



# CONSTRUCTION EQUIPMENT

## SWO-067561 ATLAS COPCO T45-10SF TMG18SEDO183 - HYDRAULIC SYSTEM



**Sample No:** VCP445722  
**Oil Type:** VOLVO SUPER HYDRAULIC OIL 46  
**Job No:** SWO-067561



### SAMPLE INFORMATION

Sample Number	<b>VCP445722</b>	VCP431122	VCP424667	VCP401093
Sample Date	<b>13 Nov 2023</b>	31 Aug 2023	02 May 2023	06 Mar 2023
Machine Hours	<b>6283</b>	5911	5181	4738
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Not Chngd</b>	Not Chngd	Not Chngd	N/A
Sample Status	<b>SEVERE</b>	ABNORMAL	NORMAL	ATTENTION

**WHITAKER CONTRACTING**  
 692 CONVICT CAMP RD  
 GUNTERVILLE, AL  
 US 35976  
 Contact: BROTHER WHITAKER  
 BrotherWhitaker@whitaker-contracting.com  
 T: (256)298-3905  
 F:



### OIL CONDITION

Visc @ 40°C	cSt	<b>46.5</b>	46.3	46.3	46.1
Acid Number (AN)	mg KOH/g	<b>0.38</b>	0.41	0.43	0.45



### CONTAMINATION

Particles >4µm		<b>54951</b>	11055	3037	9600
Particles >6µm		<b>10311</b>	1192	472	2136
Particles >14µm		<b>248</b>	11	12	28
ISO 4406:1999 (c)		<b>23/21/15</b>	21/17/11	19/16/11	20/18/12
Silicon	ppm	<b>4</b>	3	3	4
Sodium	ppm	<b>0</b>	1	2	<1
Potassium	ppm	<b>&lt;1</b>	<1	0	0

### Diagnosis

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. The filter change at the time of sampling has been noted. Resample in 30-45 days to monitor this situation. 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 oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



### WEAR METALS

Iron	ppm	<b>4</b>	2	3	3
Copper	ppm	<b>4</b>	3	4	3
Lead	ppm	<b>&lt;1</b>	0	0	0
Tin	ppm	<b>0</b>	0	0	0
Aluminum	ppm	<b>&lt;1</b>	<1	0	<1
Chromium	ppm	<b>0</b>	0	<1	0
Molybdenum	ppm	<b>2</b>	2	2	1
Nickel	ppm	<b>0</b>	0	0	0
Titanium	ppm	<b>0</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>0</b>	0	<1	0
Vanadium	ppm	<b>0</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>68</b>	66	80	78
Magnesium	ppm	<b>13</b>	8	14	9
Zinc	ppm	<b>407</b>	431	441	421
Phosphorus	ppm	<b>330</b>	347	355	334
Barium	ppm	<b>7</b>	0	0	0
Boron	ppm	<b>0</b>	0	1	<1

**Depot:** WHIGUN  
**Unique No:** 10743357  
**Signed:** Wes Davis  
**Report Date:** 17 Nov 2023

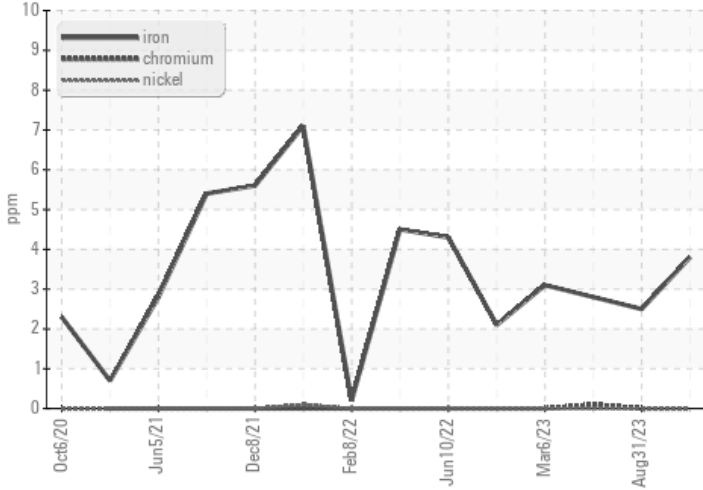


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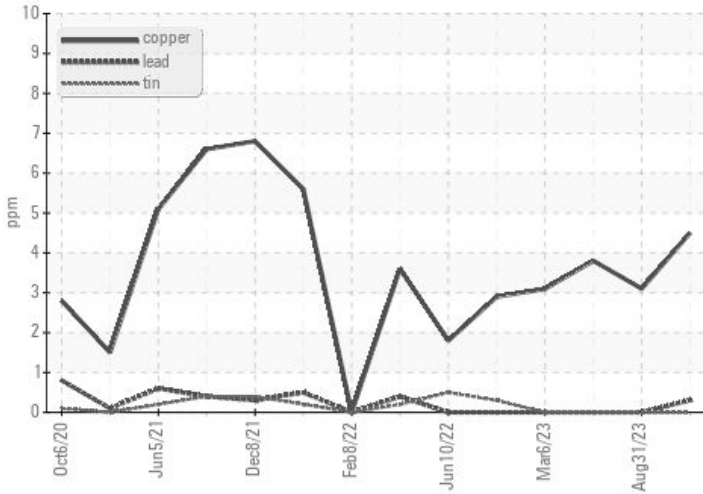


