



# CONSTRUCTION EQUIPMENT

## A11691 VOLVO ECR235E 311744 - HYDRAULIC SYSTEM



**Sample No:** VCP429669  
**Oil Type:** MOBIL HYDRAULIC OIL AW 46  
**Job No:** A11691



### SAMPLE INFORMATION

Sample Number	<b>VCP429669</b>	VCP337105	VCP400281	VCP373475
Sample Date	<b>15 Dec 2023</b>	18 Dec 2022	09 Dec 2022	07 Jul 2022
Machine Hours	<b>4195</b>	3633	3633	3115
Oil Hours	<b>2000</b>	1500	1088	0
Oil Changed	<b>Changed</b>	Not Changd	Not Changd	Not Changd
Sample Status	<b>ABNORMAL</b>	NORMAL	ABNORMAL	ABNORMAL

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### OIL CONDITION

Visc @ 40°C	cSt	<b>41.9</b>	42.7	284	40.6
Acid Number (AN)	mg KOH/g	<b>0.85</b>	0.50	1.39	0.53

### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Particles >4µm		<b>103133</b>	11798	141947	---
Particles >6µm		<b>16213</b>	471	47159	---
Particles >14µm		<b>26</b>	25	5338	---
ISO 4406:1999 (c)		<b>24/21/12</b>	21/16/12	24/23/20	---
Silicon	ppm	<b>7</b>	5	3	4
Sodium	ppm	<b>0</b>	<1	<1	0
Potassium	ppm	<b>1</b>	0	0	<1

**Diagnosis**  
 No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) 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>12</b>	7	33	6
Copper	ppm	<b>14</b>	11	6	14
Lead	ppm	<b>0</b>	0	0	<1
Tin	ppm	<b>0</b>	0	<1	0
Aluminum	ppm	<b>2</b>	1	<1	1
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>&lt;1</b>	1	0	<1
Nickel	ppm	<b>0</b>	0	0	0
Titanium	ppm	<b>&lt;1</b>	<1	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	0
Vanadium	ppm	<b>0</b>	0	0	0

### ADDITIVES

Calcium	ppm	<b>1161</b>	1031	41	115
Magnesium	ppm	<b>18</b>	16	<1	2
Zinc	ppm	<b>816</b>	704	34	515
Phosphorus	ppm	<b>708</b>	592	983	398
Barium	ppm	<b>6</b>	0	0	0
Boron	ppm	<b>37</b>	23	168	<1

**Depot:** JAAPHI  
**Unique No:** 10796632  
**Signed:** Angela Borella  
**Report Date:** 22 Dec 2023

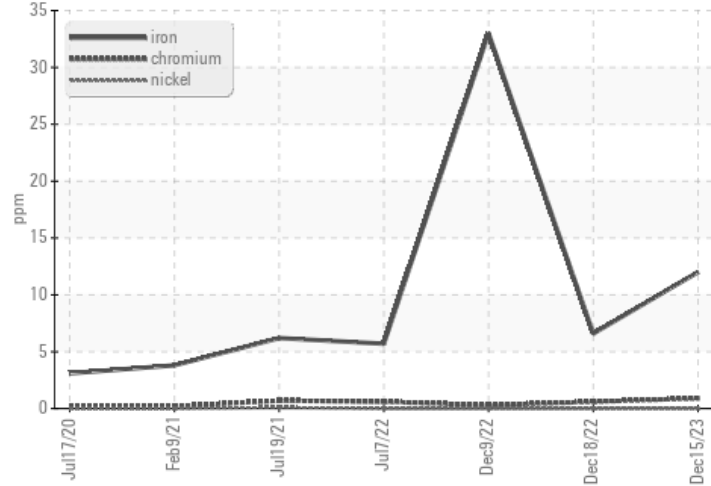


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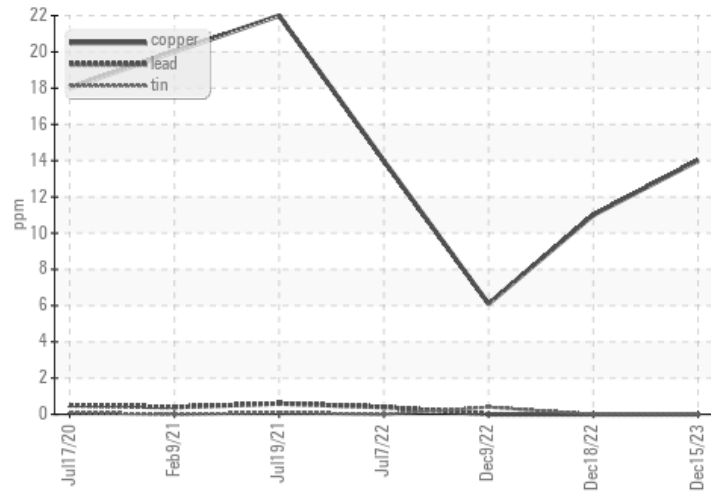


