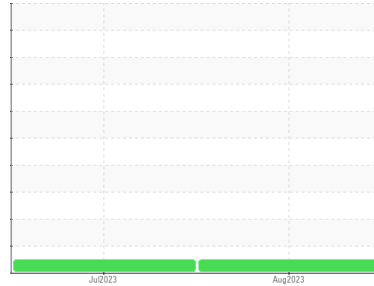


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

 Machine Id
7013452 (S/N 1FF085GXKMJ022386)

 Component
Front Right Hydraulic System

 Fluid
HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)
DIAGNOSIS
Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			JR0178693	JR0171090	---
Sample Date	Client Info			10 Aug 2023	17 Jul 2023	---
Machine Age	hrs	Client Info		1752	1718	---
Oil Age	hrs	Client Info		1752	1718	---
Oil Changed	Client Info			Not Chngd	Not Chngd	---
Sample Status				NORMAL	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		14	10	---
Iron	ppm	ASTM D5185m	>20	10	11	---
Chromium	ppm	ASTM D5185m	>10	<1	<1	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>10	2	2	---
Lead	ppm	ASTM D5185m	>10	<1	<1	---
Copper	ppm	ASTM D5185m	>75	7	7	---
Tin	ppm	ASTM D5185m	>10	<1	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

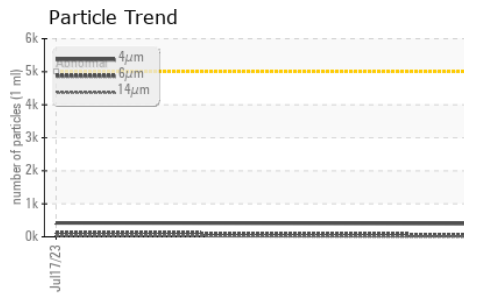
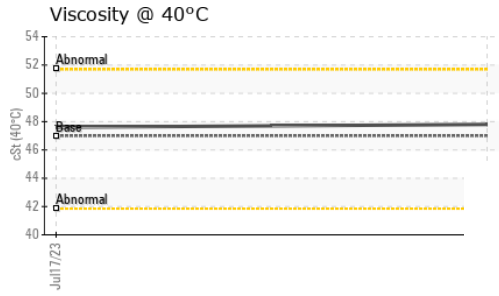
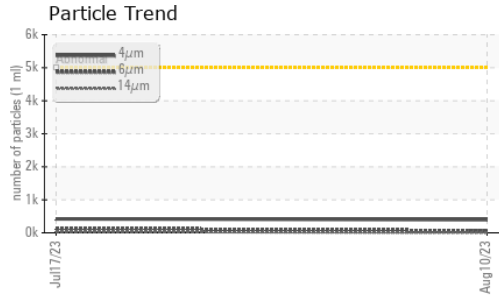
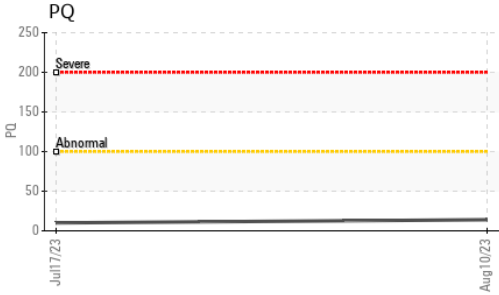
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		1	0	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		<1	0	---
Magnesium	ppm	ASTM D5185m		10	5	---
Calcium	ppm	ASTM D5185m		29	31	---
Phosphorus	ppm	ASTM D5185m	827	407	404	---
Zinc	ppm	ASTM D5185m	0	138	134	---
Sulfur	ppm	ASTM D5185m	13	951	948	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	2	2	---
Sodium	ppm	ASTM D5185m		3	0	---
Potassium	ppm	ASTM D5185m	>20	<1	1	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	397	420	---
Particles >6µm		ASTM D7647	>1300	57	131	---
Particles >14µm		ASTM D7647	>160	4	25	---
Particles >21µm		ASTM D7647	>40	1	8	---
Particles >38µm		ASTM D7647	>10	0	0	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	16/13/9	16/14/12	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.22	0.13	---

