



CONSTRUCTION EQUIPMENT

SPM580155 VOLVO EC380E 314966 - HYDRAULIC SYSTEM



Sample No: VCP420037
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: SPM580155



SAMPLE INFORMATION

Sample Number	VCP420037	VCP422177	VCP401613	VCP387486
Sample Date	14 Jul 2023	07 Jun 2023	20 Jan 2023	14 Nov 2022
Machine Hours	4982	4682	1858	2125
Oil Hours	0	0	0	0
Oil Changed	Changed	Not Changd	Not Changd	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL

UNITED SCRAP

1545 S CICERO AVE
 CICERO, IL
 US 60804
 Contact: RON LUCHTENBURG
 rluchten@unitedscrap.com
 T:
 F:



OIL CONDITION

Visc @ 40°C	cSt	39.8	43.5	41.8	41.4
Acid Number (AN)	mg KOH/g	0.40	0.49	0.52	0.47



CONTAMINATION

Particles >4µm		1557	6721	1939	2942
Particles >6µm		462	1863	630	404
Particles >14µm		47	53	76	20
ISO 4406:1999 (c)		18/16/13	20/18/13	18/16/13	19/16/11
Silicon	ppm	3	1	2	4
Sodium	ppm	<1	0	0	<1
Potassium	ppm	<1	<1	1	0

Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. The chromium level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



WEAR METALS

Iron	ppm	6	4	4	4
Copper	ppm	7	2	7	8
Lead	ppm	0	1	<1	0
Tin	ppm	<1	0	0	<1
Aluminum	ppm	<1	0	0	<1
Chromium	ppm	▲ 24	4	0	<1
Molybdenum	ppm	0	<1	<1	0
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	0	0	0
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	78	131	118	93
Magnesium	ppm	2	53	4	<1
Zinc	ppm	449	949	534	499
Phosphorus	ppm	348	732	400	399
Barium	ppm	0	1	0	0
Boron	ppm	0	0	0	0

Depot: UNICICIL
Unique No: 10586398
Signed: Jonathan Hester
Report Date: 04 Aug 2023

