



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[809875]

Machine Id

SPARTAN P102

Component

Front Diesel Engine

Fluid

PETRO CANADA 15W40 (27 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0812447	WC0618748	WC0618732
Sample Date		Client Info		01 Feb 2024	07 Dec 2022	03 Nov 2021
Machine Age	kms	Client Info		128101	115272	101560
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>75	38	7	28
Chromium	ppm	ASTM D5185(m)	>5	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<1	0	<1
Aluminum	ppm	ASTM D5185(m)	>15	2	1	4
Lead	ppm	ASTM D5185(m)	>25	0	0	2
Copper	ppm	ASTM D5185(m)	>100	4	1	40
Tin	ppm	ASTM D5185(m)	>4	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

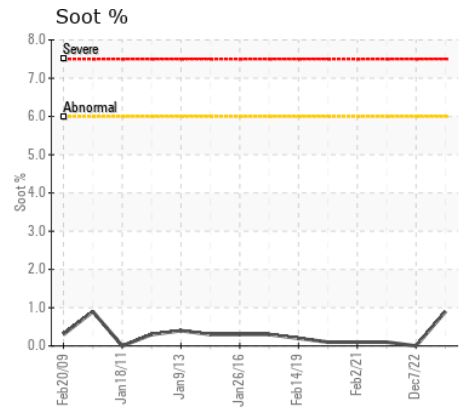
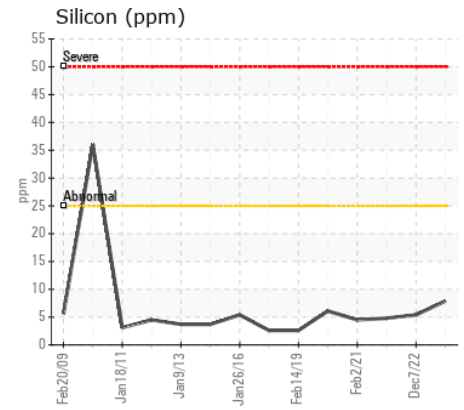
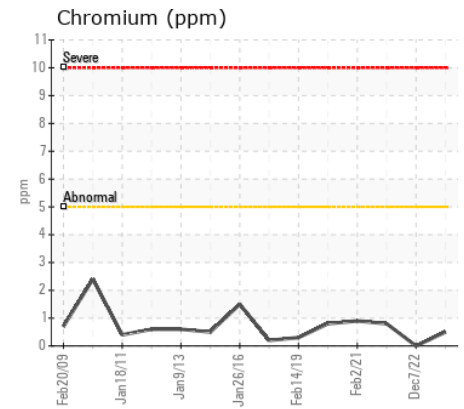
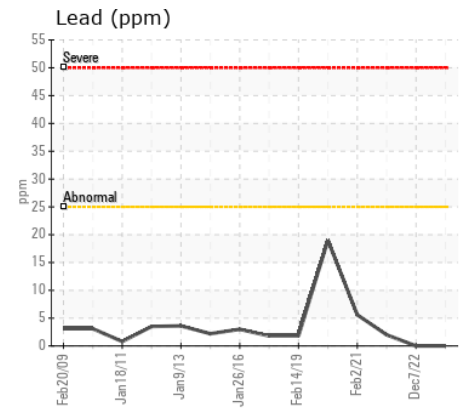
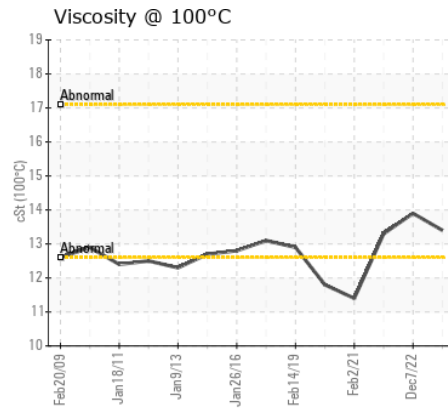
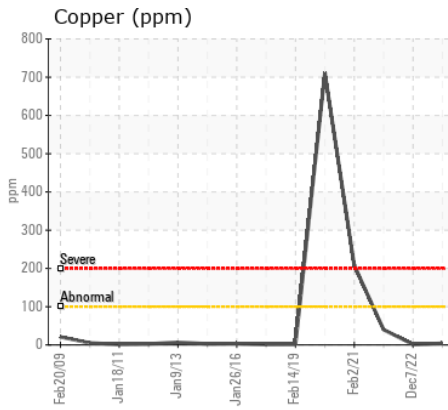
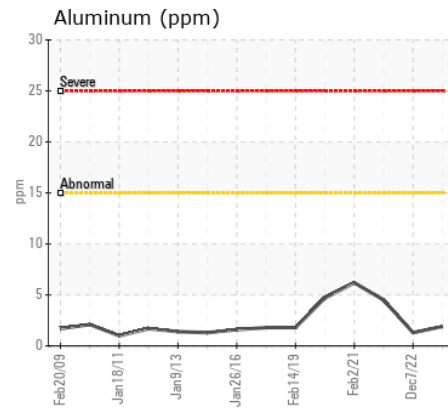
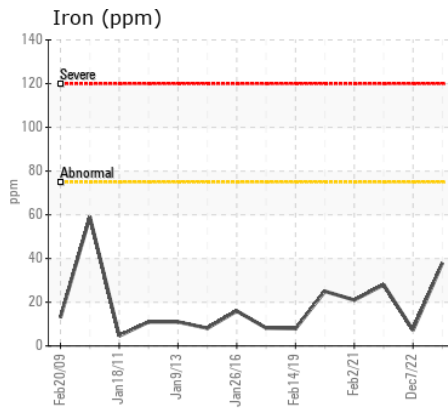
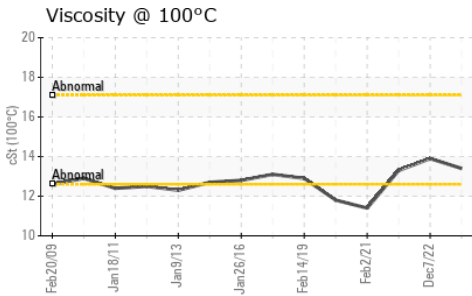
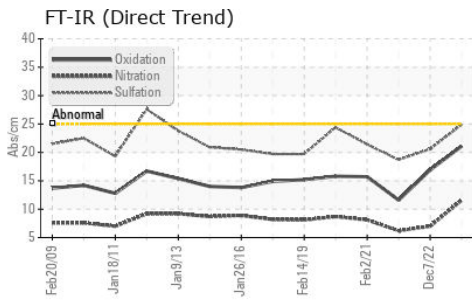
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	8	5	5