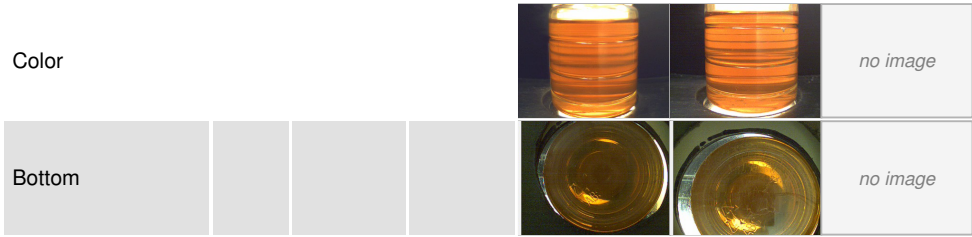
OIL ANALYSIS REPORT



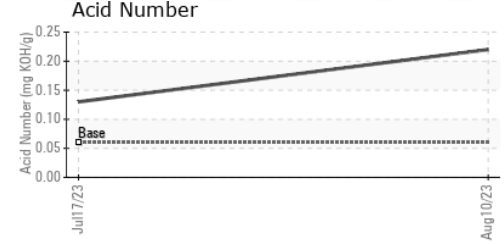
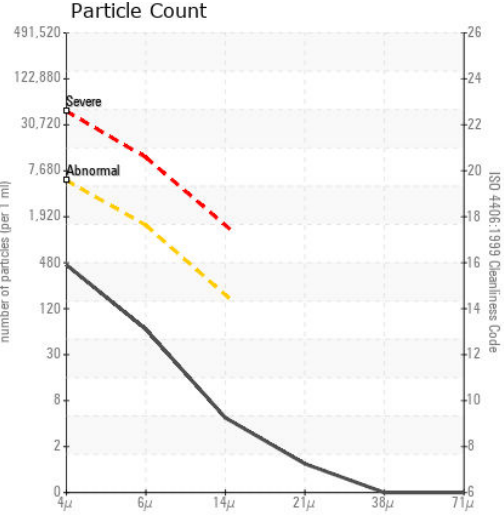
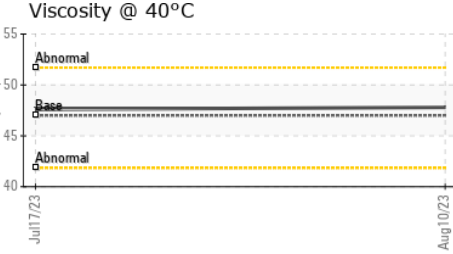
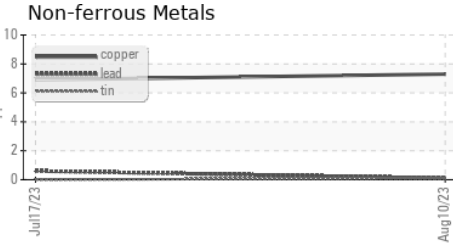
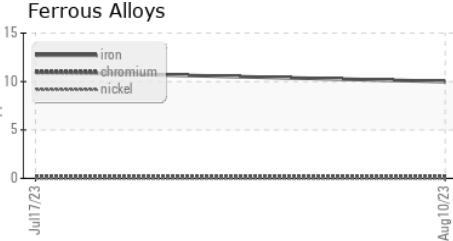
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 47	47.8	47.6	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0178693 **Received** : 14 Aug 2023
Lab Number : 05923284 **Diagnosed** : 15 Aug 2023
Unique Number : 10603231 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: PQ)

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 CHARLOTTE, NC
 US 28269
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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)