



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area

[808963]

Machine Id

FERRARA P112

Component

Front Diesel Engine

Fluid

PETRO CANADA 15W40 (40 LTR)

## RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0812444	WC0418666	WC110620
Sample Date		Client Info		22 Dec 2023	02 Nov 2020	15 Nov 2018
Machine Age	kms	Client Info		101196	56359	2
Oil Age	kms	Client Info		0	0	1
Filter Age	kms	Client Info		0	0	1
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				SEVERE	ABNORMAL	NORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>75	58	57	64
Chromium	ppm	ASTM D5185(m)	>5	2	2	2
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>15	8	4	5
Lead	ppm	ASTM D5185(m)	>25	0	1	2
Copper	ppm	ASTM D5185(m)	>100	5	23	36
Tin	ppm	ASTM D5185(m)	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

## CONTAMINATION

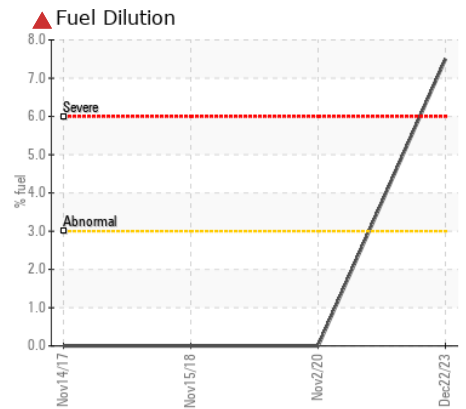
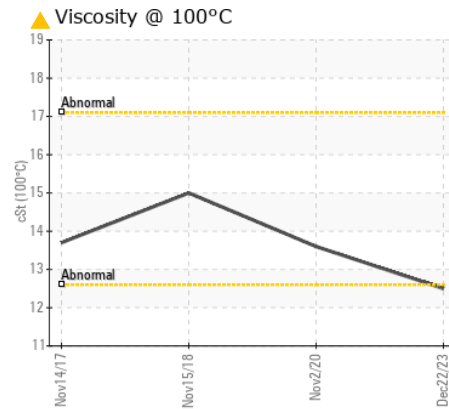
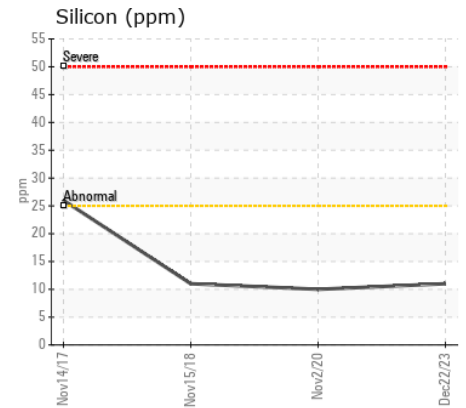
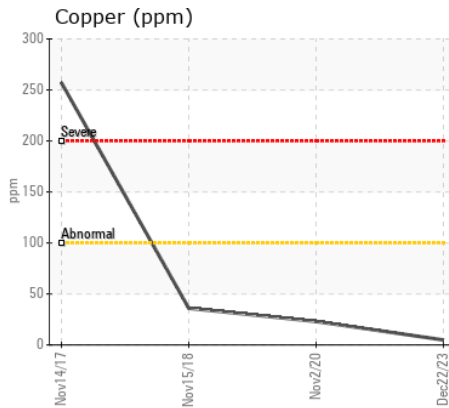
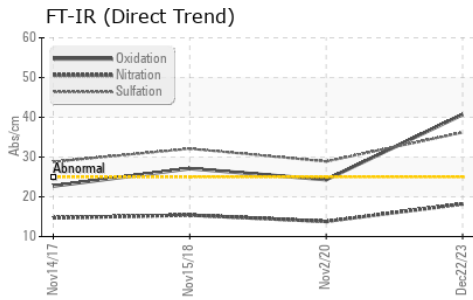
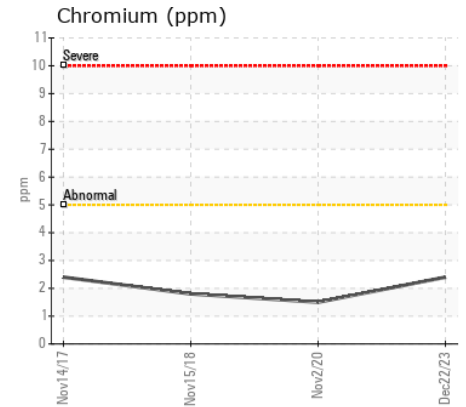
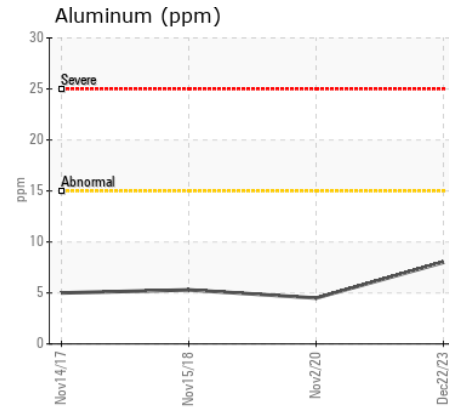
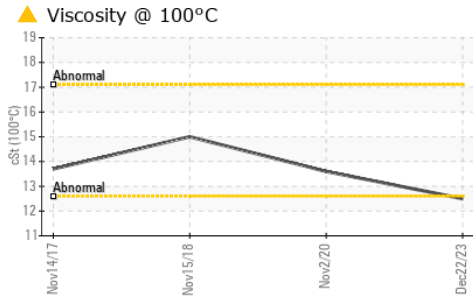
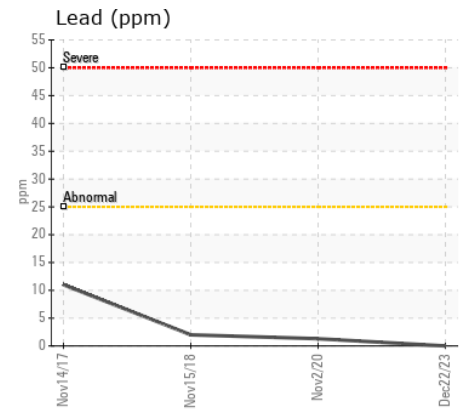
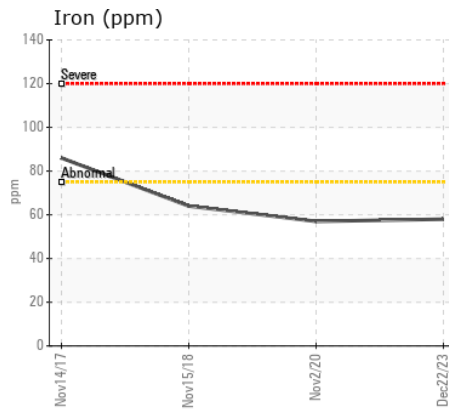
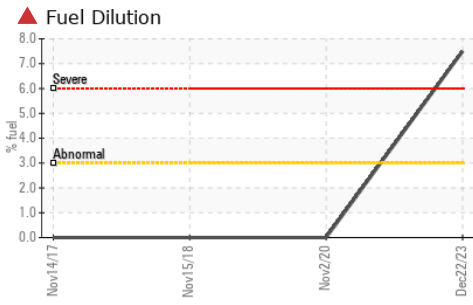
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	11	10	11