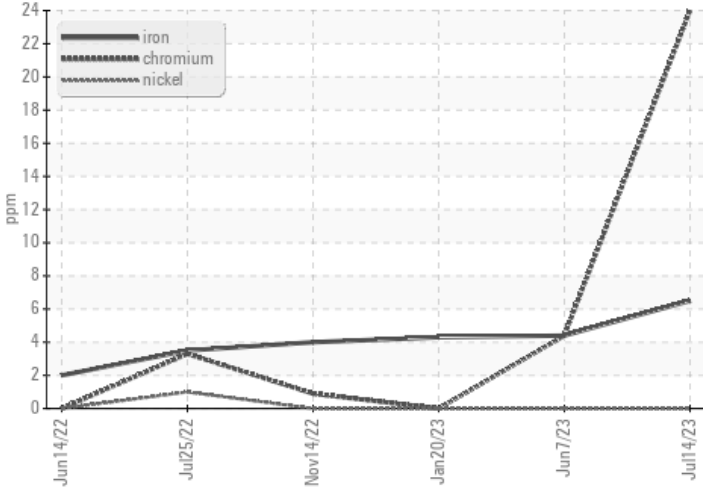


CONSTRUCTION EQUIPMENT

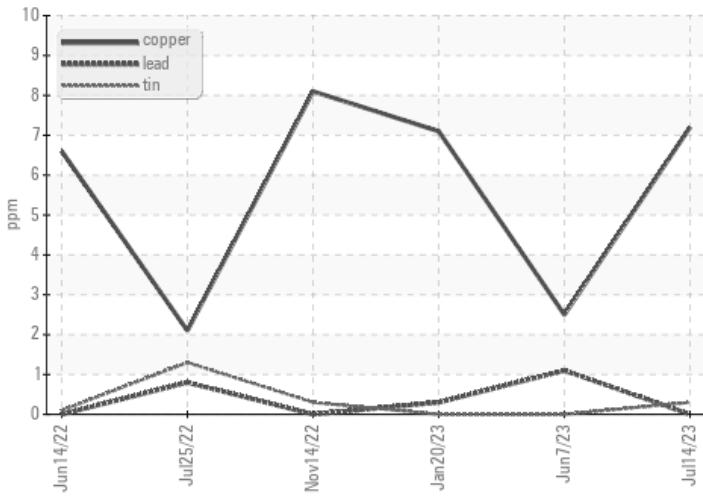


GRAPHS

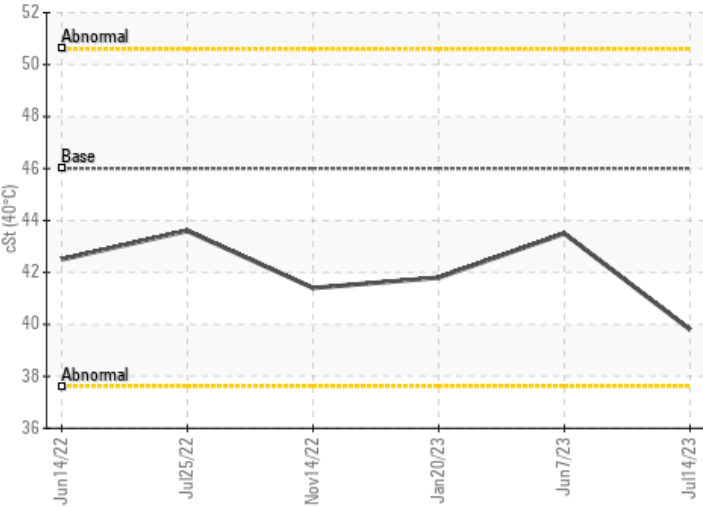
▲ Ferrous Alloys



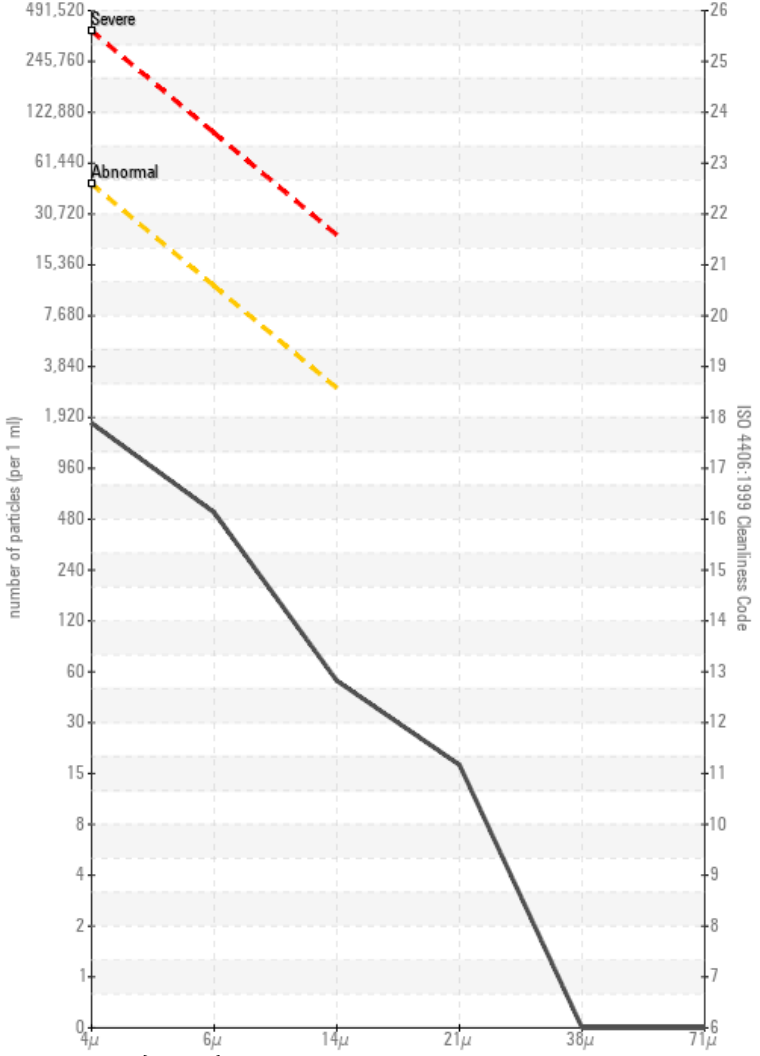
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

