



# CONSTRUCTION EQUIPMENT

## SWO-070465 EPIROC T45-11SF AVO14A1117 - HYDRAULIC SYSTEM



**Sample No:** VCP454211  
**Oil Type:** AW HYDRAULIC OIL ISO 46  
**Job No:** SWO-070465



### SAMPLE INFORMATION

Sample Number	<b>VCP454211</b>	VCP419135	VCP402461	---
Sample Date	<b>14 Mar 2024</b>	24 Jul 2023	16 Mar 2023	---
Machine Hours	<b>1217</b>	11559	10872	---
Oil Hours	<b>0</b>	0	0	---
Oil Changed	<b>Not Chngd</b>	Not Chngd	Not Chngd	---
Sample Status	<b>SEVERE</b>	ABNORMAL	ABNORMAL	---

### 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>45.8</b>	46.1	46.9	---
Acid Number (AN)	mg KOH/g	<b>0.58</b>	0.48	0.46	---



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	---
Particles >4µm		<b>▲ 44466</b>	---	▲ 159189	---
Particles >6µm		<b>▲ 9720</b>	---	▲ 63123	---
Particles >14µm		<b>▲ 428</b>	---	▲ 395	---
ISO 4406:1999 (c)		<b>23/20/16</b>	---	24/23/16	---
Silicon	ppm	<b>5</b>	6	6	---
Sodium	ppm	<b>1</b>	1	<1	---
Potassium	ppm	<b>0</b>	<1	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. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 46. Please confirm.  
 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>3</b>	3	6	---
Copper	ppm	<b>2</b>	1	1	---
Lead	ppm	<b>0</b>	0	0	---
Tin	ppm	<b>&lt;1</b>	0	0	---
Aluminum	ppm	<b>0</b>	0	<1	---
Chromium	ppm	<b>&lt;1</b>	0	0	---
Molybdenum	ppm	<b>5</b>	2	2	---
Nickel	ppm	<b>0</b>	0	0	---
Titanium	ppm	<b>0</b>	<1	0	---
Silver	ppm	<b>0</b>	0	0	---
Manganese	ppm	<b>&lt;1</b>	0	<1	---
Vanadium	ppm	<b>0</b>	<1	0	---



### ADDITIVES

Calcium	ppm	<b>107</b>	77	115	---
Magnesium	ppm	<b>16</b>	12	15	---
Zinc	ppm	<b>452</b>	442	452	---
Phosphorus	ppm	<b>352</b>	353	351	---
Barium	ppm	<b>0</b>	0	0	---
Boron	ppm	<b>&lt;1</b>	0	<1	---

**Depot:** WHIGUN  
**Unique No:** 10938976  
**Signed:** Wes Davis  
**Report Date:** 22 Mar 2024

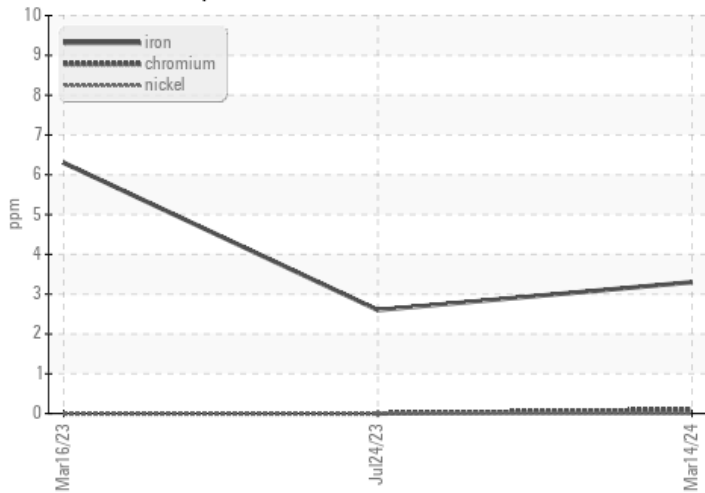


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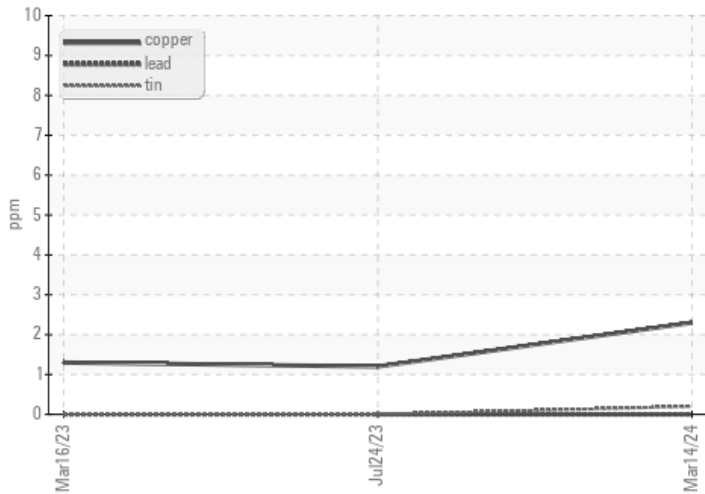


