WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

Aroo

Scissor Decks

XLIFT192
Component

Diesel Engine

{not provided} (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		PC0084782		
	Sample Date		Client Info		16 May 2024		
	Machine Age	hrs	Client Info		3495		
	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				NORMAL		
VEAR	Iron	ppm	ASTM D5185(m)	>100	13		
WEAR	Chromium		ASTM D5185(m)		0		
All component wear rates are normal.	Nickel	ppm	ASTM D5185(m)		0		
		ppm	, ,	>4			
	Titanium	ppm	ASTM D5185(m)	0	<1		
	Silver	ppm	ASTM D5185(m)		0		
	Aluminum	ppm	ASTM D5185(m)		2		
	Lead	ppm	ASTM D5185(m)		<1		
	Copper	ppm	ASTM D5185(m)		2		
	Tin	ppm	ASTM D5185(m)	>15	0		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
ONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	6		
ONTAIIIINATION	Potassium	ppm	ASTM D5185(m)		2		
There is no indication of any contamination in the oil.	Fuel	ρρ	WC Method		- <1.0		
	Water		WC Method		NEG		
	Glycol		WC Method	70.L	NEG		
	Soot %	%	ASTM D7844*	~3	0.1		
	Nitration	Abs/cm	ASTM D7644*	>20	6.0		
					18.3		
	Sulfation	Abs/.1mm	ASTM D7415*	>30			
	Silt	scalar	Visual*	NONE	VLITE		
	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		
LUID CONDITION	Sodium	ppm	ASTM D5185(m)		2		
	Boron	ppm	ASTM D5185(m)		<1		
The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		55		
	Manganese	ppm	ASTM D5185(m)		<1		
	Magnesium	ppm	ASTM D5185(m)		869		
	Calcium	ppm	ASTM D5185(m)		970		
	Phosphorus		ASTM D5185(m)		943		
	•	ppm					
	Zinc	ppm	ASTM D5185(m)		1083		
	Sulfur	ppm	ASTM D5185(m)	05	2340		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	13.1		
	Visc @ 40°C	cSt	ASTM D7279(m)		84.4		
	Visc @ 100°C	cSt	ASTM D7279(m)		12.3		
	Viscosity Index (VI)	Scale	ASTM D2270*		141		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : PC0084782

: 02638402 Unique Number : 5787564

To discuss this sample report, contact Customer Service at 1-800-268-2131.

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

Received **Tested** Diagnosed

: 29 May 2024 : 29 May 2024

: 29 May 2024 - Wes Davis Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

Lakeshore Gold Timmins West

Timmins, ON CA Contact: Dale Arseneau

darseneau@ca.panamericansilver.com Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

T: (705)269-4344 F: