

# **OIL ANALYSIS REPORT**

NO UNIT PC0075018

Component

**Rear Final Drive** 

NOT GIVEN (--- GAL)

# DIAGNOSIS

## Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 30

Transmission/Drive Train Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample. Please specify the component make and model with your next sample.

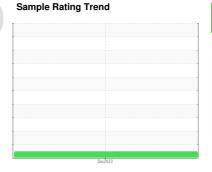
All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### **Fluid Condition**

The condition of the oil is acceptable for the time in

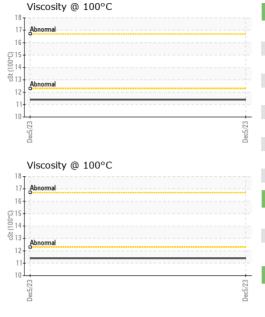




				Decease		
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC0075018		
Sample Date		Client Info		05 Dec 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>500	92		
Chromium	ppm	ASTM D5185(m)	>10	<1		
Nickel	ppm	ASTM D5185(m)	>10	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		<1		
Aluminum	ppm	ASTM D5185(m)	>25	<1		
Lead	ppm	ASTM D5185(m)	>25	<1		
Copper	ppm	ASTM D5185(m)	>50	<1		
Tin	ppm	ASTM D5185(m)	>10	0		
Antimony	ppm	ASTM D5185(m)	>5	0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<1		
Barium	ppm	ASTM D5185(m)		<1		
Molybdenum	ppm	ASTM D5185(m)		<1		
Manganese	ppm	ASTM D5185(m)		<1		
Magnesium	ppm	ASTM D5185(m)		10		
Calcium	ppm	ASTM D5185(m)		3140		
Phosphorus	ppm	ASTM D5185(m)		1028		
Zinc	ppm	ASTM D5185(m)		1256		
Sulfur	ppm	ASTM D5185(m)		10429		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>75	4		
Sodium	ppm	ASTM D5185(m)		3		
Potassium	ppm	ASTM D5185(m)	>20	1		



### **OIL ANALYSIS REPORT**



VISUAL		method	limit/base	current	history1	history?
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Precipitate	scalar	Visual*	NONE	NONE		
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		
Free Water	scalar	Visual*		NEG		
FLUID PROPE	RTIES	method	limit/base	current	history1	history
/isc @ 40°C	cSt	ASTM D7279(m)		104		
/isc @ 100°C	cSt	ASTM D7279(m)		11.4		
Viscosity Index (VI)	Scale	ASTM D2270*		95		
SAMPLE IMAG	ES	method	limit/base	current	history1	history
Color					no image	no image
Bottom					no image	no image
GRAPHS						
Iron (ppm)				Lead (ppm)		
Severe Q			200	ļ.		
Abnormal			E 100	Abnormal		
1,523				1		
Dec5/23			Dec5/23	Dec5/23		
Aluminum (ppm)				Chromium (pp	om)	
Same			40	Severe		
Severe Abnormal				Abnormal		
2/23				2/33		
Dece			Dec	Dece		
Copper (ppm)				Silicon (ppm)		
Severe			400			
Abnormal			<u>E</u> . 200	Abnormal		
Dec5/23			Dec5/23	Dec5/23		



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5694376

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

: PC0075018 : 02601291

Validity of results and interpretation are based on the sample and information as supplied.

Received Diagnosed

: 06 Dec 2023 : 07 Dec 2023

Diagnostician : Bill Quesnel Test Package : MOB 1 ( Additional Tests: KV100, VI )

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. **Lakeshore Gold Timmins West** 

Timmins, ON CA

Contact: Glenn Thornhill gthornhill@ca.panamericansilver.com

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