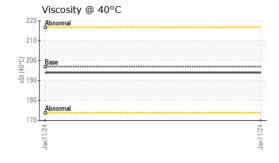
WEAR CONTAMINATION **FLUID CONDITION** **NORMAL NORMAL NORMAL**

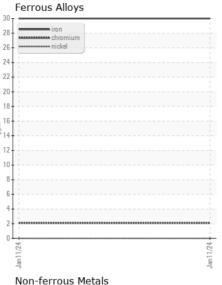
Machine Id

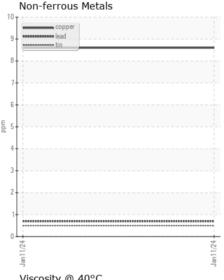
142001 - TG52

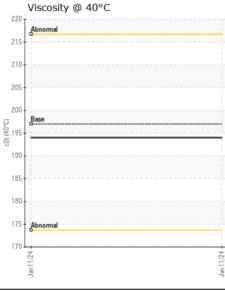
Component Gearbox

					.,		
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		LM0000791		
	Sample Date		Client Info		11 Jan 2024		
	Machine Age	hrs	Client Info		517		
	Oil Age	hrs	Client Info		517		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>200	30		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		2		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m	>25	0		
	Lead	ppm	ASTM D5185m	>50	<1		
	Copper	ppm	ASTM D5185m	>200	9		
	Tin	ppm	ASTM D5185m	>10	<1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	nnm	ASTM D5185m	<u> 50</u>	1		
	Potassium	ppm	ASTM D5185m		2		
There is no indication of any contamination in the oil.	Water	ppiii	WC Method		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		
FLUID CONDITION	0 - 45		AOTM DEADE				
	Sodium	ppm	ASTM D5185m		3		
The condition of the oil is acceptable for the time in service.	Boron Barium	ppm	ASTM D5185m ASTM D5185m		29 2		
	Molybdenum	ppm	ASTM D5185m		0		
	Manganese	ppm	ASTM D5185m		4		
	Magnesium	ppm	ASTM D5185m		70		
	Calcium	ppm	ASTM D5185m		11		
	Phosphorus	ppm	ASTM D5185m		1311		
	Zinc	ppm	ASTM D5185m		<1		
	Sulfur	ppm	ASTM D5185m		27543		
	Visc @ 40°C	cSt	ASTM D3163III		194		











Certificate L2367

Laboratory Sample No. Lab Number

: LM0000791 : 06065229 Unique Number : 10836611 Test Package : CONST

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 18 Jan 2024 Diagnosed : 22 Jan 2024 Diagnostician : Sean Felton

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)

LIEBHERR USA CO - Maritime Cranes

15101 NW 112TH AVE HIALEAH GARDENS, FL US 33018

Contact: RONNY FUNK ronny.funk@liebherr.com

T: (305)817-7566

Contact/Location: RONNY FUNK - LIEHIA