WEAR CONTAMINATION FLUID CONDITION

ABNORMAL NORMAL NORMAL



Machine Id **LIEBHERR A924 019013-957**

Swing Drive

NOT GIVEN (--- GAL)

		NDA	

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH		
Sample Date		Client Info		08 Apr 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		N/A		
Sample Status				ABNORMAL		
PQ		ASTM D8184*		<u> </u>		
Iron	ppm	ASTM D5185(m)	>400	<u> </u>		
Chromium	nnm	ASTM D5185(m)	>10	2		

WEAR

PQ levels are abnormal. Iron and antimony ppm levels are abnormal. Gear wear is indicated. The high ferrous density (PQ) index indicates that abnormal wear is occurring.

PQ		ASTM D8184*		<u> </u>	
Iron	ppm	ASTM D5185(m)	>400	△ 582	
Chromium	ppm	ASTM D5185(m)	>10	2	
Nickel	ppm	ASTM D5185(m)	>10	<1	
Titanium	ppm	ASTM D5185(m)		0	
Silver	ppm	ASTM D5185(m)		0	
Aluminum	ppm	ASTM D5185(m)	>25	0	
Lead	ppm	ASTM D5185(m)	>50	0	
Copper	ppm	ASTM D5185(m)	>200	21	
Tin	ppm	ASTM D5185(m)	>10	<1	
Vanadium	ppm	ASTM D5185(m)		0	
White Metal	scalar	Visual*	NONE	NONE	
Yellow Metal	scalar	Visual*	NONE	NONE	

CONTAMINATION

There is no indication of any contamination in the oil.

Yellow Metal	scalar	Visual*	NONE	NONE	
Silicon	ppm	ASTM D5185(m)	>50	2	
Potassium	ppm	ASTM D5185(m)	>20	<1	
Water		WC Method	>0.2	NEG	
Silt	scalar	Visual*	NONE	LIGHT	
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	
Sodium	ppm	ASTM D5185(m)		4	
Poron	nnm	ACTM DE10E/m)		20	

FLUID CONDITION

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
	Sodium	ppm	ASTM D5185(m)		4		
	Boron	ppm	ASTM D5185(m)		29		
	Barium	ppm	ASTM D5185(m)		22		
	Molybdenum	ppm	ASTM D5185(m)		0		
	Manganese	ppm	ASTM D5185(m)		4		
	Magnesium	ppm	ASTM D5185(m)		<1		
	Calcium	ppm	ASTM D5185(m)		20		
	Phosphorus	ppm	ASTM D5185(m)		440		
	Zinc	ppm	ASTM D5185(m)		10		
	Sulfur	ppm	ASTM D5185(m)		20705		
	Visc @ 40°C	cSt	ASTM D7279(m)		133	 mitted By: E	





CALA ISO 17025:2017 Accredited

Laboratory

Sample No. Lab Number

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

: LH : 02630742 Unique Number : 5763874

Received **Tested** Diagnosed

: 22 Apr 2024 : 23 Apr 2024

: 23 Apr 2024 - Kevin Marson

CA E2A 6W6 Contact: Daniel Hachey daniel.hachey@interfor.com

T: (506)547-8700 F: (506)548-1892

BRUNSWICK MINE, NB

INTERFOR CORP

5060 RTE 430

Test Package: MOB 1 (Additional Tests: PQ) To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.