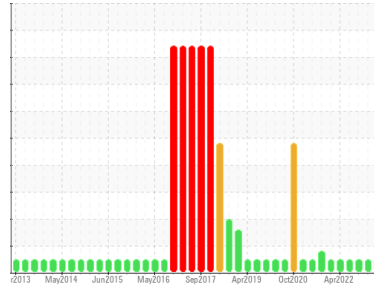


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
FREIGHTLINER 2212
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (40 LTR)

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

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PC	PC0059754	PC0059744
Sample Date	Client Info		08 Feb 2023	26 Nov 2022	14 Sep 2022
Machine Age	hrs	Client Info	14503	2242	1980
Oil Age	hrs	Client Info	274	282	301
Oil Changed	Client Info		N/A	N/A	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	7	6	5
Chromium	ppm	ASTM D5185(m) >20	<1	<1	<1
Nickel	ppm	ASTM D5185(m) >50	<1	<1	<1
Titanium	ppm	ASTM D5185(m) >2	<1	0	0
Silver	ppm	ASTM D5185(m) >2	0	0	0
Aluminum	ppm	ASTM D5185(m) >50	12	8	2
Lead	ppm	ASTM D5185(m) >40	<1	0	0
Copper	ppm	ASTM D5185(m) >330	<1	<1	<1
Tin	ppm	ASTM D5185(m) >15	<1	0	0
Antimony	ppm	ASTM D5185(m)	0	<1	<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	history1	history2
Boron	ppm	ASTM D5185(m) 0	2	1	1
Barium	ppm	ASTM D5185(m) 0	0	0	0
Molybdenum	ppm	ASTM D5185(m) 60	60	58	57
Manganese	ppm	ASTM D5185(m) 0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	955	942	935
Calcium	ppm	ASTM D5185(m) 1070	1079	1067	1056
Phosphorus	ppm	ASTM D5185(m) 1150	1072	1048	1039
Zinc	ppm	ASTM D5185(m) 1270	1145	1148	1137
Sulfur	ppm	ASTM D5185(m) 2060	2671	2675	2651
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	5	4	2
Sodium	ppm	ASTM D5185(m)	4	4	2
Potassium	ppm	ASTM D5185(m) >20	9	5	<1
Glycol	%	ASTM D7922*	0.0	0.0	NEG

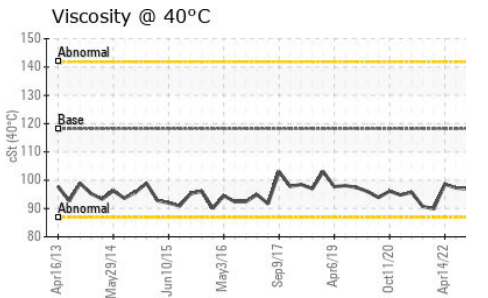
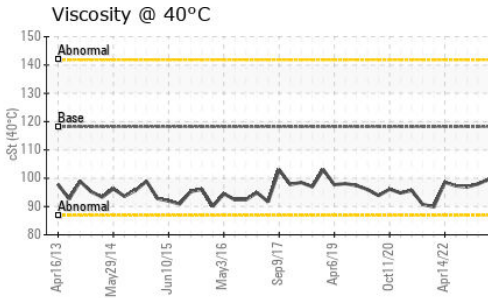
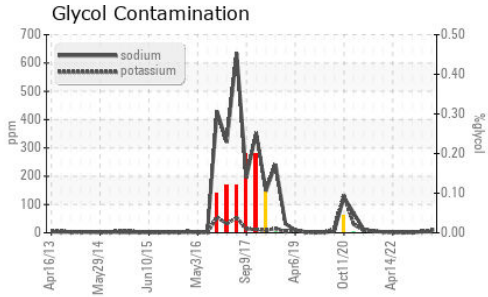
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0.1	0	0
Nitration	Abs/cm	ASTM D7624* >20	5.5	5.7	5.8
Sulfation	Abs/.1mm	ASTM D7415* >30	18.3	19.8	19.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	13.7	14.5	14.7

