



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area  
**[AFTER FILTRATION]**

Machine Id  
**512184.01**

Component  
**Hydraulic System**

Fluid  
**AW HYDRAULIC OIL ISO 46 (--- QTS)**

## RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>KL0014387</b>	KL0014386	---
Sample Date		Client Info		<b>27 Jun 2024</b>	26 Jun 2024	---
Machine Age	hrs	Client Info		<b>0</b>	0	---
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>Changed</b>	Changed	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Tin	ppm	ASTM D5185m	>20	<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

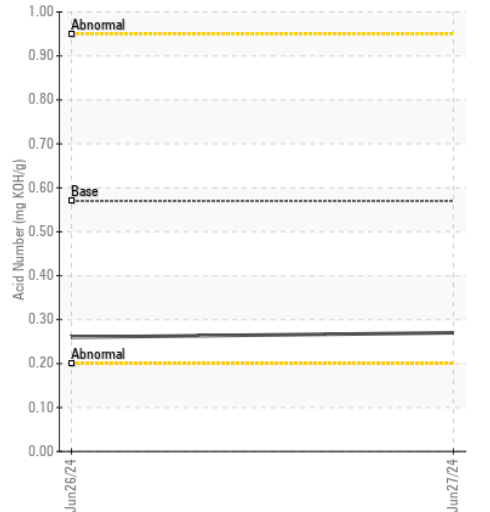
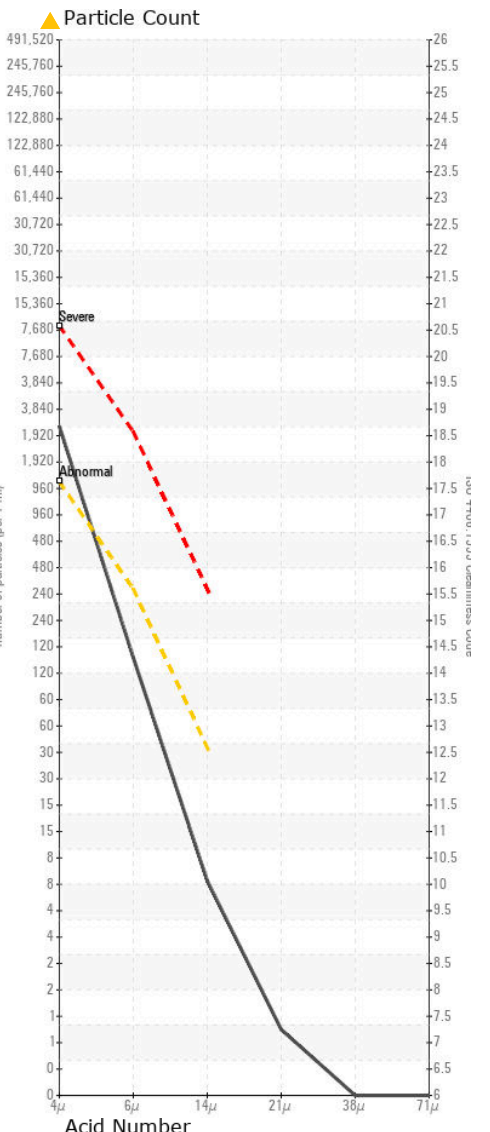
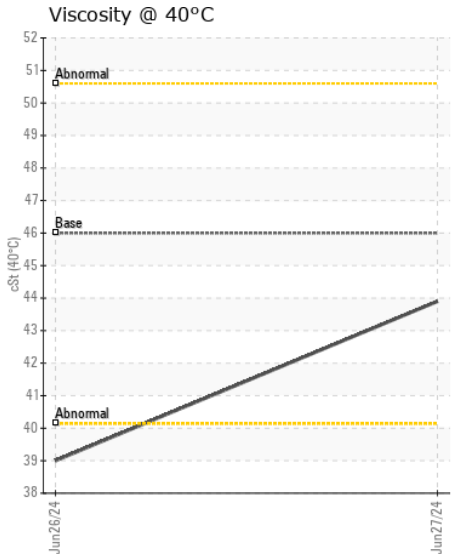
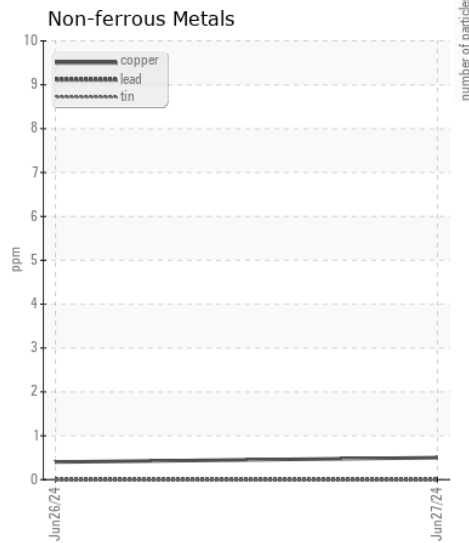
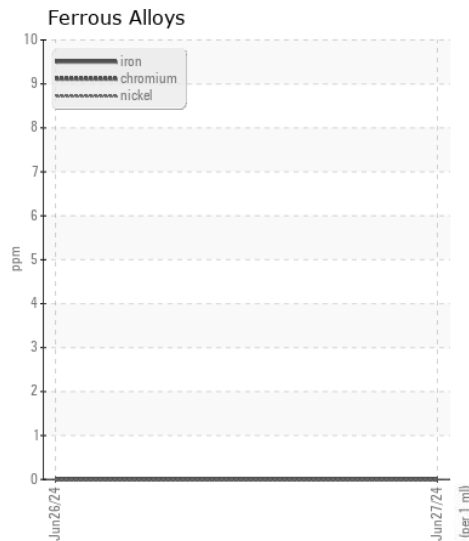
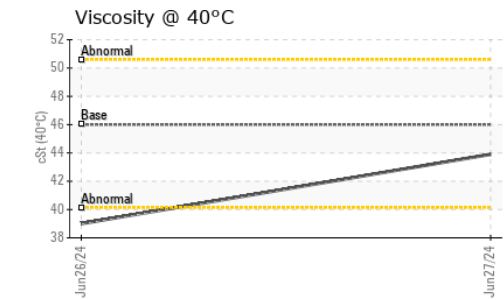
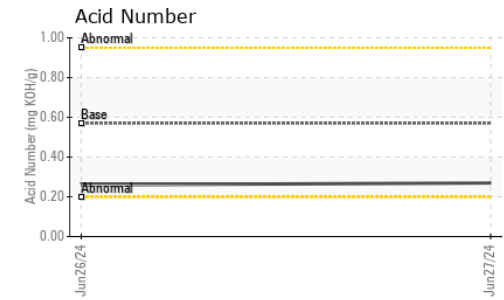
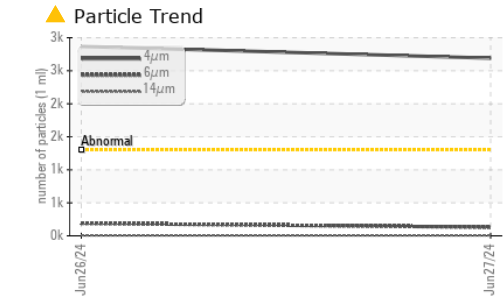
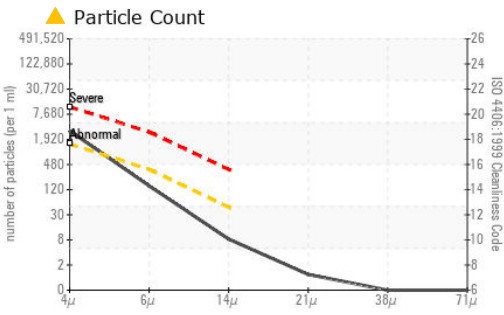
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>15	<b>2</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Water		WC Method	>0.05	<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647	>1300	<b>▲ 2690</b>	▲ 2869	---
