



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

Area  
**[44078]**  
 Machine Id  
**SAKAI 3SV59-60153**  
 Component  
**Hydraulic System**  
 Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (--- 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>JR0199292</b>	JR0075502	---
Sample Date		Client Info		<b>29 Dec 2023</b>	19 Mar 2021	---
Machine Age	hrs	Client Info		<b>991</b>	446	---
Oil Age	hrs	Client Info		<b>991</b>	446	---
Filter Age	hrs	Client Info		<b>0</b>	446	---
Oil Changed		Client Info		<b>N/A</b>	Not Changd	---
Filter Changed		Client Info		<b>N/A</b>	Changed	---
Sample Status				<b>ATTENTION</b>	ABNORMAL	---

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>16</b>	16	---
Iron	ppm	ASTM D5185m	>20	<b>4</b>	6	---
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>75	<b>9</b>	8	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
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

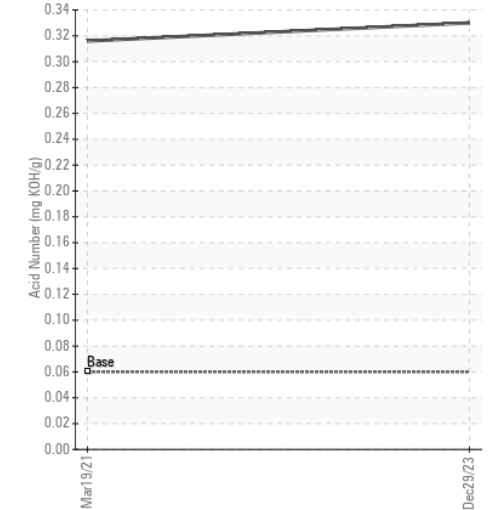
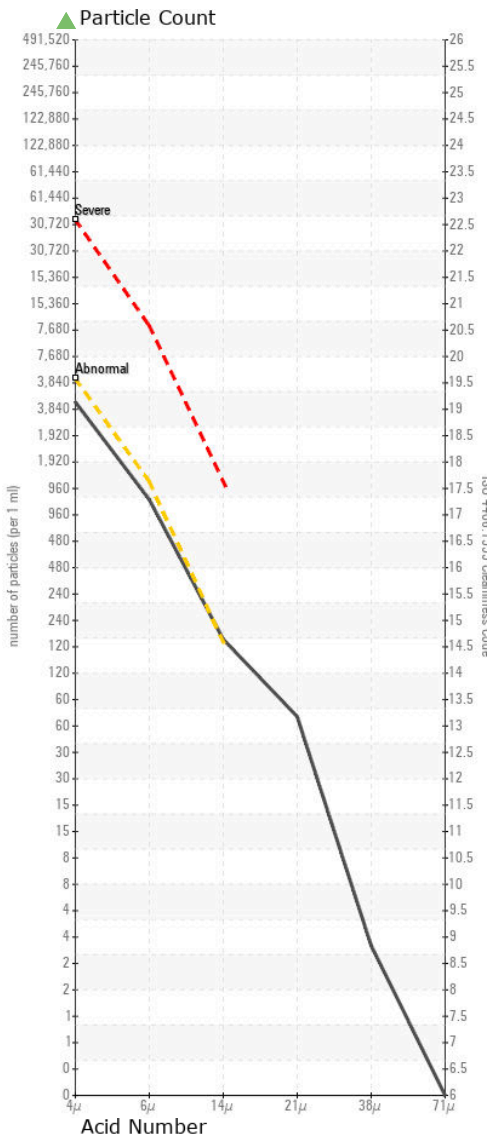
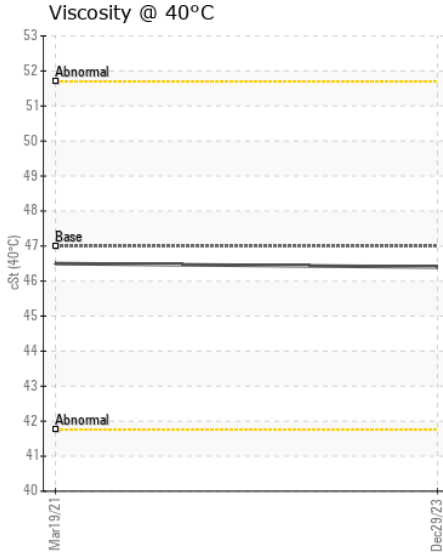
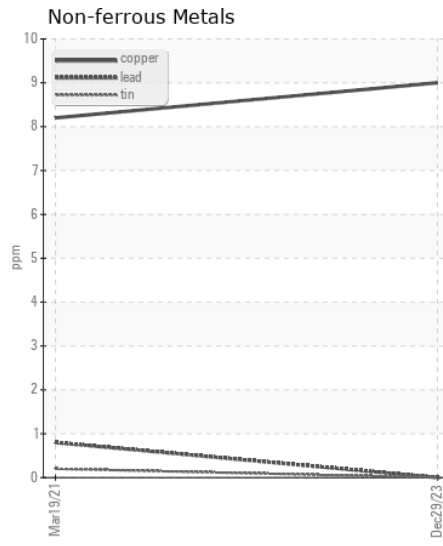
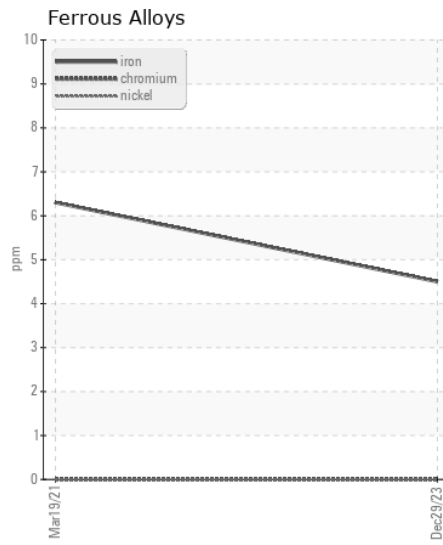
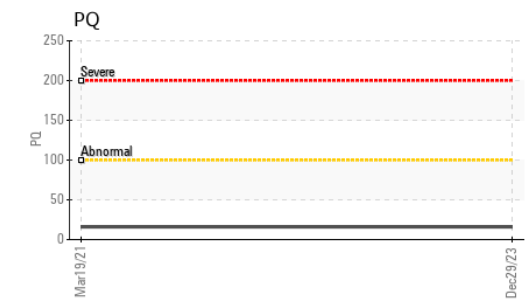
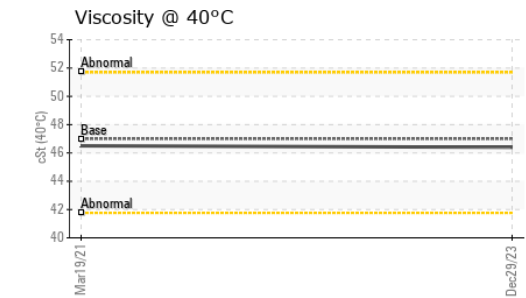
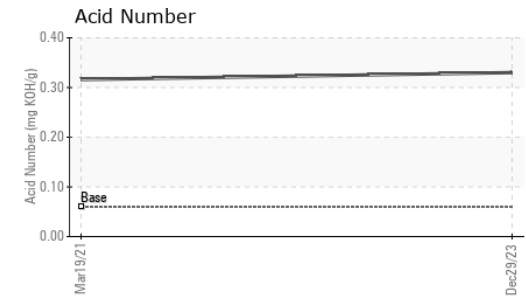
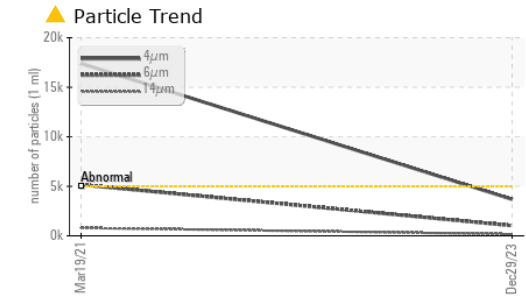