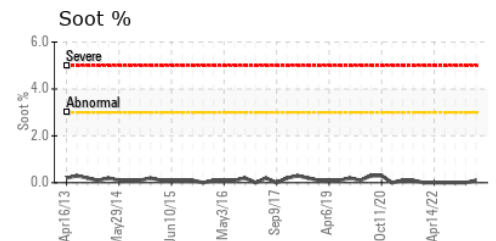
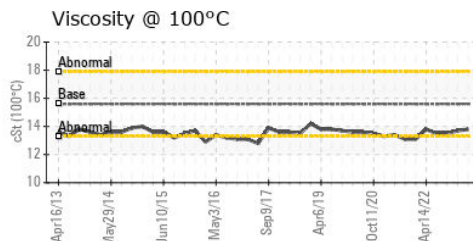
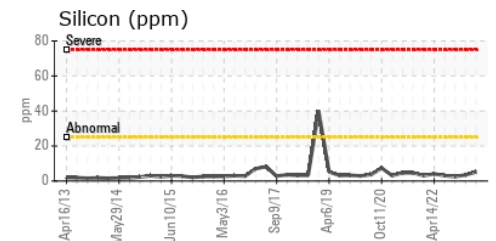
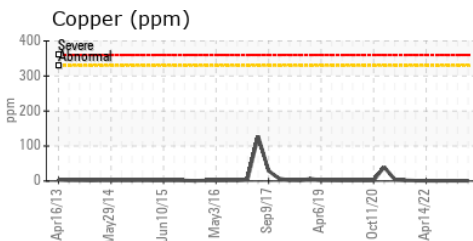
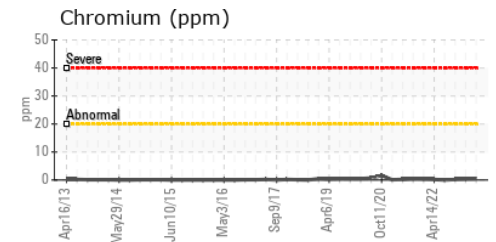
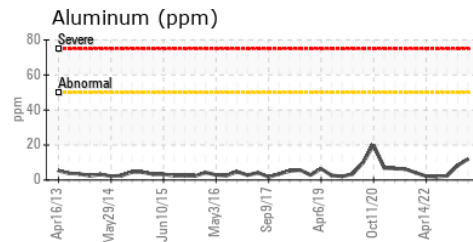
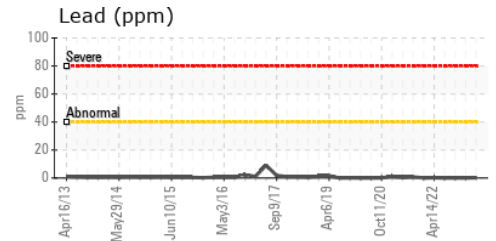
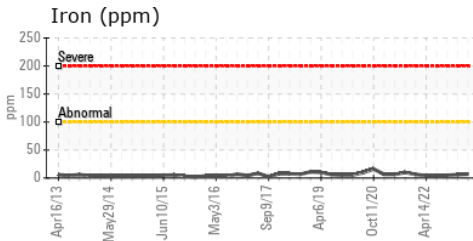
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	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)	118.2	99.6	98.0
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	13.8	13.7
Viscosity Index (VI)	Scale	ASTM D2270*	139	139	140

GRAPHS



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC
Lab Number : 02563108
Unique Number : 5592149
Test Package : MOB 1 (Additional Tests: Glycol, KV40, VI, Visual)

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 PORT COQUITLAM, BC
 CA V3C 3K6
 Contact: Phil Clark
 shop@valleywesttransport.com
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 F: (604)464-7192

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.