



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

Machine Id  
**HAMM HD120IVVHF WGH0H304PHAA00028**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 46 (--- 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>JR0209697</b>	---	---
Sample Date		Client Info		<b>16 May 2024</b>	---	---
Machine Age	hrs	Client Info		<b>75</b>	---	---
Oil Age	hrs	Client Info		<b>75</b>	---	---
Filter Age	hrs	Client Info		<b>75</b>	---	---
Oil Changed		Client Info		<b>Not Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>ATTENTION</b>	---	---

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
		ASTM D8184		<b>16</b>	---	---
Iron	ppm	ASTM D5185m	>20	<b>4</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185m	>10	<b>2</b>	---	---
Copper	ppm	ASTM D5185m	>75	<b>8</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

### CONTAMINATION

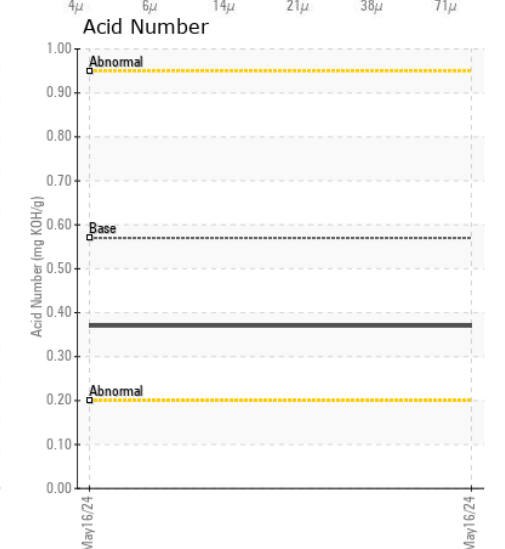
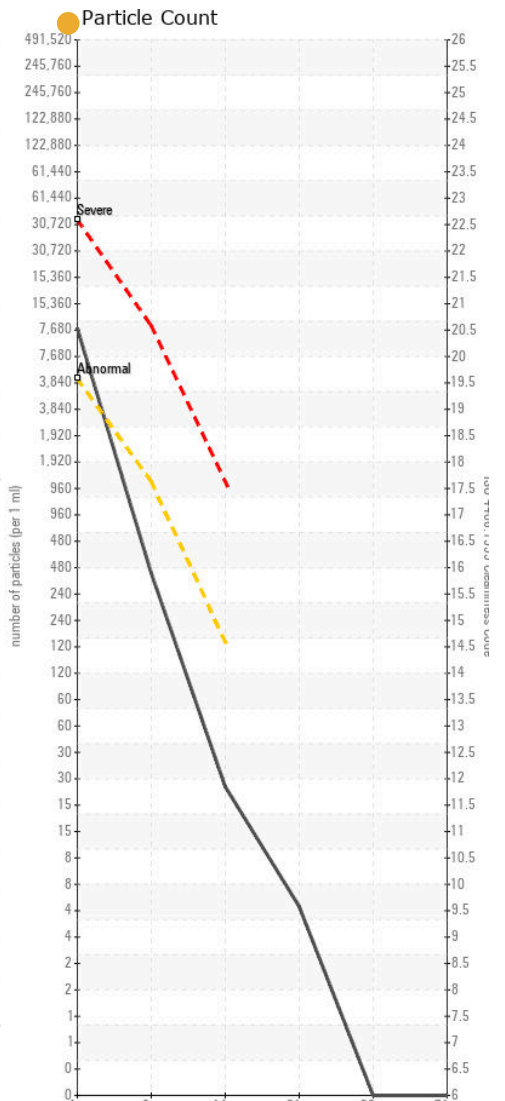
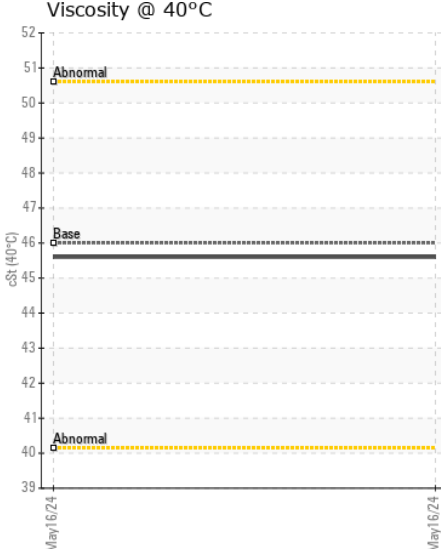
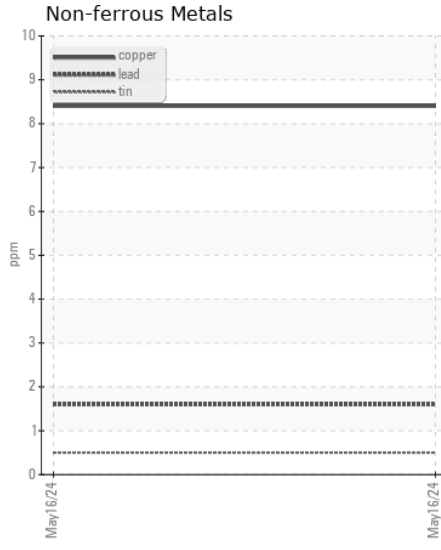
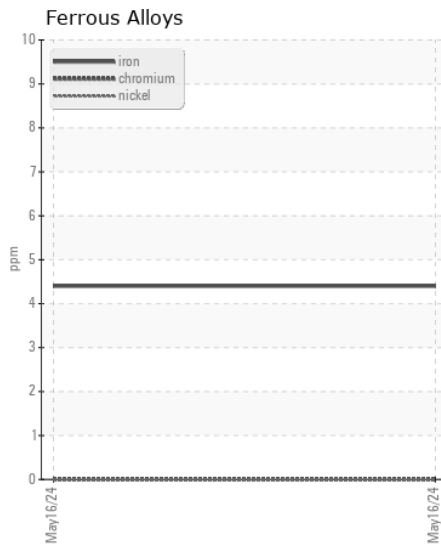
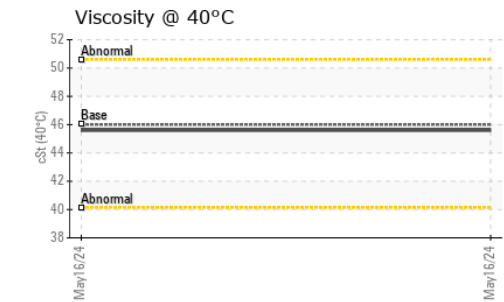
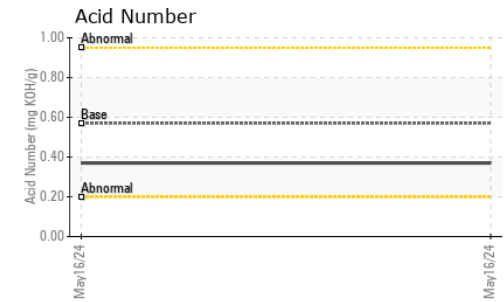
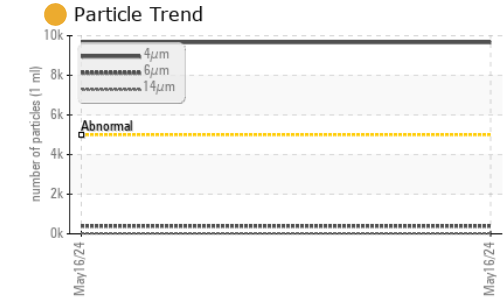
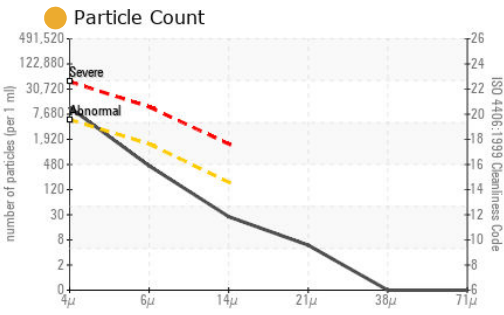
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>3</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Water		WC Method	>0.1	<b>NEG</b>	---	---
Particles >4µm		ASTM D7647	>5000	<b>9660</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>392</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>24</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>5</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>0</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>20/16/12</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	---	---

### 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>	---	---
Boron	ppm	ASTM D5185m	5	<b>0</b>	---	---
Barium	ppm	ASTM D5185m	5	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	5	<b>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	25	<b>64</b>	---	---
Calcium	ppm	ASTM D5185m	200	<b>104</b>	---	---
Phosphorus	ppm	ASTM D5185m	300	<b>310</b>	---	---
Zinc	ppm	ASTM D5185m	370	<b>369</b>	---	---
Sulfur	ppm	ASTM D5185m	2500	<b>1056</b>	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.37</b>	---	---
Visc @ 40°C	cSt	ASTM D445	46	<b>45.6</b>	---	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0209697 **Received** : 21 May 2024  
**Lab Number** : 06186033 **Tested** : 22 May 2024  
**Unique Number** : 11042785 **Diagnosed** : 23 May 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - GARNER**  
 4161 AUBURN CHURCH RD  
 GARNER, NC  
 US 27529  
 Contact: JOHN GUASCHINO  
 john.guaschino@jamesriverequipment.com  
 T:  
 F: (919)779-5432

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)