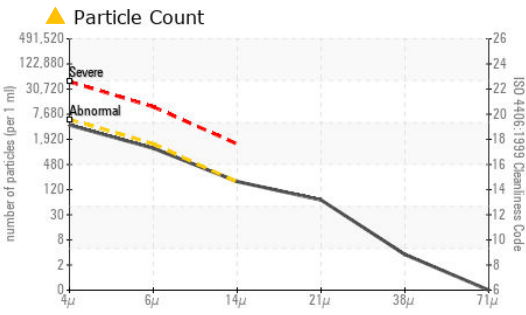
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647	>5000	<b>3681</b>	▲ 17405	---
Particles >6µm		ASTM D7647	>1300	<b>1029</b>	▲ 5157	---
Particles >14µm		ASTM D7647	>160	<b>▲ 165</b>	▲ 798	---
Particles >21µm		ASTM D7647	>40	<b>▲ 60</b>	▲ 226	---
Particles >38µm		ASTM D7647	>10	<b>3</b>	3	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 19/17/15</b>	▲ 21/20/17	---
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 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		<b>0</b>	2	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	---
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>0</b>	2	---
Calcium	ppm	ASTM D5185m		<b>65</b>	62	---
Phosphorus	ppm	ASTM D5185m	827	<b>323</b>	286	---
Zinc	ppm	ASTM D5185m	0	<b>286</b>	331	---
Sulfur	ppm	ASTM D5185m	13	<b>682</b>	734	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.33</b>	0.316	---
Visc @ 40°C	cSt	ASTM D445	47	<b>46.4</b>	46.5	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : JR0199292 Recieved : 09 Jan 2024  
 Lab Number : 06055858 Diagnosed : 10 Jan 2024  
 Unique Number : 10821807 Diagnostician : Wes Davis  
 Test Package : CONST ( Additional Tests: PQ )

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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