**WEAR CONTAMINATION FLUID CONDITION** 

**NORMAL SEVERE NORMAL** 

Historv2

History1



Scoop 10 Yard LHD1502

Transmission (Auto)

Test

UOM

Method

**ATF** (--- LTR)

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We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. We recommend that you drain the fluid from the component if this has not already been done. We recommend an early resample to monitor this condition.

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Sample Number		Client Info		PC0047167	PC0047737	PC0046794
Sample Date		Client Info		04 May 2024	18 Jul 2022	29 Apr 2021
Machine Age	hrs	Client Info		2699	6438	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	N/A
Filter Changed		Client Info		N/A	Changed	N/A
Sample Status				SEVERE	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>160	50	11	21
Chromium	ppm	ASTM D5185(m)	>5	0	0	<1
Nickel	ppm	ASTM D5185(m)	>5	0	0	<1
Titonium	nnm	ACTM D5195/m)		<b>-1</b>	Λ	0

Limit/Abn Current

## **WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>160	50	11	21
Chromium	ppm	ASTM D5185(m)	>5	0	0	<1
Nickel	ppm	ASTM D5185(m)	>5	0	0	<1
Titanium	ppm	ASTM D5185(m)		<1	0	0
Silver	ppm	ASTM D5185(m)	>5	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>50	11	<1	2
Lead	ppm	ASTM D5185(m)	>50	4	<1	1
Copper	ppm	ASTM D5185(m)	>225	6	3	5
Tin	ppm	ASTM D5185(m)	>10	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NON
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NON

## CONTAMINATION

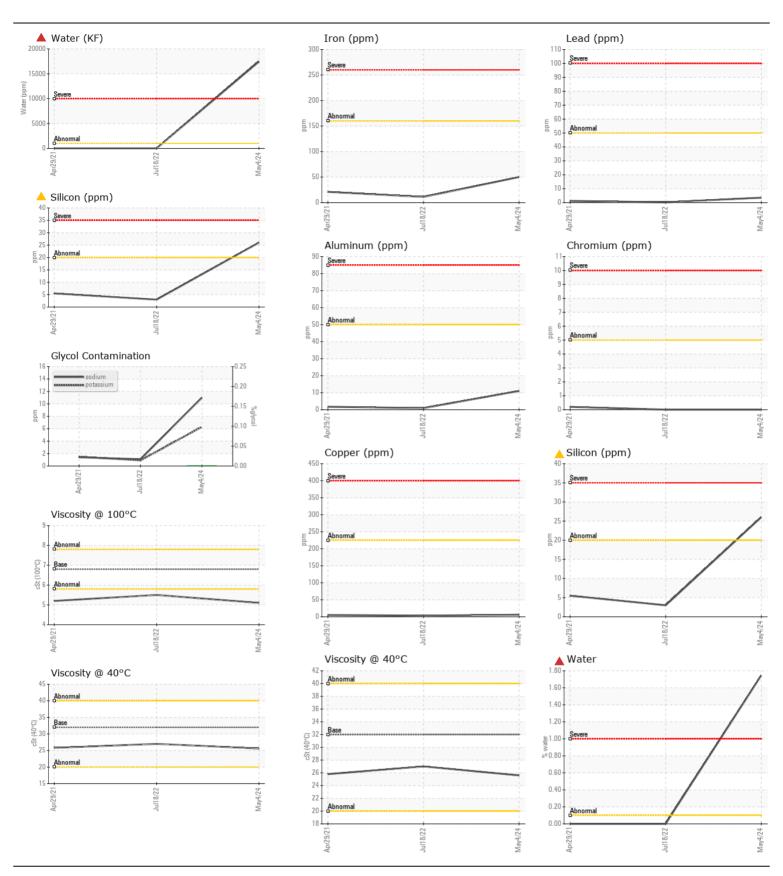
There is a high concentration of water present in the fluid. There is a moderate concentration of dirt present in the fluid. Test for glycol is negative.

Silicon	ppm	ASTM D5185(m)	>20	<u>^</u> 26		3	6
Potassium	ppm	ASTM D5185(m)	>20	6		<1	2
Water	%	ASTM D6304*	>0.1	<b>1.7</b> 4	14		
ppm Water	ppm	ASTM D6304*	>1000	<b>174</b>	46		
Glycol	%	ASTM D7922*		0.0			
Silt	scalar	Visual*	NONE	VLI <sup>-</sup>	TE	NONE	NONE
Debris	scalar	Visual*	NONE	NOI	NE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NOI	NE	NONE	NONE
Appearance	scalar	Visual*	NORML	A HAZ	ZY	NORML	NORML
Odor	scalar	Visual*	NORML	NOF	RML	NORML	NORML
<b>Emulsified Water</b>	scalar	Visual*	>0.1	<u>^</u> 1%		NEG	NEG
0 "		AOTH DEGOE					

## **FLUID CONDITION**

The fluid is no longer serviceable due to the presence of contaminants.

Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	<b>1</b> %	NEG	NEG
Sodium	ppm	ASTM D5185(m)		11	1	1
Boron	ppm	ASTM D5185(m)		85	91	94
Barium	ppm	ASTM D5185(m)		<1	0	0
Molybdenum	ppm	ASTM D5185(m)		0	1	<1
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		9	23	5
Calcium	ppm	ASTM D5185(m)		136	115	132
Phosphorus	ppm	ASTM D5185(m)		226	235	226
Zinc	ppm	ASTM D5185(m)		42	38	31
Sulfur	ppm	ASTM D5185(m)		797	905	799
Visc @ 40°C	cSt	ASTM D7279(m)	32.0	25.6	27.0	25.8
Visc @ 100°C	cSt	ASTM D7279(m)	6.8	5.1	5.5	5.2
Viscosity Index (VI)	Scale	ASTM D2270*	178	130	146	136





CALA ISO 17025:2017 Accredited

Laboratory

Laboratory Sample No. Lab Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : PC0047167 : 02638545

Received **Tested** Unique Number : 5787707 Diagnosed

: 29 May 2024 : 03 Jun 2024 Test Package : MOB 1 (Additional Tests: GLYCOL, KF, KV100, VI)

: 03 Jun 2024 - Kevin Marson

**Lakeshore Gold Timmins West** Timmins, ON CA

Contact: Dale Arseneau darseneau@ca.panamericansilver.com

T: (705)269-4344

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.