WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

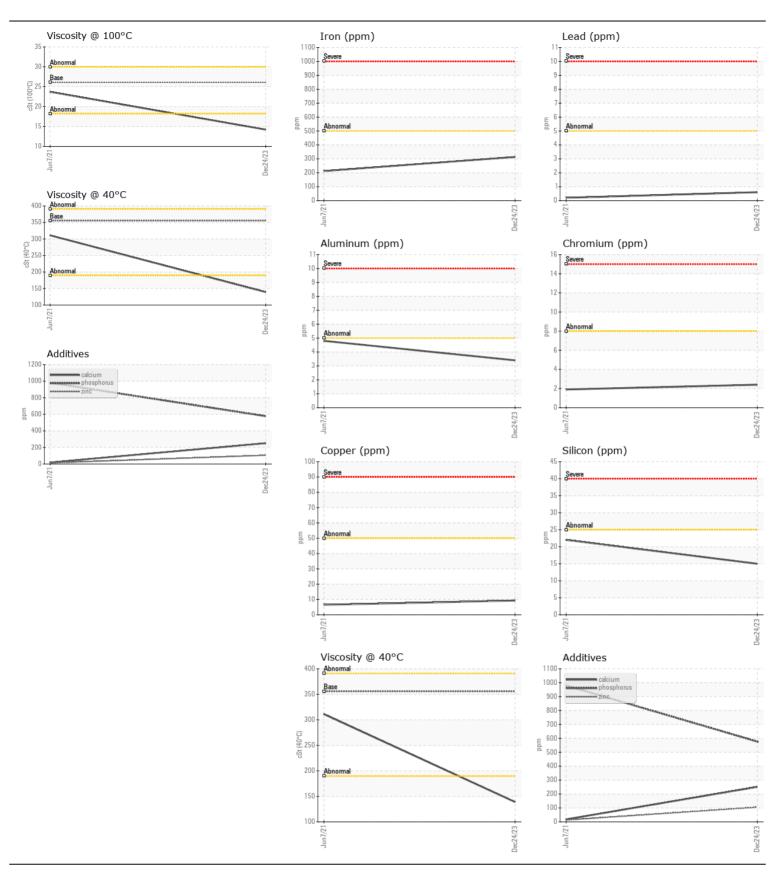


Haul Truck
Machine Id
HT5024

Component Rear Left Wheel Hub

PETRO CANADA TRAXON 85W140 (13 LTR)

