WEAR CONTAMINATION **FLUID CONDITION**

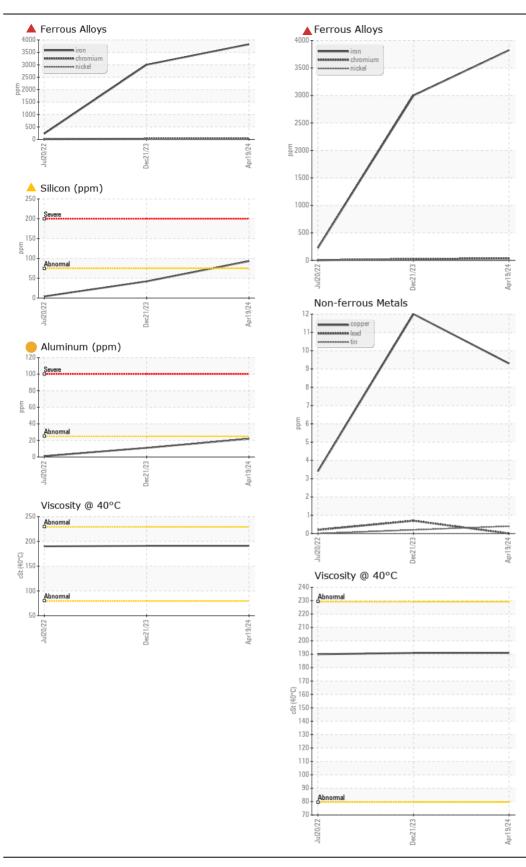
SEVERE ABNORMAL NORMAL

Machine Id

040-R0006

Left Final Drive

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.	Sample Number		Client Info	2.1111071011	WC0903845	WC0868435	WC069808
	Sample Date		Client Info		19 Apr 2024	21 Dec 2023	20 Jul 202
	Machine Age	hrs	Client Info		6945	6459	2244
	Oil Age	hrs	Client Info		6631	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Not Changd	Not Chang
	Filter Changed		Client Info		N/A	Not Changd	N/A
	Sample Status				SEVERE	SEVERE	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>500	▲ 3824	▲ 2999	225
Gear wear is indicated.	Chromium	ppm	ASTM D5185m	>10	▲ 36	<u>^</u> 24	2
	Nickel	ppm	ASTM D5185m		1	2	0
	Titanium	ppm	ASTM D5185m		2	1	0
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m	>25	<u>22</u>	11	1
	Lead	ppm	ASTM D5185m	>25	0	<1	<1
	Copper	ppm	ASTM D5185m	>50	9	12	3
	Tin	ppm	ASTM D5185m	>10	<1	<1	0
	Vanadium	ppm	ASTM D5185m		<1	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>75	9 3	42	4
Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress.	Potassium	ppm	ASTM D5185m	>20	36	23	3
	Water		WC Method	>0.2	NEG	NEG	NEG
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		28	21	4
The oil is no longer serviceable as a result of the abnormal and/or severe wear.	Boron	ppm	ASTM D5185m		73	44	234
	Barium	ppm	ASTM D5185m		10	8	6
	Molybdenum	ppm	ASTM D5185m		0	<1	3
	Manganese	ppm	ASTM D5185m		26	19	2
	Magnesium	ppm	ASTM D5185m		16	10	<1
	Calcium	ppm	ASTM D5185m		218	114	6
	Phosphorus	ppm	ASTM D5185m		1284	1182	1469
	Zinc	ppm	ASTM D5185m		93	73	26
	Sulfur	ppm	ASTM D5185m		29166	24822	27693
	Visc @ 40°C	cSt	ASTM D445		191	191	190







Certificate L2367

Laboratory Sample No.

: WC0903845 Lab Number : 06159497 Unique Number : 10994920 Test Package : CONST

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 24 Apr 2024 **Tested** : 25 Apr 2024

Diagnosed : 26 Apr 2024 - Jonathan Hester

US 37415 Contact: DANIEL LISELLA daniel.lisella@shimmick.com

SHIMMICK CONSTRUCTION

5535 TRAILHEAD DRIVE

CHATTANOOGA, TN

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)

T:

F: