

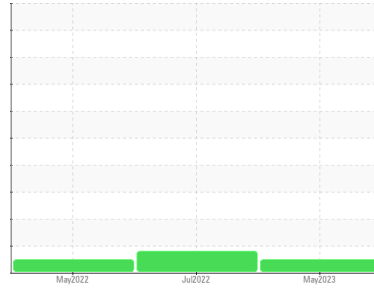
OIL ANALYSIS REPORT



Area
Haul Truck
Machine Id
HT4501

Component
Transmission (Manual)
Fluid
PETRO CANADA DURATRAN (60 LTR)

Sample Rating Trend



NORMAL



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 fluid.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of fluid. The condition of the fluid is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number	Client Info		PC0051417	PC0048830	PC0050658
Sample Date	Client Info		13 May 2023	21 Jul 2022	05 May 2022
Machine Age	hrs	Client Info	6383	4116	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed		Client Info	N/A	N/A	N/A
Sample Status			NORMAL	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history 1	history 2	
Iron	ppm	ASTM D5185(m)	>200	10	6	8
Chromium	ppm	ASTM D5185(m)	>5	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>7	0	2	<1
Aluminum	ppm	ASTM D5185(m)	>25	1	1	2
Lead	ppm	ASTM D5185(m)	>45	1	13	0
Copper	ppm	ASTM D5185(m)	>225	9	▲ 365	2
Tin	ppm	ASTM D5185(m)	>10	0	<1	<1
Antimony	ppm	ASTM D5185(m)		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	history 1	history 2	
Boron	ppm	ASTM D5185(m)	110	5	36	77
Barium	ppm	ASTM D5185(m)	0.0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0.0	3	<1	16
Manganese	ppm	ASTM D5185(m)	1	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	13	51	15	257
Calcium	ppm	ASTM D5185(m)	3610	2285	2956	2894
Phosphorus	ppm	ASTM D5185(m)	1192	936	1026	1128
Zinc	ppm	ASTM D5185(m)	1455	1070	976	1314
Sulfur	ppm	ASTM D5185(m)	2641	2580	2576	2634
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

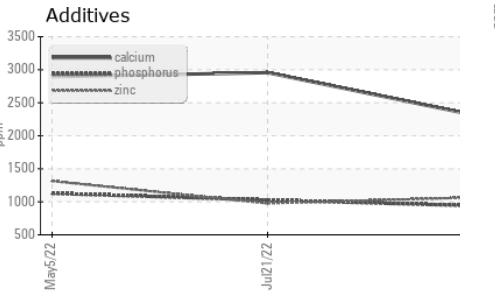
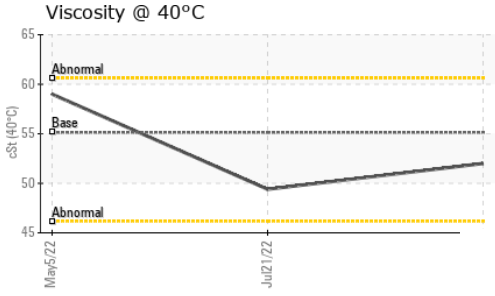
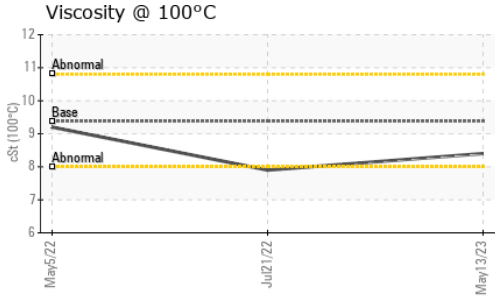
CONTAMINANTS

	method	limit/base	current	history 1	history 2	
Silicon	ppm	ASTM D5185(m)	>125	6	6	12
Sodium	ppm	ASTM D5185(m)		3	3	2
Potassium	ppm	ASTM D5185(m)	>20	1	<1	0

VISUAL

	method	limit/base	current	history 1	history 2	
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	VLITE	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*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

