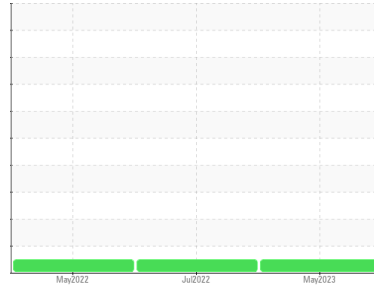


OIL ANALYSIS REPORT



Area
Haul Truck
Machine Id
HT4501
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (64 LTR)

Sample Rating Trend



NORMAL

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
Light fuel dilution occurring. No other contaminants were detected in the oil.

Fluid Condition
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	PC0051409	PC0048834	PC0050661
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	NORMAL	NORMAL

CONTAMINATION method limit/base current history 1 history 2

Glycol	WC Method	NEG	0.0	NEG
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WEAR METALS method limit/base current history 1 history 2

Iron	ppm	ASTM D5185(m)	>100	31	23	15
Chromium	ppm	ASTM D5185(m)	>20	1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	0	<1
Titanium	ppm	ASTM D5185(m)	>2	<1	<1	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	4	4	2
Lead	ppm	ASTM D5185(m)	>40	5	18	6
Copper	ppm	ASTM D5185(m)	>330	17	477	6
Tin	ppm	ASTM D5185(m)	>15	1	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)	0	4	3	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	51	66	64
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	812	1104	1099
Calcium	ppm	ASTM D5185(m)	1070	1531	1289	1171
Phosphorus	ppm	ASTM D5185(m)	1150	1127	1178	1163
Zinc	ppm	ASTM D5185(m)	1270	1259	1351	1336
Sulfur	ppm	ASTM D5185(m)	2060	2574	2606	2687
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS method limit/base current history 1 history 2

Silicon	ppm	ASTM D5185(m)	>25	11	9	8
Sodium	ppm	ASTM D5185(m)		5	5	2
Potassium	ppm	ASTM D5185(m)	>20	<1	1	<1
Fuel	%	ASTM D7593*	>5	1.2	<1.0	<1.0

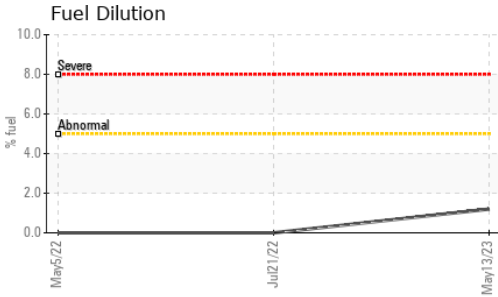
INFRA-RED method limit/base current history 1 history 2

Soot %	%	ASTM D7844*	>3	0.2	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	9.4	11.7	9.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.1	24.9	23.8

