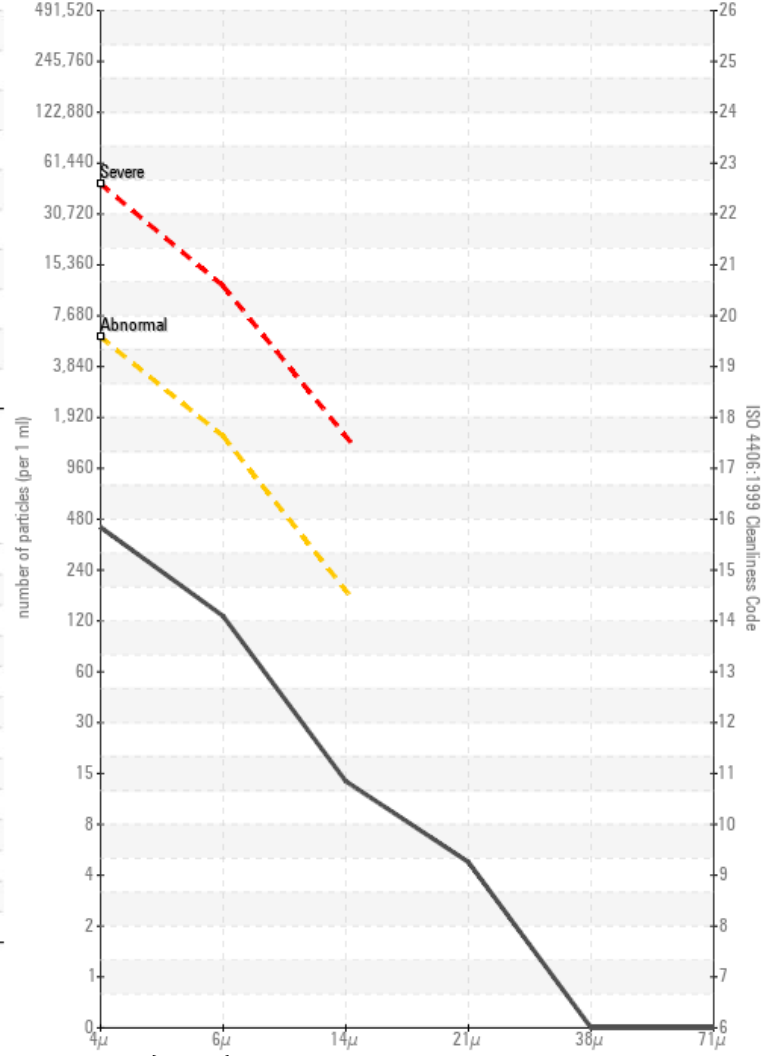


VOLVO GRAPHS

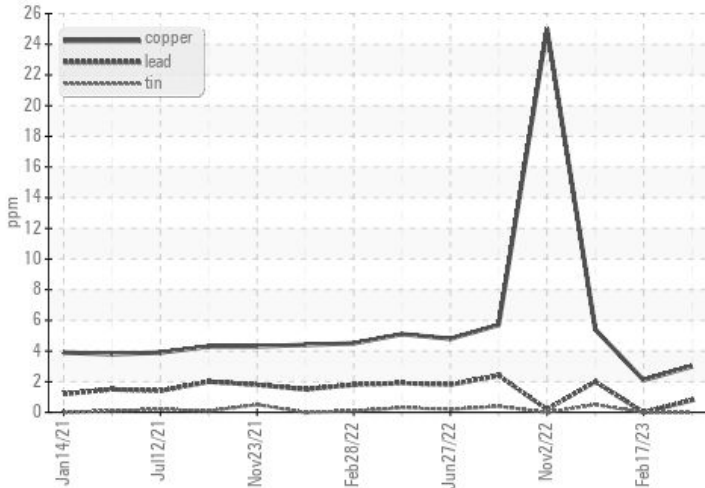
Ferrous Alloys



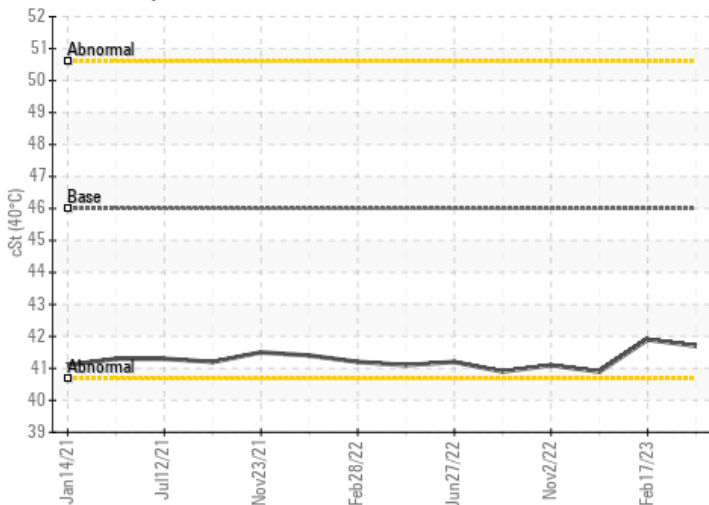
Particle Count



Non-ferrous Metals



Viscosity @ 40°C



Acid Number

