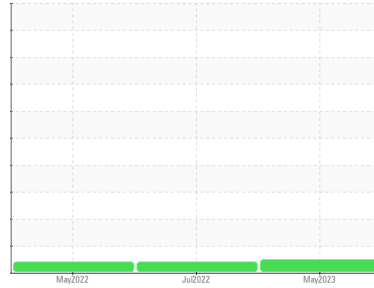


OIL ANALYSIS REPORT



Area
Haul Truck
Machine Id
HT4501
Component
Hydraulic System
Fluid
PETRO CANADA DURATRAN (266 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 oil.

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

SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number	Client Info	PC0051408	PC0048835	PC0050655
Sample Date	Client Info	13 May 2023	21 Jul 2022	05 May 2022
Machine Age	hrs Client Info	6383	4116	3521
Oil Age	hrs Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history 1	history 2
Iron ppm ASTM D5185(m)	>20	3	4	4
Chromium ppm ASTM D5185(m)	>10	0	<1	<1
Nickel ppm ASTM D5185(m)	>10	<1	1	2
Titanium ppm ASTM D5185(m)		<1	<1	0
Silver ppm ASTM D5185(m)		<1	0	0
Aluminum ppm ASTM D5185(m)	>10	2	1	1
Lead ppm ASTM D5185(m)	>10	0	<1	<1
Copper ppm ASTM D5185(m)	>75	<1	2	2
Tin ppm ASTM D5185(m)	>10	0	0	0
Antimony ppm ASTM D5185(m)		0	0	<1
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	2	20	16
Barium ppm ASTM D5185(m)	0.0	0	0	0
Molybdenum ppm ASTM D5185(m)	0.0	2	2	2
Manganese ppm ASTM D5185(m)	1	0	<1	0
Magnesium ppm ASTM D5185(m)	13	39	25	36
Calcium ppm ASTM D5185(m)	3610	2254	2729	2639
Phosphorus ppm ASTM D5185(m)	1192	899	1020	1034
Zinc ppm ASTM D5185(m)	1455	1023	1128	1146
Sulfur ppm ASTM D5185(m)	2641	2548	4500	5250
Lithium ppm ASTM D5185(m)		<1	<1	<1

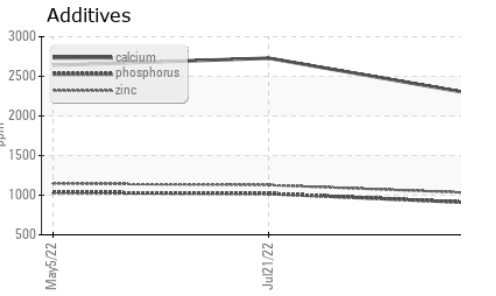
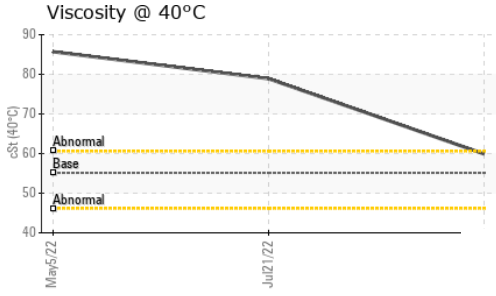
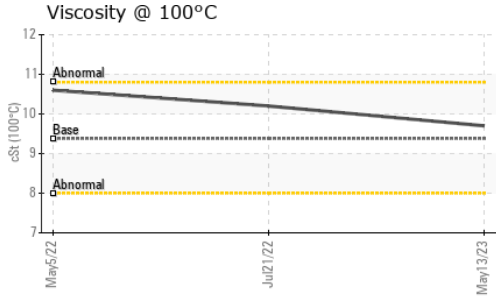
CONTAMINANTS

method	limit/base	current	history 1	history 2
Silicon ppm ASTM D5185(m)	>20	7	16	22
Sodium ppm ASTM D5185(m)		<1	3	3
Potassium ppm ASTM D5185(m)	>20	<1	<1	1

