

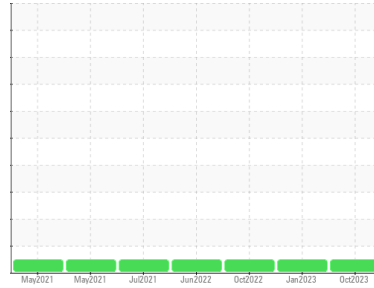
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Rock Truck
Machine Id
HT2607
Component
Front Axle
Fluid
PETRO CANADA PRODURO FD-1 60 (66 LTR)



DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. 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

Additive levels indicate the addition of a different brand, or type of oil. Viscosity of sample indicates oil is within SAE 5W20 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		PC0066726	PC0067018	PC0048643
Sample Date	Client Info		07 Oct 2023	08 Jan 2023	11 Oct 2022
Machine Age	hrs	Client Info	40917	37663	36264
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >500	10	7	8
Chromium	ppm	ASTM D5185(m) >10	0	0	0
Nickel	ppm	ASTM D5185(m) >10	<1	0	0
Titanium	ppm	ASTM D5185(m)	0	<1	<1
Silver	ppm	ASTM D5185(m)	1	0	0
Aluminum	ppm	ASTM D5185(m) >25	1	1	1
Lead	ppm	ASTM D5185(m) >25	0	<1	0
Copper	ppm	ASTM D5185(m) >50	3	1	2
Tin	ppm	ASTM D5185(m) >10	0	<1	<1
Antimony	ppm	ASTM D5185(m) >5	0	<1	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) 92	74	13	99
Barium	ppm	ASTM D5185(m) 0	<1	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<1	<1	1
Manganese	ppm	ASTM D5185(m) 0	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 0	21	18	24
Calcium	ppm	ASTM D5185(m) 283	3226	2398	3512
Phosphorus	ppm	ASTM D5185(m) 306	1058	904	1147
Zinc	ppm	ASTM D5185(m) 0	1279	1007	1319
Sulfur	ppm	ASTM D5185(m) 9080	2615	2573	2785
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

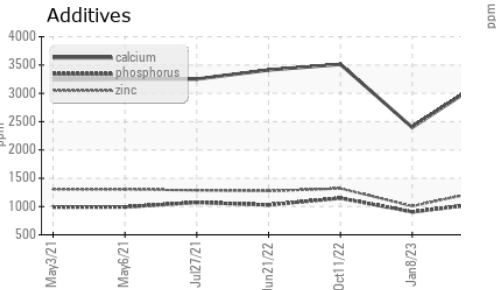
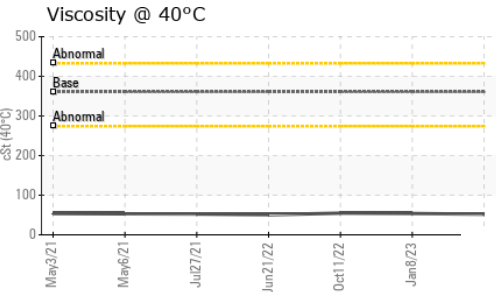
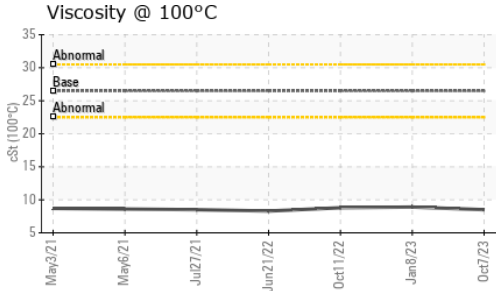
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >75	11	6	12
Sodium	ppm	ASTM D5185(m)	<1	<1	1
Potassium	ppm	ASTM D5185(m) >20	0	<1	<1

VISUAL

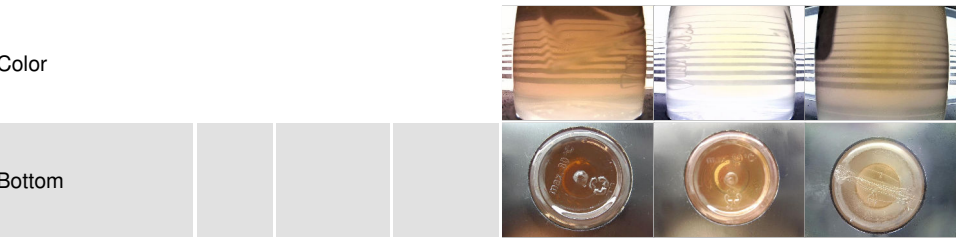
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White Metal	scalar	Visual* NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual* NONE	NONE	NONE	NONE
Precipitate	scalar	Visual* NONE	NONE	NONE	NONE
Silt	scalar	Visual* NONE	NONE	NONE	NONE
Debris	scalar	Visual* NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual* NONE	NONE	NONE	NONE
Appearance	scalar	Visual* NORML	NORML	NORML	NORML
Odor	scalar	Visual* NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual* >0.2	NEG	NEG	NEG
Free Water	scalar	Visual*	NEG	NEG	NEG