FLUID DEGRADATION method limit/base current history 1 history 2

Oxidation	Abs/.1mm	ASTM D7414*	>25	17.9	22.6	18.7
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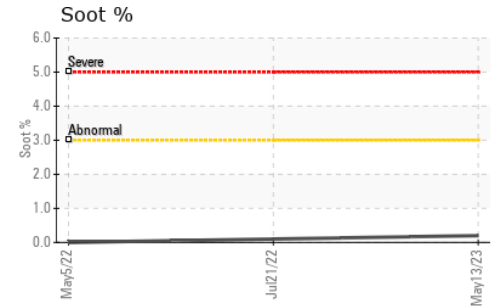
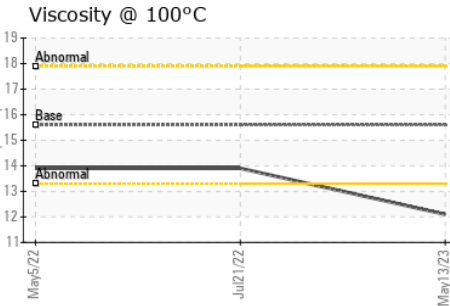
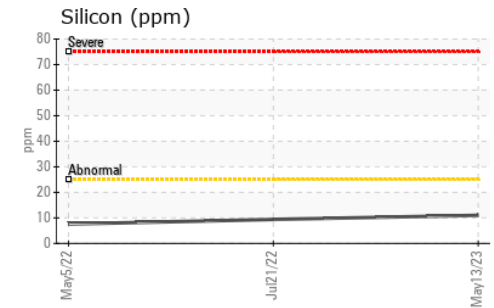
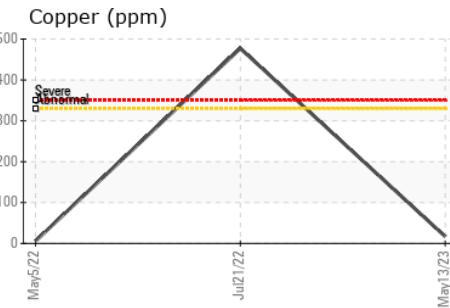
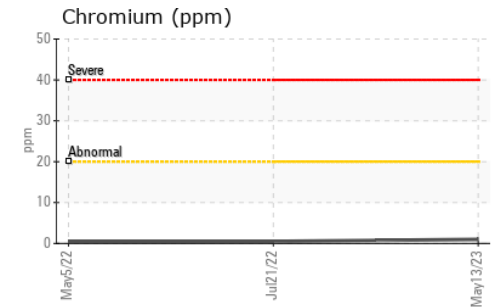
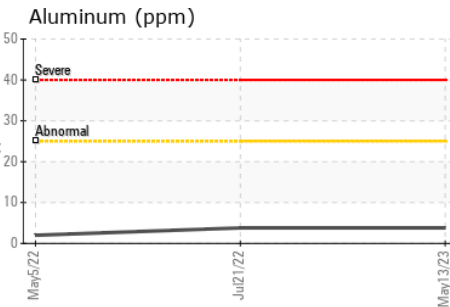
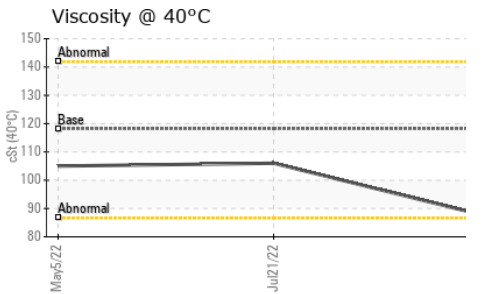
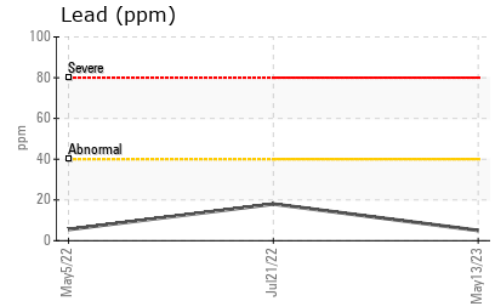
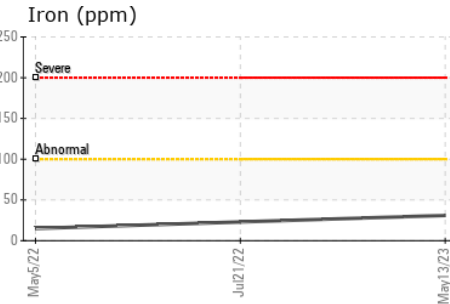
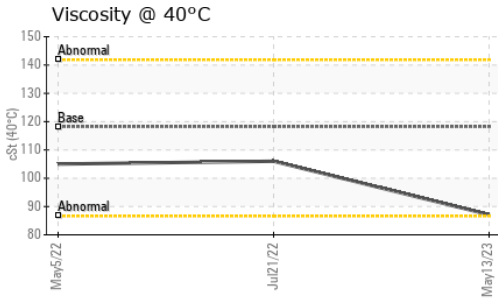
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	87.1	106
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	12.1	13.9
Viscosity Index (VI)	Scale	ASTM D2270*	139	132	131

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0051409 **Received** : 04 Jul 2023
Lab Number : **02567705** **Diagnosed** : 05 Jul 2023
Unique Number : 5604751 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, 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.