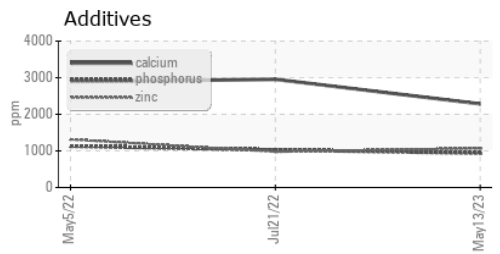
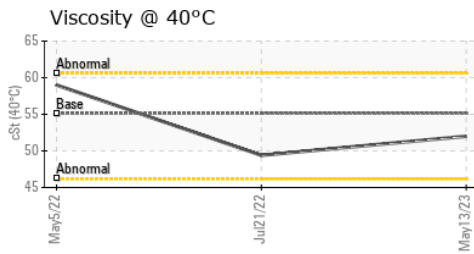
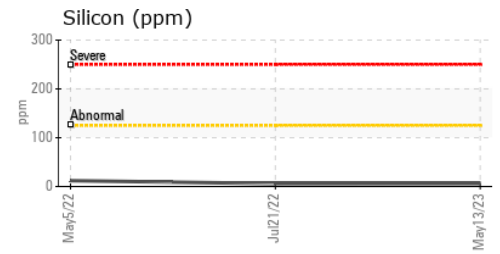
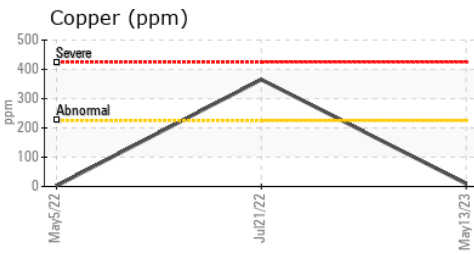
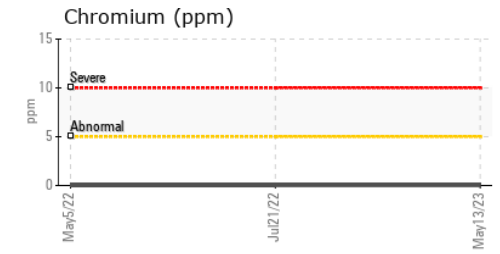
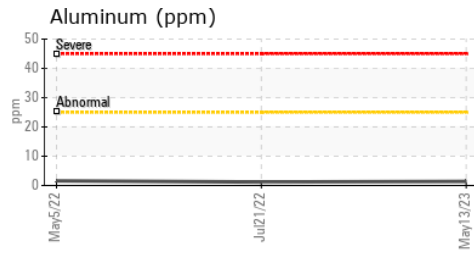
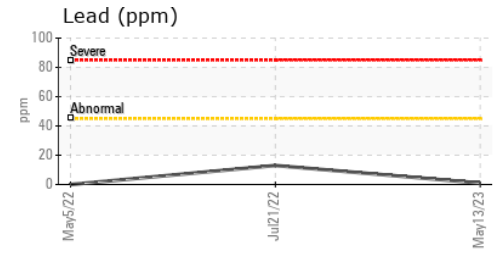
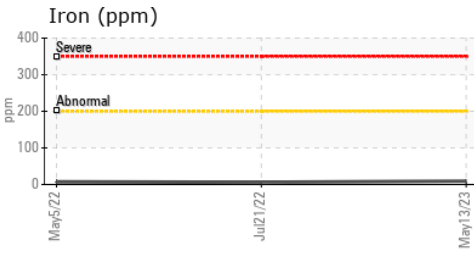
OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D7279(m)	55.14	52.0	49.4	59.0
Visc @ 100°C	cSt	ASTM D7279(m)	9.38	8.4	7.9	9.2
Viscosity Index (VI)	Scale	ASTM D2270*	153	135	128	135

SAMPLE IMAGES		method	limit/base	current	history 1	history 2
Color						
Bottom						

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0051417 **Received** : 04 Jul 2023
Lab Number : 02567825 **Diagnosed** : 04 Jul 2023
Unique Number : 5604871 **Diagnostician** : Wes Davis
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.