



# CONSTRUCTION EQUIPMENT

## MGC VOLVO L110H 631398 - HYDRAULIC SYSTEM



**Sample No:** VCP397982  
**Oil Type:** AW HYDRAULIC OIL ISO 46  
**Job No:** MGC



### SAMPLE INFORMATION

Sample Number	<b>VCP397982</b>	VCP316026	VCP297389	VCP254332
Sample Date	<b>13 Jan 2023</b>	11 Jun 2021	03 Dec 2020	12 Jul 2019
Machine Hours	<b>2544</b>	2025	1744	1021
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Not Chngd</b>	Not Chngd	Not Chngd	Changed
Sample Status	<b>ABNORMAL</b>	NORMAL	NORMAL	ABNORMAL

**ARNOLD MACHINERY COMPANY**  
 4323 EAST WINSLOW AVENUE  
 PHOENIX, AZ  
 US 85040  
 Contact: RANDY PRZEKURAT  
 randyp@arnoldmachinery.com  
 T:  
 F: (602)414-1904

### OIL CONDITION

Visc @ 40°C	cSt	<b>42.1</b>	42.6	42.1	42.0
Acid Number (AN)	mg KOH/g	<b>0.37</b>	0.388	0.342	0.425

### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Particles >4µm		<b>7632</b>	6744	3860	6141
Particles >6µm		<b>2129</b>	853	509	1632
Particles >14µm		<b>207</b>	73	35	163
ISO 4406:1999 (c)		<b>20/18/15</b>	20/17/13	19/16/12	20/18/15
Silicon	ppm	<b>3</b>	2	<1	2
Sodium	ppm	<b>0</b>	1	0	<1
Potassium	ppm	<b>&lt;1</b>	0	<1	<1

### Diagnosis

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates 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>6</b>	4	4	3
Copper	ppm	<b>4</b>	3	3	3
Lead	ppm	<b>3</b>	2	3	2
Tin	ppm	<b>&lt;1</b>	<1	<1	<1
Aluminum	ppm	<b>1</b>	<1	0	0
Chromium	ppm	<b>1</b>	<1	<1	<1
Molybdenum	ppm	<b>0</b>	<1	<1	0
Nickel	ppm	<b>0</b>	0	0	0
Titanium	ppm	<b>0</b>	0	0	0
Silver	ppm	<b>&lt;1</b>	0	<1	0
Manganese	ppm	<b>&lt;1</b>	0	<1	0
Vanadium	ppm	<b>0</b>	0	0	0

### ADDITIVES

Calcium	ppm	<b>158</b>	149	171	155
Magnesium	ppm	<b>2</b>	2	2	<1
Zinc	ppm	<b>467</b>	415	468	423
Phosphorus	ppm	<b>349</b>	336	343	323
Barium	ppm	<b>1</b>	0	0	0
Boron	ppm	<b>&lt;1</b>	5	2	1

