



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id  
**C586 HSP5 PUMP 1**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 68 (--- GAL)**

## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>FC006227</b>	FC007430	FC007129
Sample Date		Client Info		<b>27 Jun 2024</b>	12 May 2023	12 May 2022
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>4</b>	10	▲ 21
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>20	<b>1</b>	<1	3
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

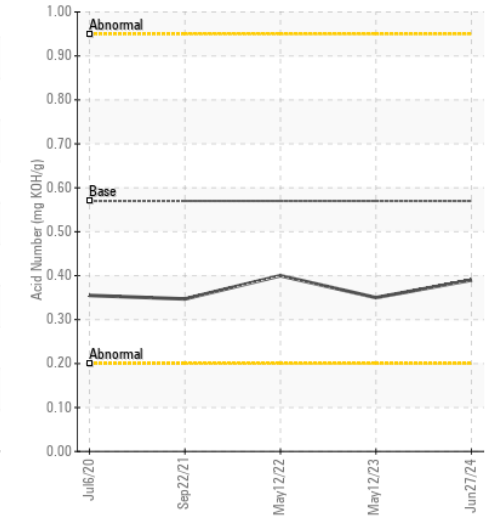
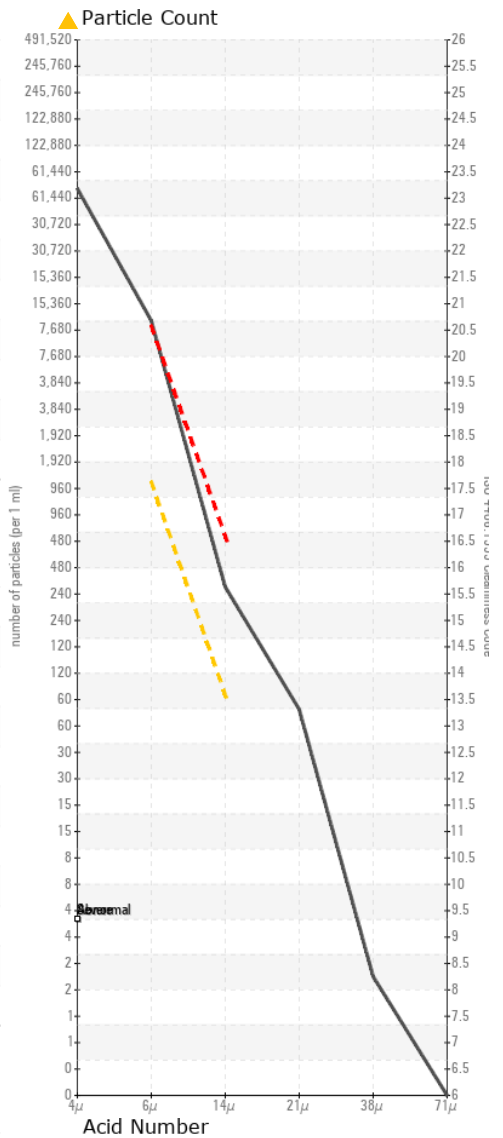
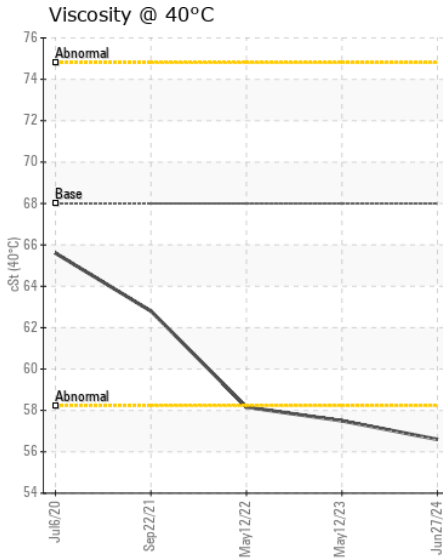
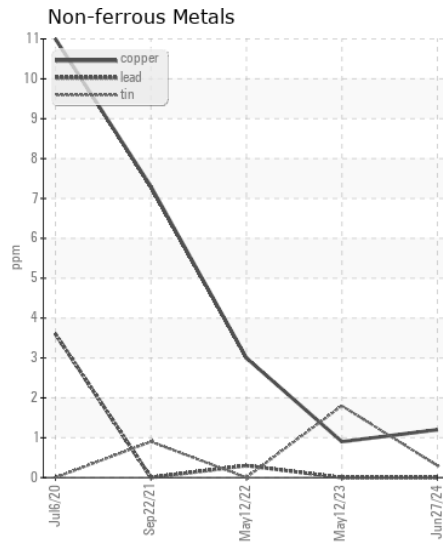
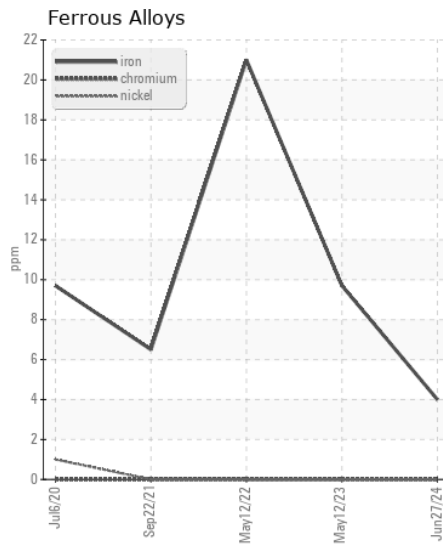
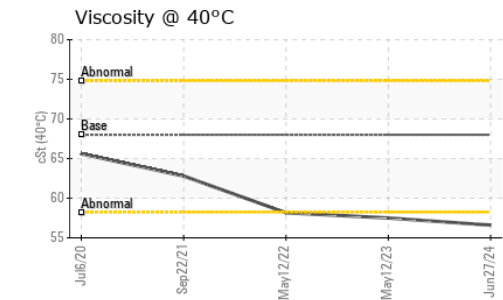
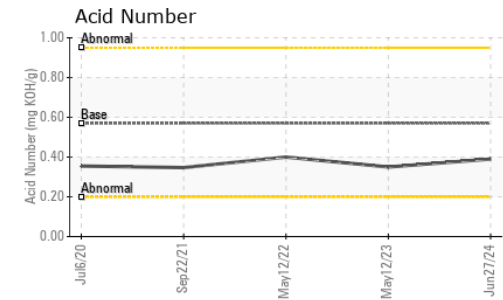
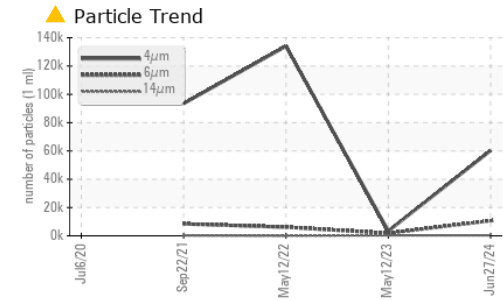
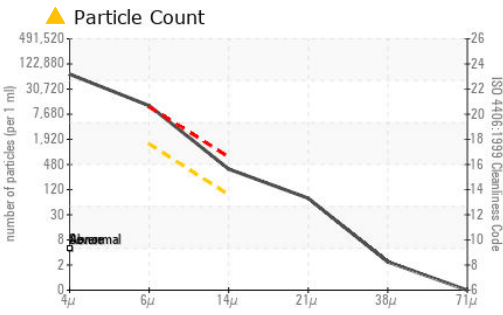
There is a high amount of particulates present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	2
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	1
Water		WC Method	>0.05	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647		<b>60228</b>	3402	133965
Particles >6µm		ASTM D7647	>1300	<b>▲ 10684</b>	▲ 1853	▲ 6149
Particles >14µm		ASTM D7647	>80	<b>▲ 328</b>	▲ 315	15
