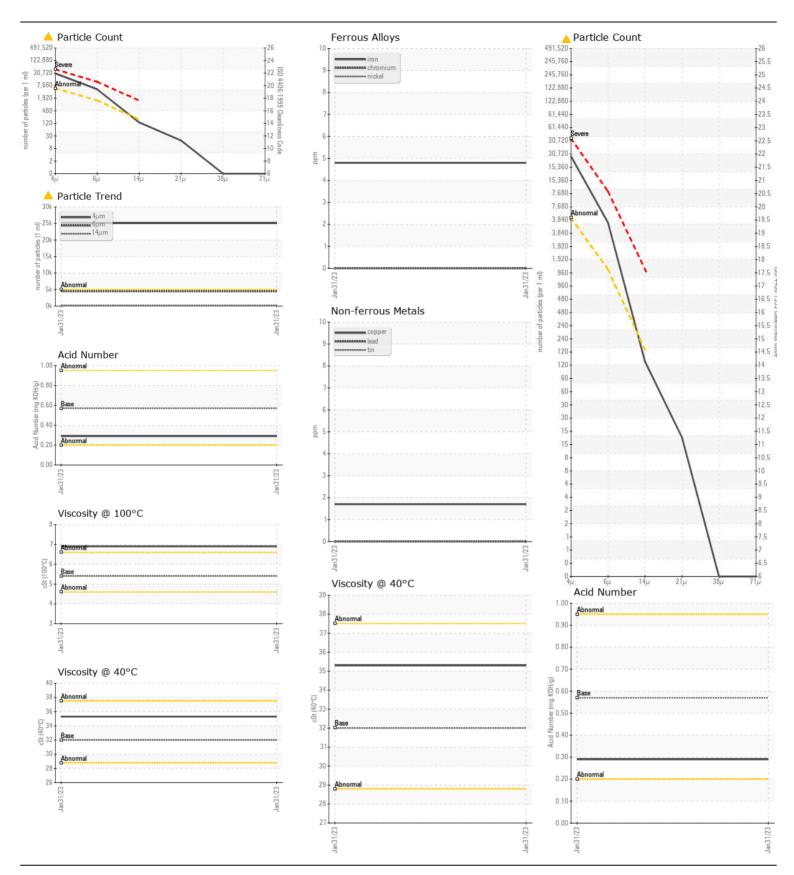
**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL ABNORMAL NORMAL** 

Machine Id 3351413

Component Hydraulic System

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
TEOOMMENDATION	Sample Number		Client Info		WC0741584		
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.	Sample Date		Client Info		31 Jan 2023		
	Machine Age	yrs	Client Info		0		
	Oil Age	yrs	Client Info		0		
	Filter Age	yrs	Client Info		0		
	Oil Changed	,	Client Info		Not Changd		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	<b>&gt;</b> 20	5		
	Chromium	ppm	ASTM D5185m		0		
	Nickel		ASTM D5185m		0		
		ppm		>10	0		
	Titanium	ppm	ASTM D5185m				
	Silver	ppm	ASTM D5185m	. 10	0		
	Aluminum	ppm	ASTM D5185m		0		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		2		
	Tin	ppm	ASTM D5185m	>10	0		
	Vanadium	ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		<1		
There is a high amount of silt (particulates < 14 microns in size) present in the oil.	Potassium	ppm	ASTM D5185m	>20	0		
	Water		WC Method	>0.1	NEG		
	Particles >4µm		ASTM D7647	>5000	<b>25069</b>		
	Particles >6µm		ASTM D7647	>1300	<b>4429</b>		
	Particles >14μm		ASTM D7647	>160	117		
	Particles >21µm		ASTM D7647	>40	16		
	Particles >38µm		ASTM D7647	>10	0		
	Particles >71µm		ASTM D7647	>3	0		
	Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>22/19/14</b>		
	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		*Visual	>0.1	NEG		
LUID CONDITION	Sodium	ppm	ASTM D5185m		0		
LOID CONDITION	Boron	ppm	ASTM D5185m	5	0		
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		0		
	Manganese	ppm	ASTM D5185m		0		
	Magnesium	ppm	ASTM D5185m	25	0		
	Calcium	ppm	ASTM D5185m		62		
	Phosphorus	ppm	ASTM D5185m		335		
	Zinc	ppm	ASTM D5185m	370	438		
	Sulfur	ppm	ASTM D5185m		4289		
	Acid Number (AN)	mg KOH/g	ASTM D8045		0.29		
	Visc @ 40°C	cSt	ASTM D445		35.3		
	Visc @ 100°C	cSt	ASTM D445		6.9		
	Viscosity Index (VI)	Scale	ASTM D2270	102	159		





Report Id: CARFRAIL [WUSCAR] 05771264 (Generated: 01/17/2024 21:12:12) Rev: 1

Laboratory Sample No. Lab Number **Unique Number** 

: WC0741584 : 05771264 : 10345881

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved Diagnosed

: 17 Feb 2023 : 20 Feb 2023 Diagnostician : Doug Bogart

Test Package : MOB 2 ( Additional Tests: KV100, VI ) Certificate L2367 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)

**HIAB USA - MIDWEST** 2827 COMMERCE ST FRANKLIN PARK, IL US 60131 Contact: KEITH BECKER

keith.becker@hiabusa.com T: (847)915-9560

Contact/Location: KEITH BECKER - CARFRAIL

F: (847)288-0192