CONSTRUCTION EQUIPMENT

3676BS VOLVO EC160EL 310364 - HYDRAULIC SYSTEM

Sample No: VCP413224
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: 3676BS

DH FUNK AND SONS LLC
3995 CONTINENTAL DRIVE
COLUMBIA, PA
US 17512
Contact: GARY SHEPHERD
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T:
F:

SAMPLE INFORMATION

Sample Number		**VCP413224**	VCP384730	VCP335949	---
Sample Date		**26 Jun 2023**	13 Jun 2023	25 Mar 2022	---
Machine Hours		**4068**	4000	3000	---
Oil Hours		**0**	2000	1000	---
Oil Changed		**N/A**	Changed	Not Changd	---
Sample Status		**ABNORMAL**	ABNORMAL	NORMAL	---

OIL CONDITION

Visc @ 40°C	cSt	▲ **69.2**	57.5	58.5	---
Acid Number (AN)	mg KOH/g	**1.59**	1.14	1.27	---

CONTAMINATION

Particles >4µm		▲ **179700**	▲ 180111	9041	---
Particles >6µm		▲ **93555**	▲ 93831	472	---
Particles >14µm		**1602**	886	25	---
ISO 4406:1999 (c)		**25/24/18**	25/24/17	20/16/12	---
Silicon	ppm	**6**	14	5	---
Sodium	ppm	**2**	0	3	---
Potassium	ppm	**4**	13	2	---

WEAR METALS

Iron	ppm	**5**	15	6	---
Copper	ppm	**7**	39	12	---
Lead	ppm	**0**	<1	<1	---
Tin	ppm	**0**	<1	<1	---
Aluminum	ppm	**<1**	5	3	---
Chromium	ppm	**0**	0	<1	---
Molybdenum	ppm	**44**	50	19	---
Nickel	ppm	**0**	0	0	---
Titanium	ppm	**0**	<1	<1	---
Silver	ppm	**0**	0	<1	---
Manganese	ppm	**0**	<1	<1	---
Vanadium	ppm	**0**	0	0	---

ADDITIVES

Calcium	ppm	**1652**	1710	1685	---
Magnesium	ppm	**439**	327	316	---
Zinc	ppm	**1059**	938	866	---
Phosphorus	ppm	**875**	804	798	---
Barium	ppm	**0**	0	0	---
Boron	ppm	**50**	82	73	---

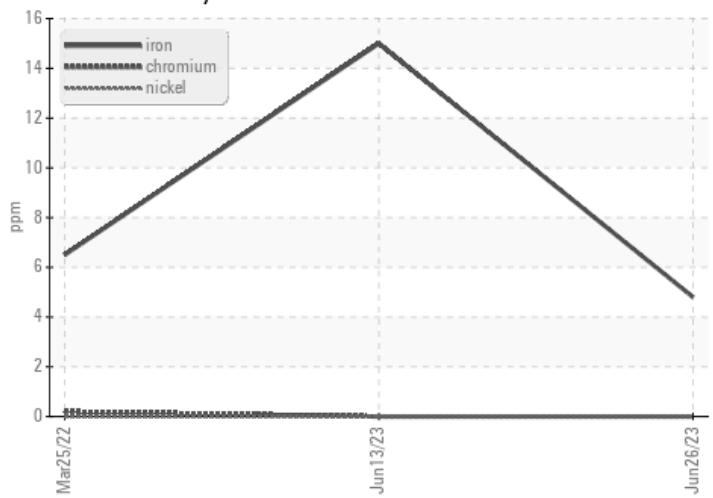
Diagnosis

We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. The wear metal levels do not reflect the suspected failure. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The oil viscosity is higher than normal. Confirm oil type. The AN level is acceptable for this fluid.

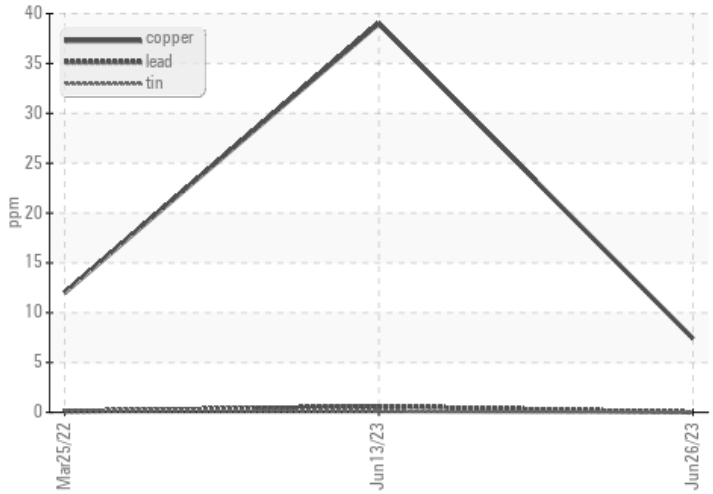
Depot: DHFCOL
Unique No: 10537033
Signed: Don Baldridge
Report Date: 03 Jul 2023