**Depot:** VOLVO6174  
**Unique No:** 10307509  
**Signed:** Angela Borella  
**Report Date:** 25 Jan 2023

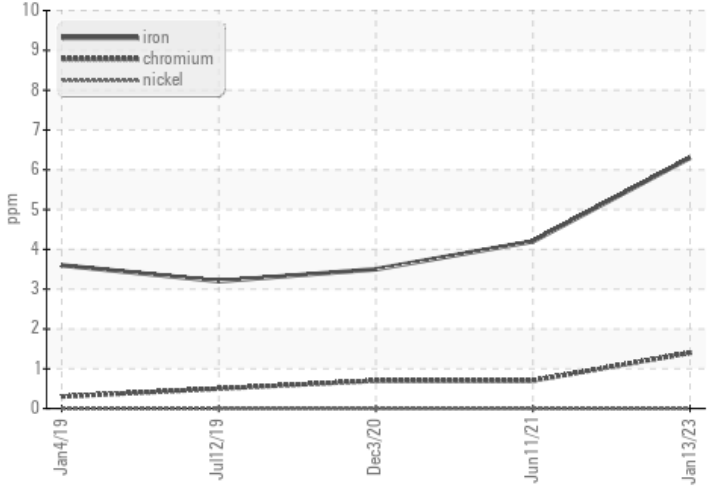


# CONSTRUCTION EQUIPMENT

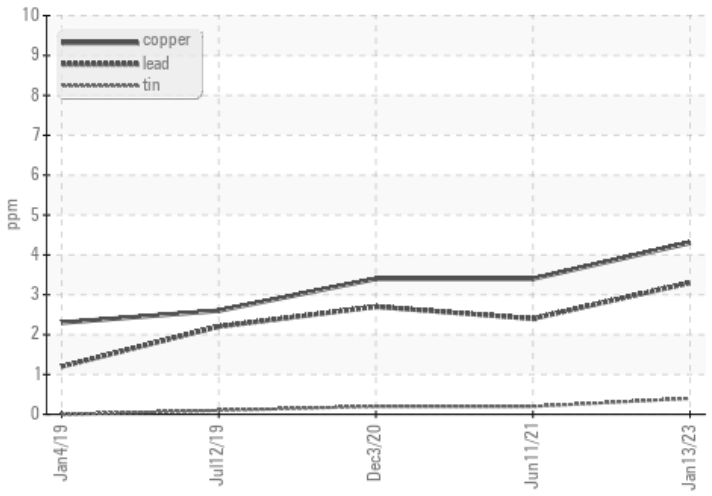


## GRAPHS

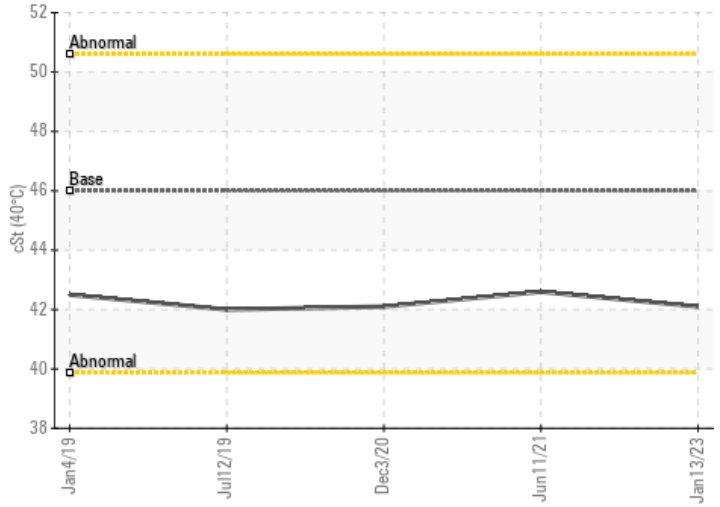
### Ferrous Alloys



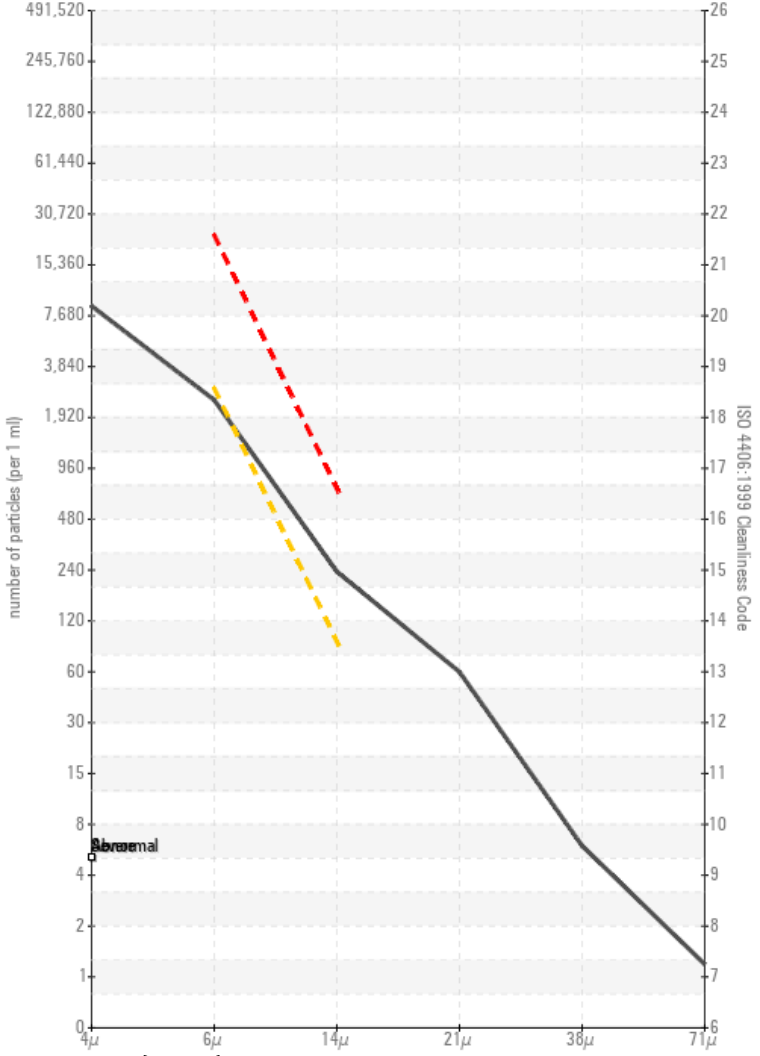
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



### Acid Number