OIL ANALYSIS REPORT

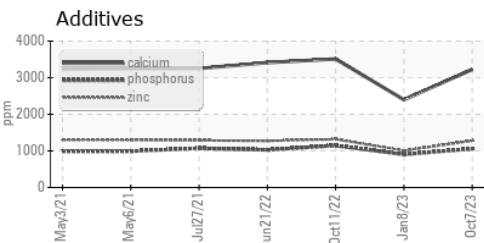
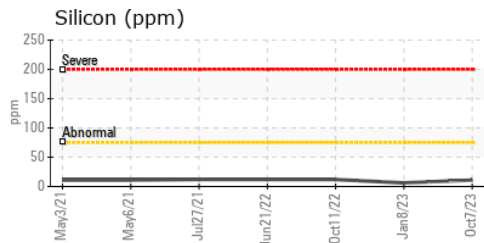
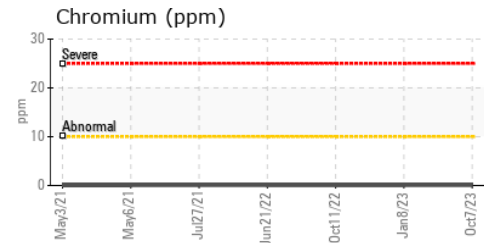
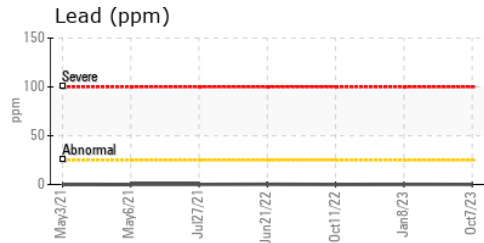
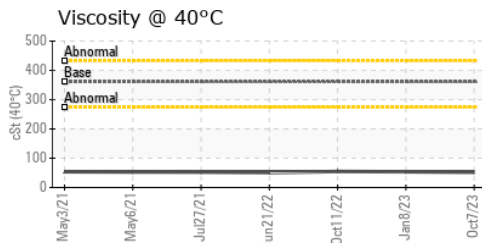
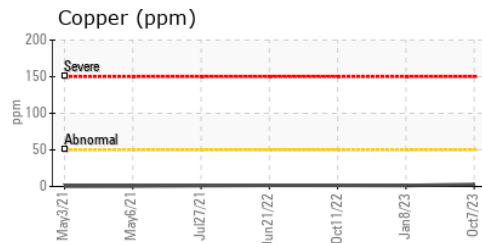
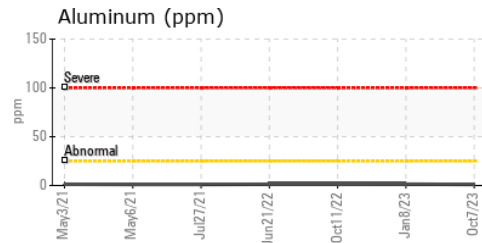
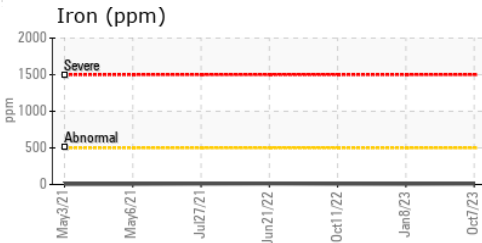


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	360.6	52.0	53.7	54.8
Visc @ 100°C	cSt	ASTM D7279(m)	26.49	8.5	8.9	8.8
Viscosity Index (VI)	Scale	ASTM D2270*	98	138	144	138

SAMPLE IMAGES		method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0066726 **Received** : 01 Nov 2023
Lab Number : **02593317** **Diagnosed** : 01 Nov 2023
Unique Number : 5670396 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: KV100, VI)

Lakeshore Gold Timmins West
 Timmins, ON
 CA
 Contact: Adam Koscielak
 adam.koscielak@HFSinclair.com
 T:
 F:

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.