PETRO CANADA TRAXON 85W	140 (13 L II	ער					
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.	Sample Number		Client Info		PC0074943	PC0047202	
	Sample Date		Client Info		24 Dec 2023	07 Jun 2021	
	Machine Age	hrs	Client Info		9972	0	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		N/A	N/A	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	nnm	ACTM DE10E(m)	- E00	242	010	
All component wear rates are normal.	Iron Chromium	ppm	ASTM D5185(m) ASTM D5185(m)		313 2	212 2	
	Nickel	ppm	ASTM D5185(III) ASTM D5185(m)		2	<1	
	Titanium	ppm	ASTM D5185(m)	>5	0	<1	
	Silver	ppm	ASTM D5185(m)		0	<1	
	Aluminum	ppm	ASTM D5185(m)	\5	3	5	
	Lead	ppm	ASTM D5185(m)	>5	<1	<1	
	Copper	ppm		>50	9	6	
	Tin	ppm	ASTM D5185(m)	700	0	0	
	Vanadium	ppm	ASTM D5185(m)		0	0	
	White Metal	scalar	Visual*	NONE	VLITE	LIGHT	
	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	15	22	
CONTAMINATION There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	8	17	
	Potassium Water	ppm	ASTM D5185(m) WC Method	>20 >0.2	8 NEG	17 NEG	
	Potassium Water Silt	ppm	ASTM D5185(m) WC Method Visual*	>20 >0.2 NONE	8 NEG NONE	17 NEG VLITE	
	Potassium Water Silt Debris	ppm scalar scalar	ASTM D5185(m) WC Method Visual* Visual*	>20 >0.2 NONE NONE	8 NEG NONE NONE	17 NEG VLITE NONE	
	Potassium Water Silt Debris Sand/Dirt	ppm scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual*	>20 >0.2 NONE NONE NONE	8 NEG NONE NONE	17 NEG VLITE NONE NONE	
	Potassium Water Silt Debris Sand/Dirt Appearance	ppm scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual*	>20 >0.2 NONE NONE NONE NORML	8 NEG NONE NONE NONE	17 NEG VLITE NONE NONE NORML	
	Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm scalar scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual*	>20 >0.2 NONE NONE NONE NORML	8 NEG NONE NONE NONE NORML	17 NEG VLITE NONE NONE NORML	
There is no indication of any contamination in the oil.	Potassium Water Silt Debris Sand/Dirt Appearance	ppm scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual*	>20 >0.2 NONE NONE NONE NORML	8 NEG NONE NONE NONE	17 NEG VLITE NONE NONE NORML	
	Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm scalar scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual*	>20 >0.2 NONE NONE NONE NORML	8 NEG NONE NONE NONE NORML	17 NEG VLITE NONE NONE NORML	
There is no indication of any contamination in the oil. FLUID CONDITION	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual*	>20 >0.2 NONE NONE NORML NORML >0.2	8 NEG NONE NONE NONE NORML NORML NEG	17 NEG VLITE NONE NONE NORML NORML NEG	
There is no indication of any contamination in the oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	scalar scalar scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2	8 NEG NONE NONE NONE NORML NORML NEG	17 NEG VLITE NONE NONE NORML NORML NEG	
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar scalar scalar ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2	8 NEG NONE NONE NORML NORML NEG 3 64	17 NEG VLITE NONE NONE NORML NORML NEG 6 222	
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2	8 NEG NONE NONE NORML NORML NEG 3 64	17 NEG VLITE NONE NONE NORML NORML NEG 6 222 6	
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2	8 NEG NONE NONE NORML NORML NEG 3 64 0	17 NEG VLITE NONE NONE NORML NORML NEG 6 222 6 <1 2 <1	
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NONE NONE NORML NORML >0.2 243 0	8 NEG NONE NONE NORML NORML NEG 3 64 0 0 3 1	17 NEG VLITE NONE NONE NORML NORML NEG 6 222 6 <1 2	
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2 243 0 0 0 988	8 NEG NONE NONE NORML NORML NEG 3 64 0 0 251 577	17 NEG VLITE NONE NONE NORML NORML NEG 6 222 6 <1 2 <1 18 980	
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2 243 0 0 0 988 0	8 NEG NONE NONE NORML NORML NEG 3 64 0 0 3 1 251 577 105	17 NEG VLITE NONE NONE NORML NORML NEG 6 222 6 <1 2 <1 18 980 13	
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	scalar scalar scalar scalar scalar scalar scalar scalar sppm ppm ppm ppm ppm ppm ppm ppm ppm pp	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2 243 0 0 0 988 0 24530	8 NEG NONE NONE NORML NORML NEG 3 64 0 0 3 1 251 577 105 12145	17 NEG VLITE NONE NONE NORML NORML NEG 6 222 6 <1 2 <1 18 980 13 22197	
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Visc @ 40°C	scalar sppm ppm ppm ppm ppm ppm ppm ppm ppm pp	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2 243 0 0 988 0 24530 355.4	8 NEG NONE NONE NORML NORML NEG 3 64 0 0 3 1 251 577 105 12145 139	17 NEG VLITE NONE NONE NORML NORML NEG 6 222 6 <1 2 <1 18 980 13 22197 311	
There is no indication of any contamination in the oil. FLUID CONDITION Additive levels indicate the addition of a different brand, or type of oil.	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	scalar scalar scalar scalar scalar scalar scalar scalar sppm ppm ppm ppm ppm ppm ppm ppm ppm cSt cSt	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2 243 0 0 0 988 0 24530	8 NEG NONE NONE NORML NORML NEG 3 64 0 0 3 1 251 577 105 12145	17 NEG VLITE NONE NONE NORML NORML NEG 6 222 6 <1 2 <1 18 980 13 22197	





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number **Unique Number**

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : PC0074943

Recieved : 02608267 : 5709353

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

: 11 Jan 2024 Diagnosed : 11 Jan 2024 Diagnostician : Wes Davis

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: Dale Arseneau darseneau@ca.panamericansilver.com

T: (705)269-4344