## GRAPHS

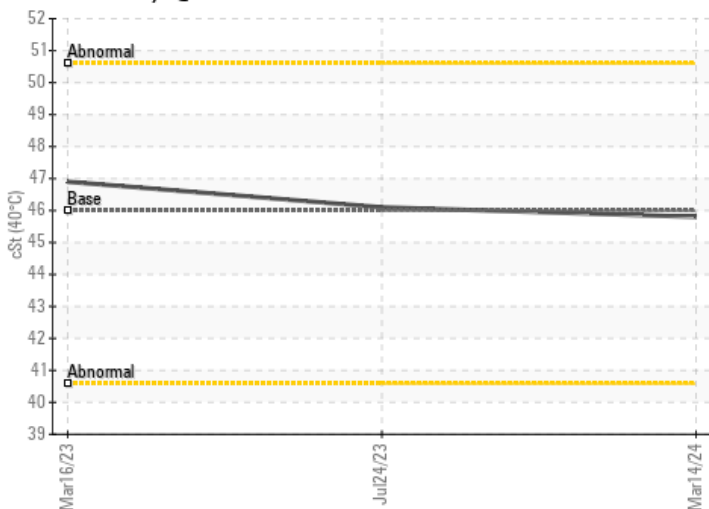
### Ferrous Alloys



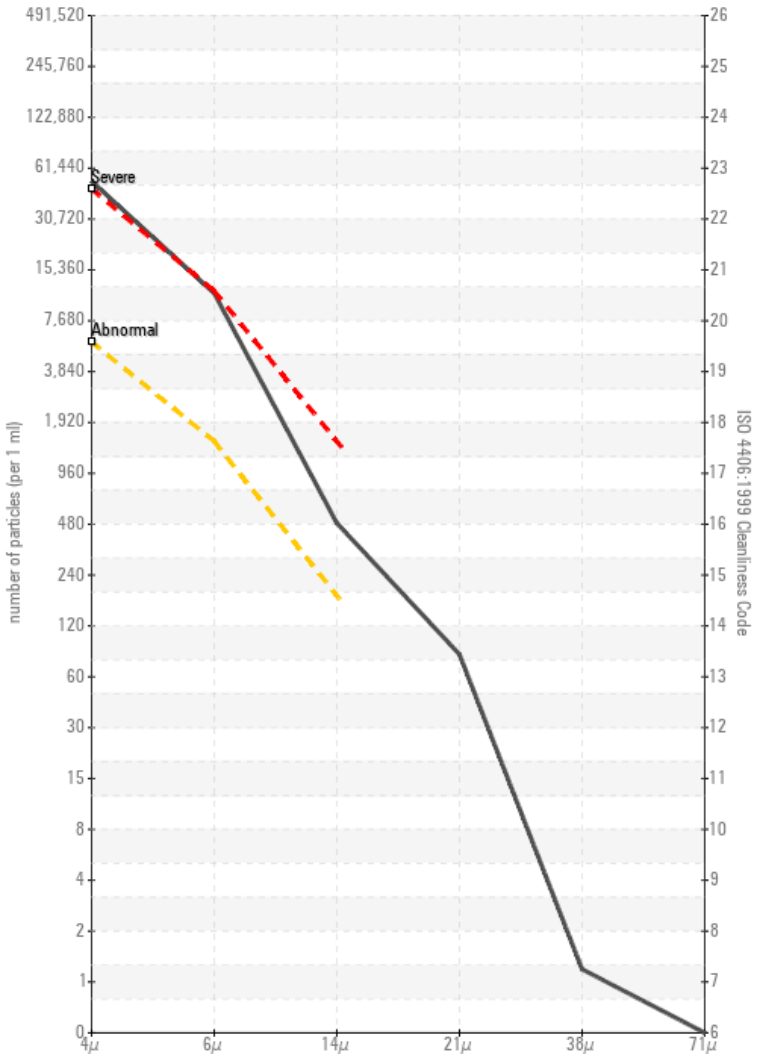
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



### Acid Number

