



# CONSTRUCTION EQUIPMENT

## SPM580906 VOLVO EC380EL 311492 - HYDRAULIC SYSTEM



**Sample No:** VCP414189  
**Oil Type:** VOLVO SUPER HYDRAULIC OIL 46  
**Job No:** SPM580906



### SAMPLE INFORMATION

Sample Number	<b>VCP414189</b>	VCP403425	VCP387437	VCP365203
Sample Date	<b>21 Jul 2023</b>	22 Feb 2023	05 Dec 2022	19 Sep 2022
Machine Hours	<b>7780</b>	6944	6455	6062
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Not Changd</b>	Changed	Not Changd	Not Changd
Sample Status	<b>ABNORMAL</b>	NORMAL	ATTENTION	NORMAL

**BELSON STEEL**  
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### OIL CONDITION

Visc @ 40°C	cSt	<b>42.0</b>	38.4	41.4	41.6
Acid Number (AN)	mg KOH/g	<b>0.50</b>	0.62	0.54	0.59

### CONTAMINATION

Particles >4µm	---	4642	63383	6560
Particles >6µm	---	948	12483	1491
Particles >14µm	---	32	550	110
ISO 4406:1999 (c)	---	19/17/12	23/21/16	20/18/14
Silicon	ppm	<b>&lt;1</b>	1	2
Sodium	ppm	<b>&lt;1</b>	0	2
Potassium	ppm	<b>0</b>	1	0

### Diagnosis

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present 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	<b>3</b>	7	7	4
Copper	ppm	<b>6</b>	18	21	16
Lead	ppm	<b>0</b>	<1	0	<1
Tin	ppm	<b>0</b>	<1	<1	<1
Aluminum	ppm	<b>&lt;1</b>	<1	<1	<1
Chromium	ppm	<b>2</b>	3	3	2
Molybdenum	ppm	<b>1</b>	2	3	3
Nickel	ppm	<b>0</b>	<1	0	0
Titanium	ppm	<b>0</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	<1
Manganese	ppm	<b>&lt;1</b>	<1	<1	0
Vanadium	ppm	<b>0</b>	0	0	<1

### ADDITIVES

Calcium	ppm	<b>95</b>	182	223	226
Magnesium	ppm	<b>9</b>	15	19	18
Zinc	ppm	<b>478</b>	486	498	469
Phosphorus	ppm	<b>366</b>	381	407	378
Barium	ppm	<b>0</b>	0	0	2
Boron	ppm	<b>0</b>	2	1	2

**Depot:** BELBOU  
**Unique No:** 10586393  
**Signed:** Jonathan Hester  
**Report Date:** 04 Aug 2023

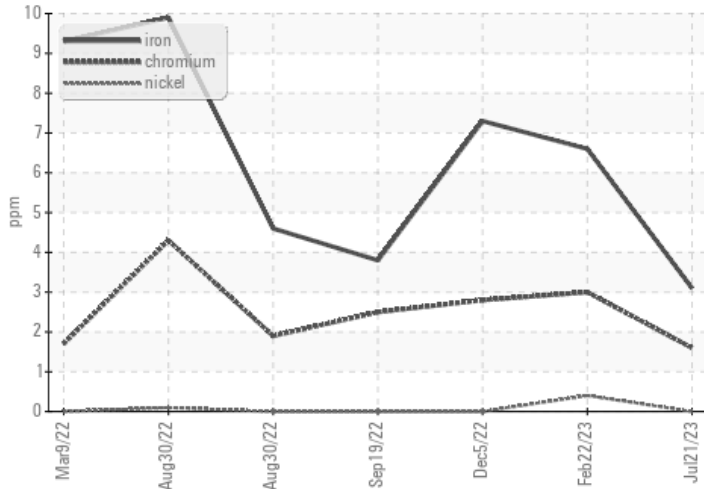


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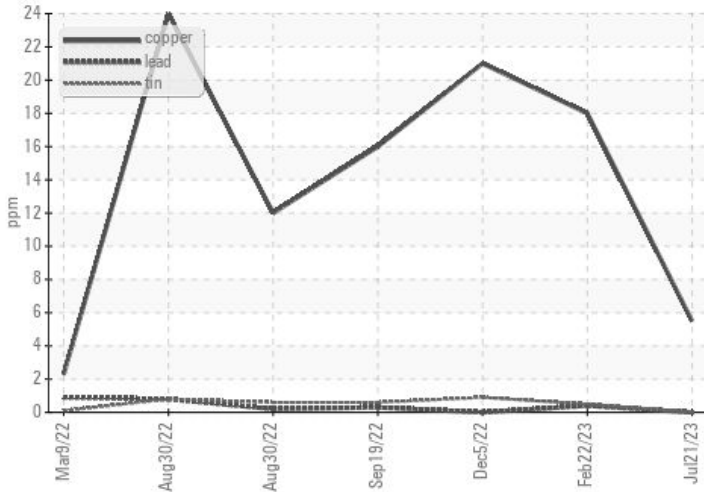


## GRAPHS

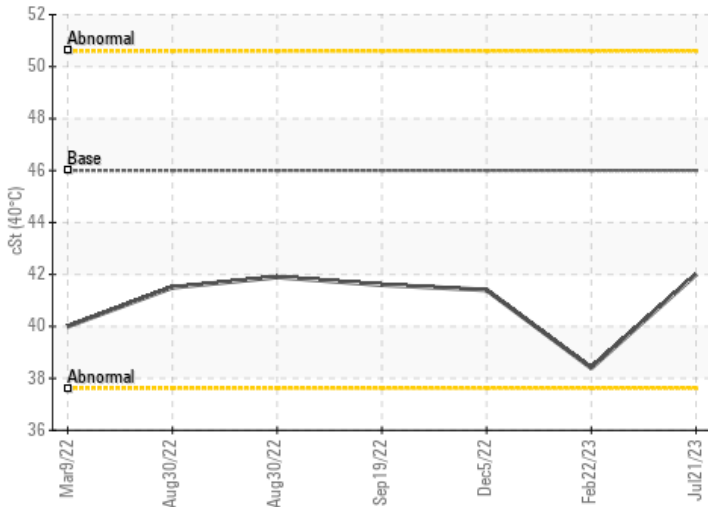
### Ferrous Alloys



### Non-ferrous Metals



### Viscosity @ 40°C



### Acid Number