Particles >21µm		ASTM D7647	>20	<b>▲ 66</b>	▲ 106	4
Particles >38µm		ASTM D7647	>4	<b>2</b>	▲ 16	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	▲ 2	0
Oil Cleanliness		ISO 4406 (c)	>-/17/13	<b>▲ 23/21/16</b>	▲ 19/18/15	▲ 24/20/11
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	VLITE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	<b>NEG</b>	0.2%	0.2%

## 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>2</b>	0	0
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	25	<b>&lt;1</b>	0	2
Calcium	ppm	ASTM D5185m	200	<b>40</b>	44	71
Phosphorus	ppm	ASTM D5185m	300	<b>334</b>	316	517
Zinc	ppm	ASTM D5185m	370	<b>402</b>	400	699
Sulfur	ppm	ASTM D5185m	2500	<b>887</b>	806	1001
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.39</b>	0.35	0.40
Visc @ 40°C	cSt	ASTM D445	68	<b>56.6</b>	57.5	58.16



Certificate L2367

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

**Sample No.** : FC006227

**Lab Number** : 06226174

**Unique Number** : 11109667

**Test Package** : IND 2

**Received** : 02 Jul 2024

**Tested** : 03 Jul 2024

**Diagnosed** : 05 Jul 2024 - Jonathan Hester

**FLUID CONTROL SERVICES, INC.**

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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)