VISUAL

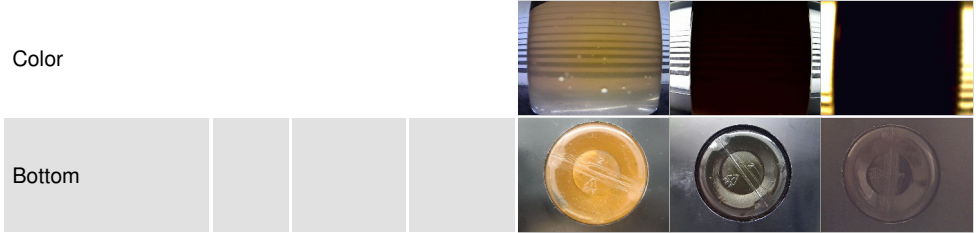
method	limit/base	current	history 1	history 2
White Metal scalar Visual*	NONE	NONE	NONE	NONE
Yellow Metal scalar Visual*	NONE	NONE	NONE	NONE
Precipitate scalar Visual*	NONE	NONE	NONE	NONE
Silt scalar Visual*	NONE	NONE	NONE	NONE
Debris scalar Visual*	NONE	NONE	NONE	NONE
Sand/Dirt scalar Visual*	NONE	NONE	NONE	NONE
Appearance scalar Visual*	NORML	NORML	NORML	NORML
Odor scalar Visual*	NORML	NORML	NORML	NORML
Emulsified Water scalar Visual*	>0.1	NEG	NEG	NEG
Free Water scalar Visual*		NEG	NEG	NEG

OIL ANALYSIS REPORT

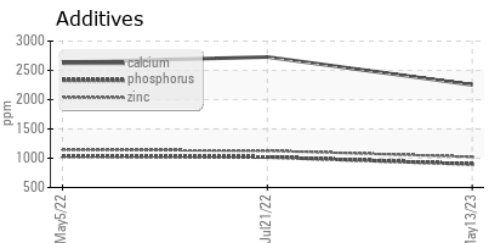
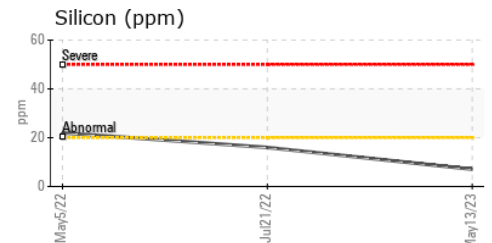
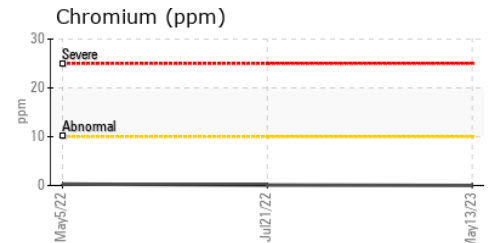
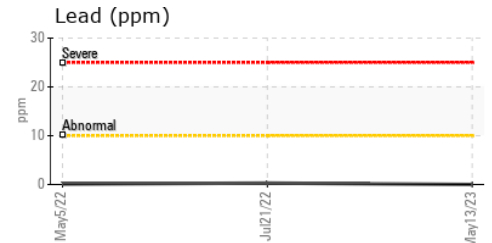
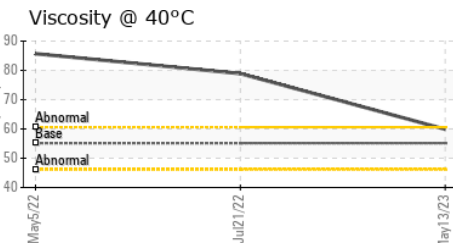
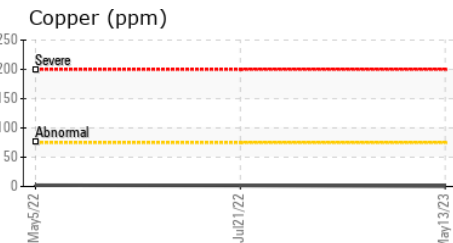
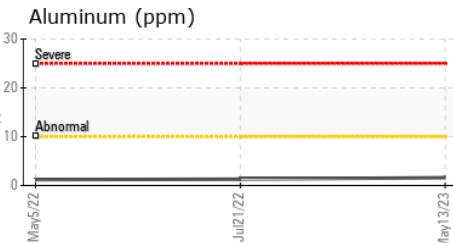
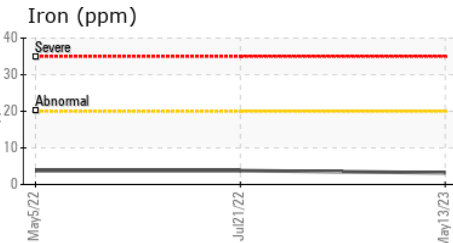


FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D7279(m)	55.14	59.9	▲ 78.9	▲ 85.7
Visc @ 100°C	cSt	ASTM D7279(m)	9.38	9.7	10.2	10.6
Viscosity Index (VI)	Scale	ASTM D2270*	153	145	111	107

SAMPLE IMAGES		method	limit/base	current	history 1	history 2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0051408 **Received** : 04 Jul 2023
Lab Number : 02567819 **Diagnosed** : 04 Jul 2023
Unique Number : 5604865 **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.