Potassium	ppm	ASTM D5185(m)	>20	<1	▲ 29	<1
Fuel	%	ASTM D7593*	>3.0	▲ 7.5	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	▲ 0.012	NEG
Soot %	%	ASTM D7844*	>6	2.1	1.1	1.5
Nitration	Abs/cm	ASTM D7624*	>20	18.2	13.8	15.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	36.2	28.9	32.1
Silt	scalar	Visual*	NONE	VLITE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

## FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		4	● 247	4
Boron	ppm	ASTM D5185(m)		1	9	<1
Barium	ppm	ASTM D5185(m)		<1	0	<1
Molybdenum	ppm	ASTM D5185(m)		55	53	12
Manganese	ppm	ASTM D5185(m)		1	5	2
Magnesium	ppm	ASTM D5185(m)		871	499	206
Calcium	ppm	ASTM D5185(m)		973	1446	2160
Phosphorus	ppm	ASTM D5185(m)		852	895	1004
Zinc	ppm	ASTM D5185(m)		1042	1179	1253
Sulfur	ppm	ASTM D5185(m)		2236	2766	3183
Oxidation	Abs/.1mm	ASTM D7414*	>25	40.7	24.3	27.1
Visc @ 100°C	cSt	ASTM D7279(m)		▲ 12.5	13.6	15.0



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0812444 **Received** : 10 Jun 2024  
**Lab Number** : 02640624 **Tested** : 11 Jun 2024  
**Unique Number** : 5789786 **Diagnosed** : 11 Jun 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel, Visual )

**CITY OF MISSISSAUGA FIRE DEPT**  
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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.