## VOLVO GRAPHS

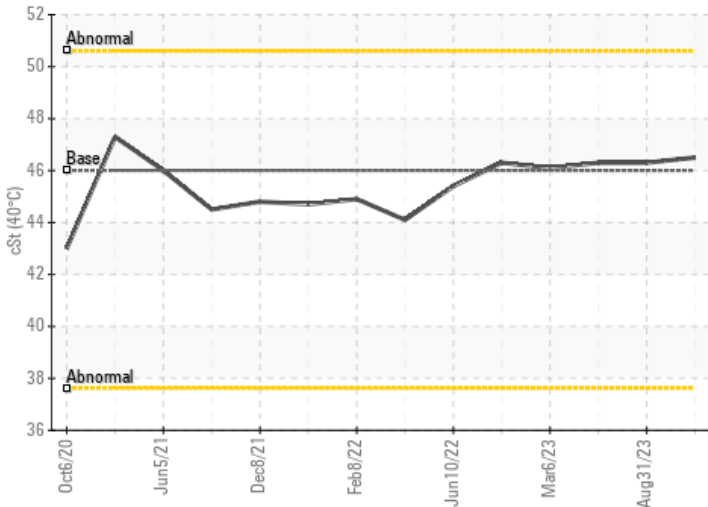
Ferrous Alloys



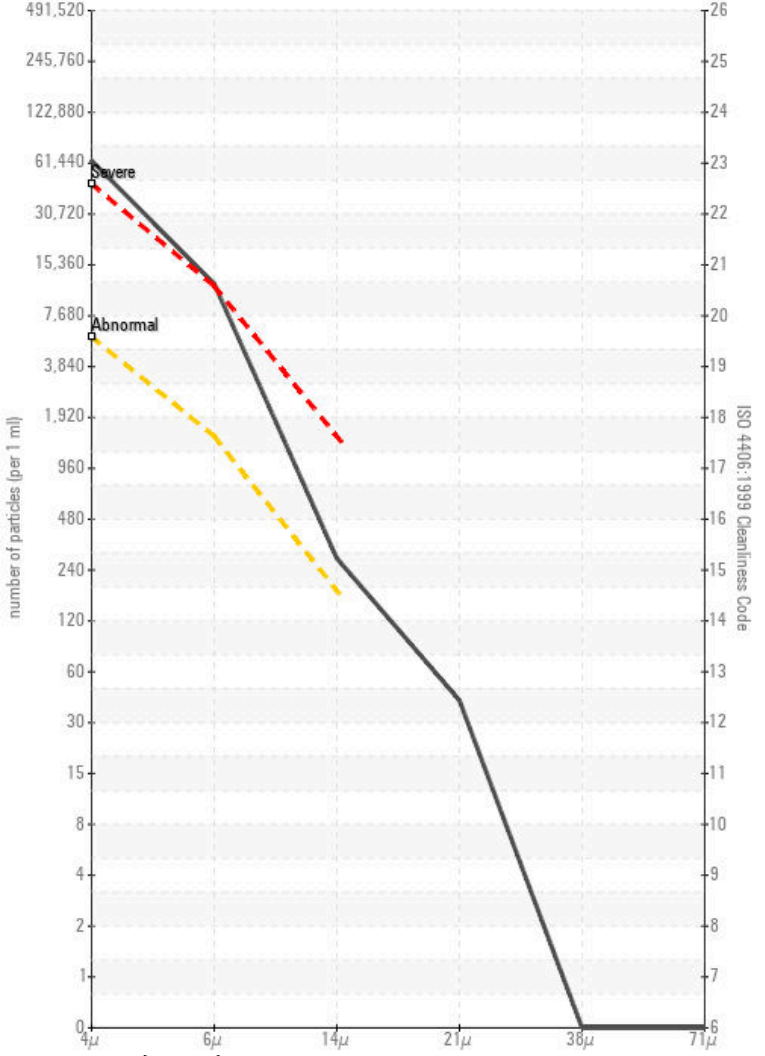
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