Potassium	ppm	ASTM D5185(m)	>20	2	2	2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	0.9	0	0.1
Nitration	Abs/cm	ASTM D7624*	>20	11.6	7.0	6.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.9	20.6	18.7
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	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		3	8	3
Boron	ppm	ASTM D5185(m)		<1	38	2
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		61	41	55
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		961	761	494
Calcium	ppm	ASTM D5185(m)		1052	1124	1630
Phosphorus	ppm	ASTM D5185(m)		925	753	1009
Zinc	ppm	ASTM D5185(m)		1153	808	1169
Sulfur	ppm	ASTM D5185(m)		2432	1964	2696
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.1	16.9	11.6
Visc @ 100°C	cSt	ASTM D7279(m)		13.4	13.9	13.3



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : WC0812447

Lab Number : 02640646

Unique Number : 5789808

Test Package : MOB 1 (Additional Tests: Visual)

Received : 10 Jun 2024

Tested : 10 Jun 2024

Diagnosed : 10 Jun 2024 - Kevin Marson

CITY OF MISSISSAUGA FIRE DEPT

7535 NINTH LINE

MISSISSAUGA, ON

CA L5N 7C3

Contact: Nick Specic

nicolas.specic@mississauga.ca

T: (905)615-3753

F: (905)615-4523

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.