## GRAPHS

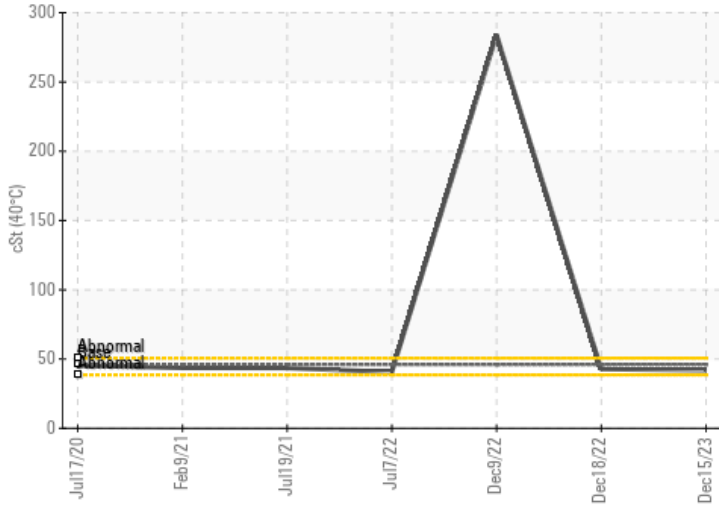
Ferrous Alloys



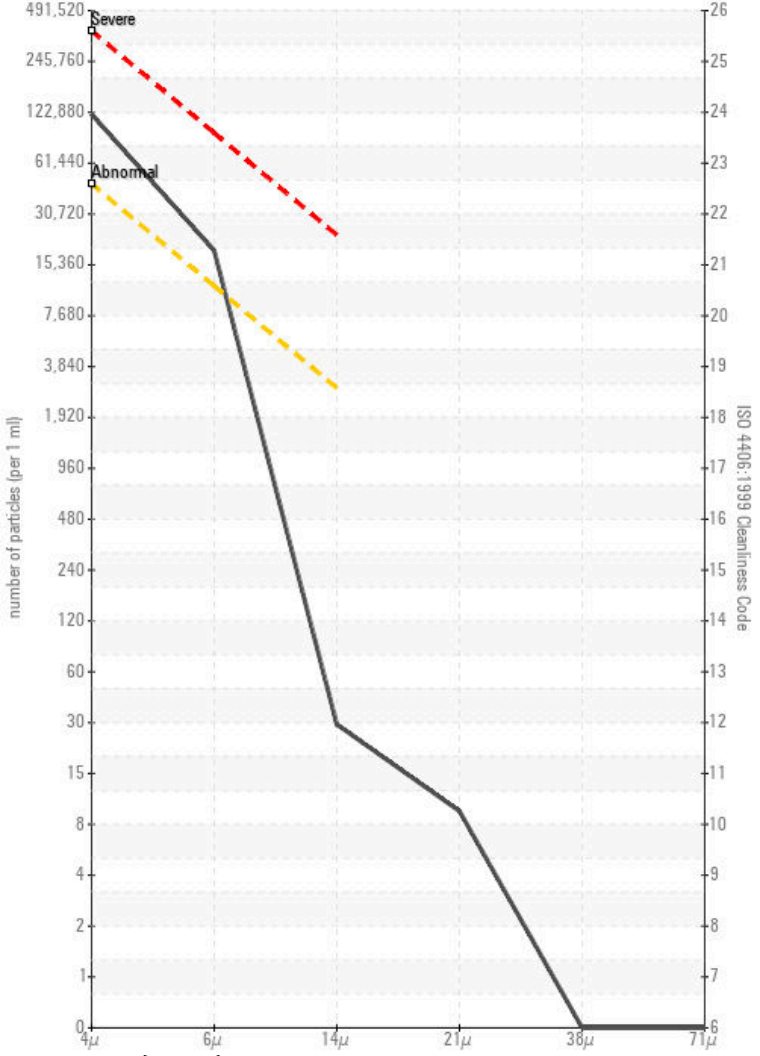
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

