



# OIL ANALYSIS REPORT

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**{UNASSIGNED}**  
Machine Id  
**GRUMMAN GSO-297**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 32 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0930914</b>	WC0419864	---
Sample Date		Client Info		<b>24 Apr 2024</b>	14 Jan 2020	---
Machine Age	hrs	Client Info		<b>715</b>	706	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	---
Filter Changed		Client Info		<b>Not Changed</b>	Not Changed	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

## WEAR

The lead level has decreased, but is still abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>2</b>	4	---
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Lead	ppm	ASTM D5185m	>10	<b>▲ 27</b>	<b>▲ 49</b>	---
Copper	ppm	ASTM D5185m	>75	<b>8</b>	16	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

There is no indication of any contamination in the oil.

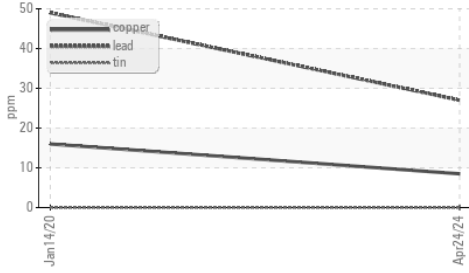
Silicon	ppm	ASTM D5185m	>20	<b>6</b>	10	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	---

## FLUID CONDITION

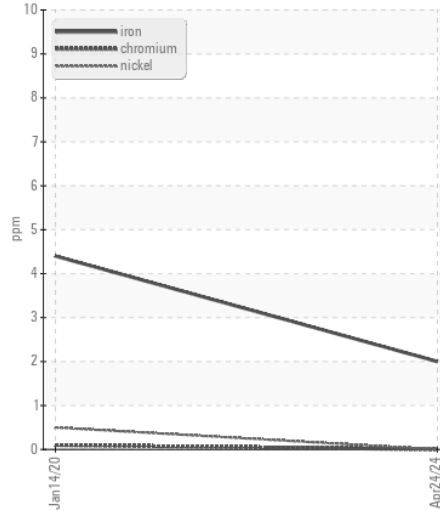
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Boron	ppm	ASTM D5185m	5	<b>0</b>	2	---
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m	25	<b>0</b>	<1	---
Calcium	ppm	ASTM D5185m	200	<b>83</b>	133	---
Phosphorus	ppm	ASTM D5185m	300	<b>308</b>	367	---
Zinc	ppm	ASTM D5185m	370	<b>377</b>	475	---
Sulfur	ppm	ASTM D5185m	2500	<b>2522</b>	2511	---
Visc @ 40°C	cSt	ASTM D445	32	<b>35.0</b>	37.6	---

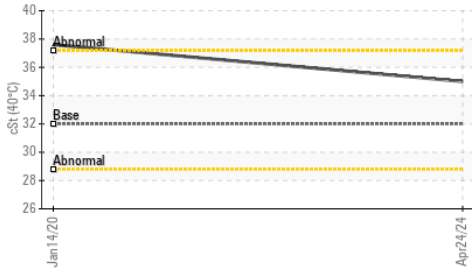
▲ Non-ferrous Metals



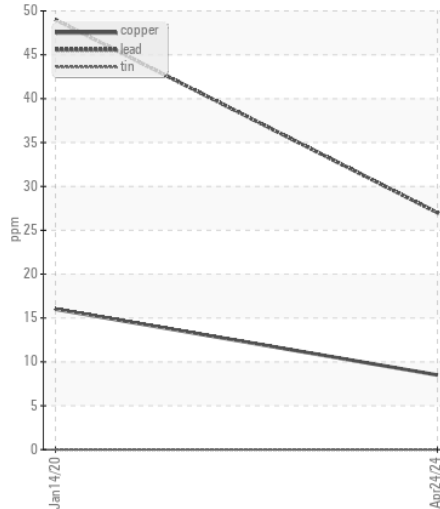
Ferrous Alloys



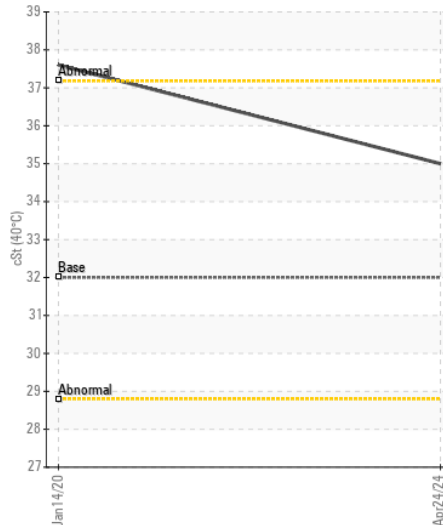
Viscosity @ 40°C



▲ Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0930914  
**Lab Number** : 06176391  
**Unique Number** : 11022444  
**Test Package** : FLEET

**Received** : 10 May 2024  
**Tested** : 13 May 2024  
**Diagnosed** : 14 May 2024 - Sean Felton

**JON'S MID AMERICA FIRE DEPT.**  
 7037 E. US HWY 60  
 ROGERVILLE, MO  
 US 65742

Contact: JUSTIN KELTNER  
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To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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