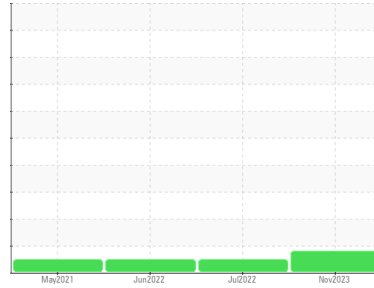


OIL ANALYSIS REPORT



Area
Haul Truck
Machine Id
HT4502
Component
Rear Right Planetary
Fluid
NOT GIVEN (--- LTR)

Sample Rating Trend



VISCOSITY



DIAGNOSIS

- ▲ Recommendation**
Resample at the next service interval to monitor.
- Wear**
All component wear rates are normal.
- Contamination**
There is no indication of any contamination in the oil.
- ▲ Fluid Condition**
Viscosity of sample indicates oil is within SAE 75W80 range, advise investigate. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC0074883	PC0048862	PC0047118
Sample Date	Client Info	23 Nov 2023	27 Jul 2022	06 Jun 2022
Machine Age	hrs	Client Info	6729	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.2	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >500	26	57	72
Chromium	ppm ASTM D5185(m) >10	0	<1	<1
Nickel	ppm ASTM D5185(m) >10	0	0	<1
Titanium	ppm ASTM D5185(m)	0	<1	<1
Silver	ppm ASTM D5185(m)	<1	0	0
Aluminum	ppm ASTM D5185(m) >25	1	5	5
Lead	ppm ASTM D5185(m) >25	2	1	2
Copper	ppm ASTM D5185(m) >75	88	52	57
Tin	ppm ASTM D5185(m) >10	3	1	1
Antimony	ppm ASTM D5185(m) >5	0	0	0
Vanadium	ppm ASTM D5185(m)	0	0	0
Beryllium	ppm ASTM D5185(m)	0	0	0
Cadmium	ppm ASTM D5185(m)	0	0	0

ADDITIVES

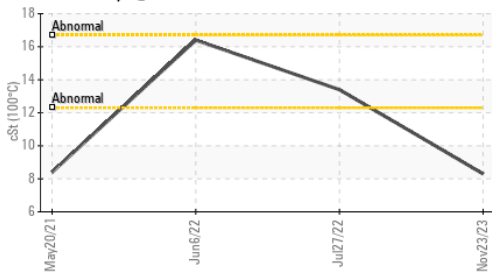
method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m)	86	12	3
Barium	ppm ASTM D5185(m)	<1	0	<1
Molybdenum	ppm ASTM D5185(m)	<1	8	11
Manganese	ppm ASTM D5185(m)	0	1	1
Magnesium	ppm ASTM D5185(m)	14	15	17
Calcium	ppm ASTM D5185(m)	3340	3013	3034
Phosphorus	ppm ASTM D5185(m)	1072	951	1088
Zinc	ppm ASTM D5185(m)	1352	1178	1234
Sulfur	ppm ASTM D5185(m)	2680	5425	6305
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

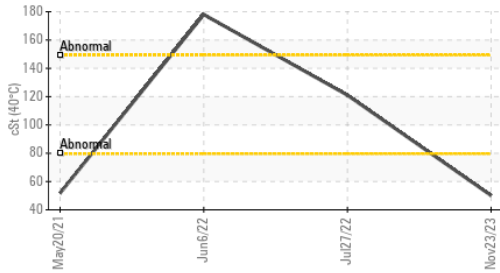
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >75	11	21	28
Sodium	ppm ASTM D5185(m)	<1	5	6
Potassium	ppm ASTM D5185(m) >20	<1	14	19

OIL ANALYSIS REPORT

▲ Viscosity @ 100°C



▲ Viscosity @ 40°C



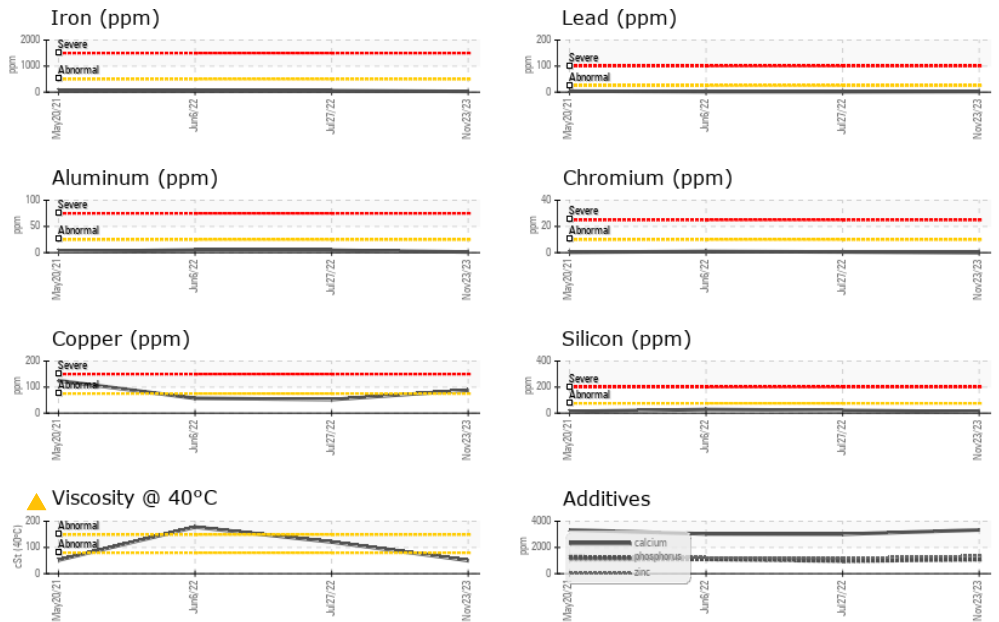
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	VLITE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	▲ 50.1	121	178
Visc @ 100°C	cSt	ASTM D7279(m)	▲ 8.3	13.4	16.4
Viscosity Index (VI)	Scale	ASTM D2270*	139	106	95

▲ SAMPLE IMAGES



GRAPHS



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0074883 **Received** : 06 Dec 2023
Lab Number : 02601299 **Diagnosed** : 07 Dec 2023
Unique Number : 5694384 **Diagnostician** : Bill Quesnel
Test Package : MOB 1 (Additional Tests: KV100, VI)

Lakeshore Gold Timmins West

Timmins, ON
CA

Contact: Adam Koscielak
adam.koscielak@HFSinclair.com

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.

T:
F: