



WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Machine Id  
**1FF250PAPPF000110**

Component  
**Hydraulic System**

Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)**

### 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		JR0206330	JR0189122	---
Sample Date		Client Info		15 Apr 2024	07 Nov 2023	---
Machine Age	hrs	Client Info		1012	506	---
Oil Age	hrs	Client Info		1012	506	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Chngd	Not Chngd	---
Filter Changed		Client Info		Changed	Not Chngd	---
Sample Status				ATTENTION	NORMAL	---

### WEAR

All component wear rates are normal.

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

### CONTAMINATION

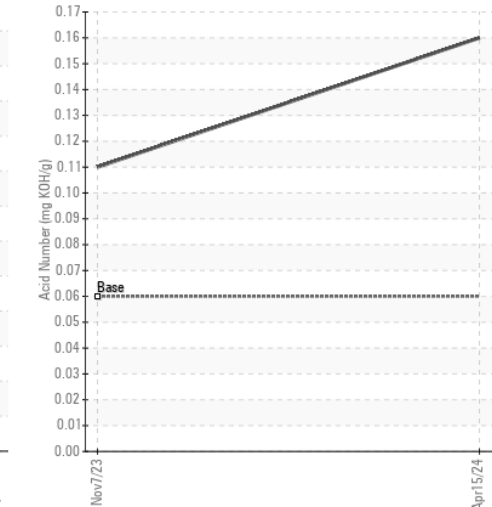
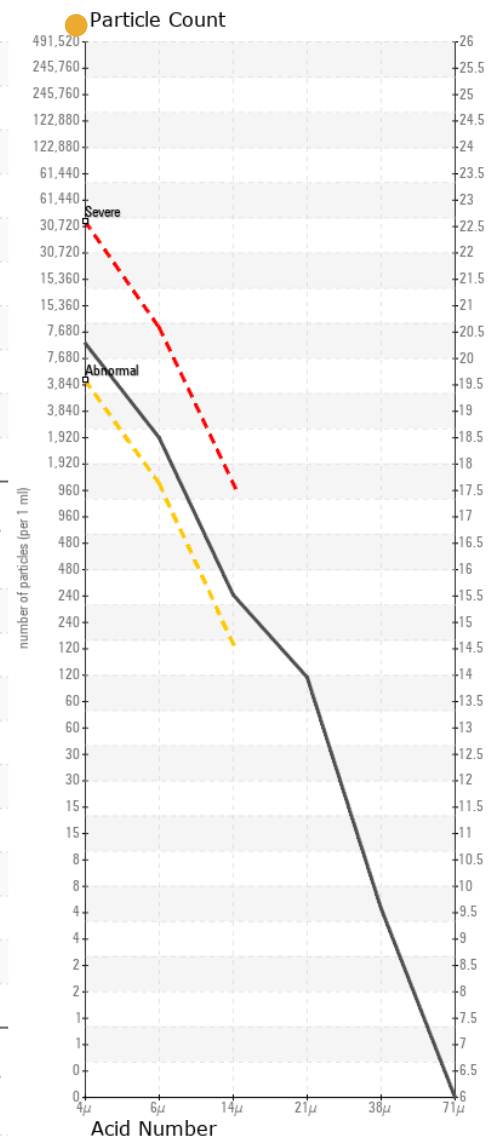
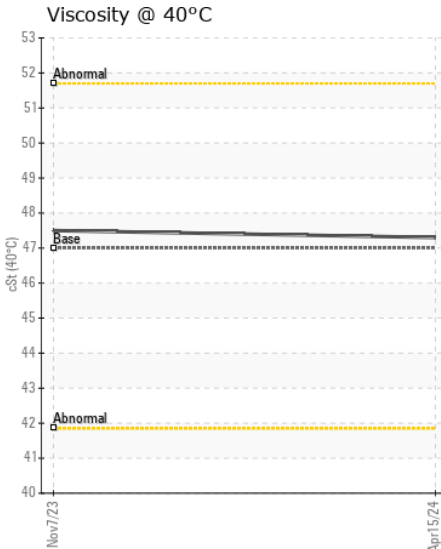
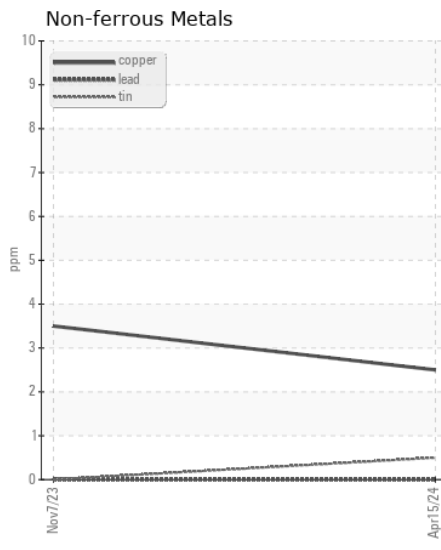
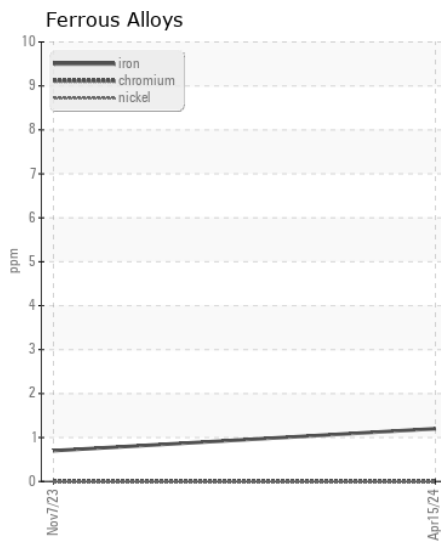
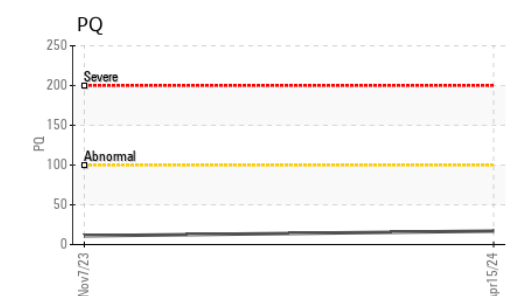
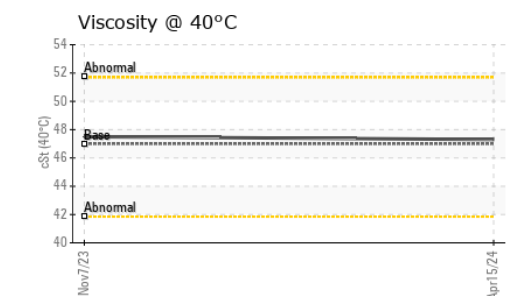
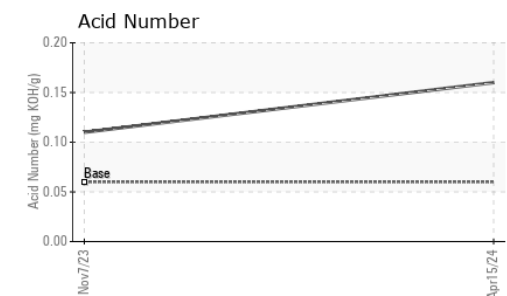
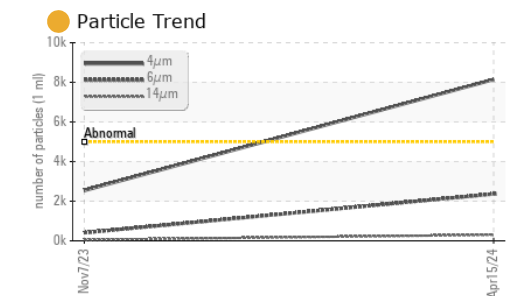
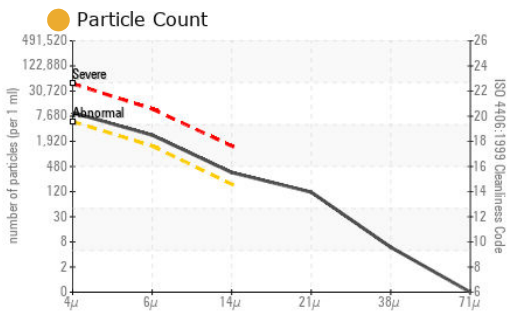
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<1	<1	---
Potassium	ppm	ASTM D5185m	>20	3	2	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>5000	8145	2539	---
Particles >6µm		ASTM D7647	>1300	2365	407	---
Particles >14µm		ASTM D7647	>160	303	49	---
Particles >21µm		ASTM D7647	>40	103	12	---
Particles >38µm		ASTM D7647	>10	5	0	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	20/18/15	19/16/13	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	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		2	<1	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		0	<1	---
Calcium	ppm	ASTM D5185m		11	4	---
Phosphorus	ppm	ASTM D5185m	827	549	597	---
Zinc	ppm	ASTM D5185m	0	27	44	---
Sulfur	ppm	ASTM D5185m	13	162	174	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.16	0.11	---
Visc @ 40°C	cSt	ASTM D445	47	47.3	47.5	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0206330 **Received** : 18 Apr 2024  
**Lab Number** : 06152973 **Tested** : 19 Apr 2024  
**Unique Number** : 10983051 **Diagnosed** : 22 Apr 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

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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)