Particles >6µm		ASTM D7647	>320	<b>130</b>	189	---
Particles >14µm		ASTM D7647	>40	<b>7</b>	7	---
Particles >21µm		ASTM D7647	>10	<b>1</b>	1	---
Particles >38µm		ASTM D7647	>3	<b>0</b>	0	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>17/15/12	<b>▲ 19/14/10</b>	▲ 19/15/10	---
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	>0.05	<b>NEG</b>	NEG	---

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	---
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>2</b>	1	---
Calcium	ppm	ASTM D5185m	200	<b>76</b>	40	---
Phosphorus	ppm	ASTM D5185m	300	<b>279</b>	277	---
Zinc	ppm	ASTM D5185m	370	<b>360</b>	364	---
Sulfur	ppm	ASTM D5185m	2500	<b>7277</b>	7346	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.27</b>	0.26	---
Visc @ 40°C	cSt	ASTM D445	46	<b>43.9</b>	39.0	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : KL0014387

Lab Number : 06233227

Unique Number : 11116720

Test Package : MOB 2

Received : 11 Jul 2024

Tested : 12 Jul 2024

Diagnosed : 12 Jul 2024 - Don Baldrige

FREUDENBERG-NOK

50 AMMON DR #3308

MANCHESTER, NH

US 03103

Contact: CHRIS SMITH

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F:

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)