GRAPHS

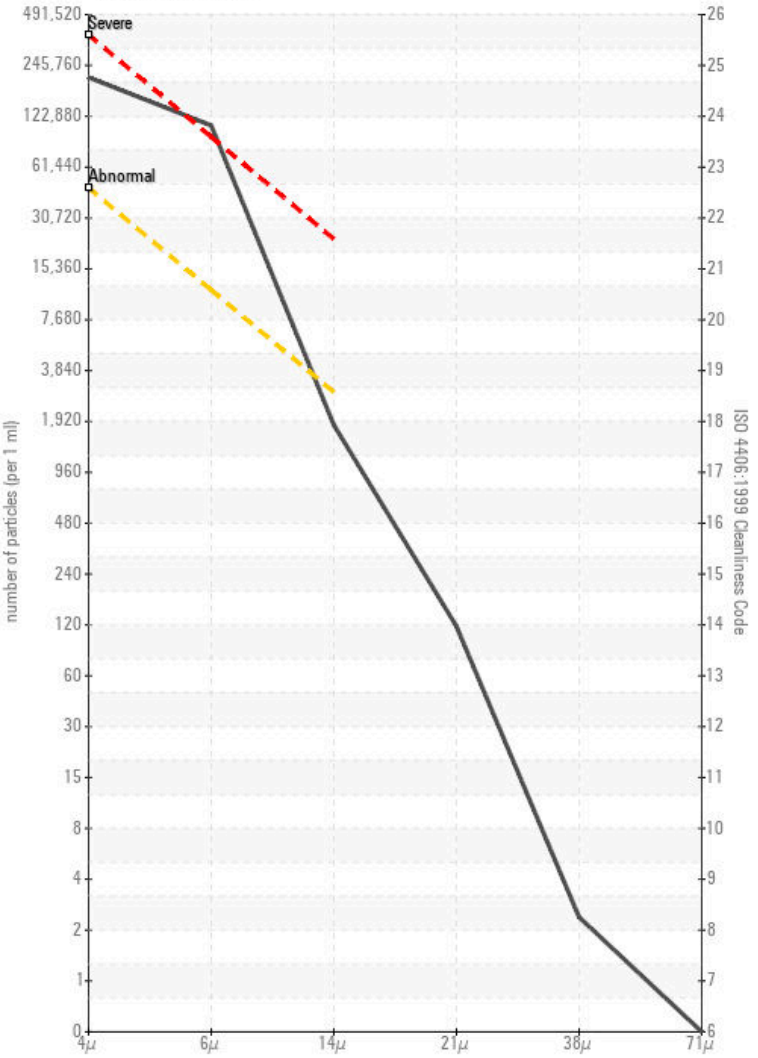
Ferrous Alloys



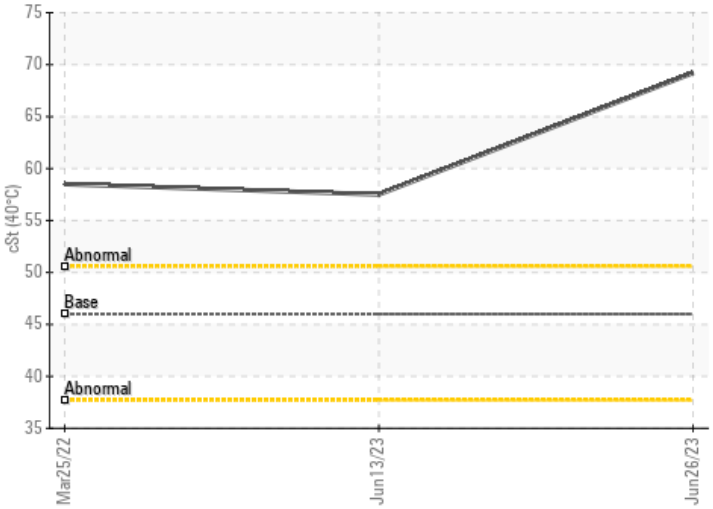
Non-ferrous Metals



Particle Count



Viscosity @ 40°C



Acid Number