WEAR CONTAMINATION FLUID CONDITION

SEVERE SEVERE NORMAL

Machine Id

HITACHI 512576

Component

Left Final Drive

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		JR0220326		
	Sample Date		Client Info		08 Jul 2024		
	Machine Age	hrs	Client Info		3256		
	Oil Age	hrs	Client Info		3256		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		N/A		
	Sample Status				SEVERE		
VEAR	PQ		ASTM D8184		584		
Gear wear is indicated.	Iron	ppm	ASTM D5185m	>500	▲ 1903		
	Chromium	ppm	ASTM D5185m		<u>^</u> 21		
	Nickel	ppm	ASTM D5185m		1		
	Titanium	ppm	ASTM D5185m		8		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m	>25	88		
	Lead	ppm	ASTM D5185m	>25	0		
	Copper	ppm	ASTM D5185m	>50	3		
	Tin	ppm	ASTM D5185m	>10	0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>75	▲ 312		
Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress.	Potassium	ppm	ASTM D5185m	>20	17		
	Water		WC Method	>0.2	NEG		
	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	>0.2	NEG		
LUID CONDITION	Sodium	ppm	ASTM D5185m	>170	4		
The oil is no longer serviceable due to the presence of contaminants.	Boron	ppm	ASTM D5185m	400	58		
	Barium	ppm	ASTM D5185m	200	9		
	Molybdenum	ppm	ASTM D5185m	12	<1		
	Manganese	ppm	ASTM D5185m		22		
	Magnesium	ppm	ASTM D5185m	12	3		
	Calcium	ppm	ASTM D5185m	150	20		
	Phosphorus	ppm	ASTM D5185m	1650	493		
	Zinc	ppm	ASTM D5185m	125	34		
	Sulfur	ppm	ASTM D5185m	22500	17084		

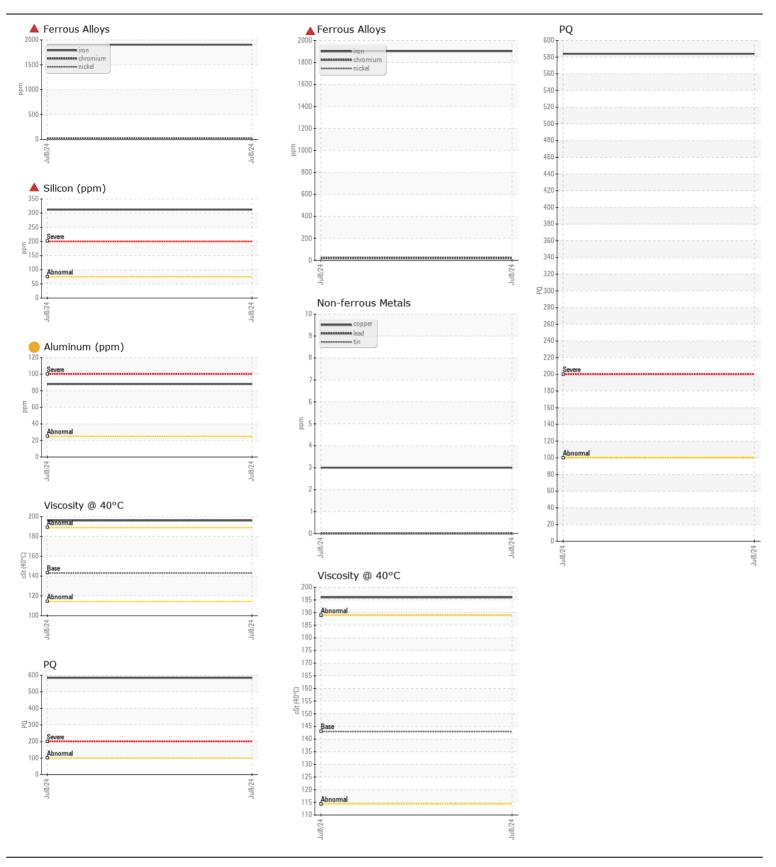
Visc @ 40°C

cSt

ASTM D445 143

196

Submitted By: Ray Benson





Certificate L2367

Report Id: JAMCHA [WUSCAR] 06232464 (Generated: 07/12/2024 14:14:46) Rev: 1

Laboratory Sample No.

Lab Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0220326 : 06232464

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received **Tested** Unique Number : 11115957

Diagnosed Test Package : CONST (Additional Tests: PQ)

: 10 Jul 2024 : 11 Jul 2024

: 11 Jul 2024 - Sean Felton

JRE - CHARLOTTE 9550 STATESVILLE ROAD CHARLOTTE, NC

US 28269 Contact: CHARLOTTE SHOP

F: (704)596-6198

myoung@jamesriverequipment.com T: (704)597-0211

* - 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)