



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Area
[808293]
 Machine Id
S121
 Component
Diesel Engine
 Fluid
PETRO CANADA 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0812457	WC0418687	---
Sample Date		Client Info		11 Jan 2024	12 May 2020	---
Machine Age	kms	Client Info		79591	268406	---
Oil Age	kms	Client Info		0	0	---
Filter Age	kms	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>75	27	▲ 84	---
Chromium	ppm	ASTM D5185(m)	>5	<1	▲ 6	---
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	---
Titanium	ppm	ASTM D5185(m)	>2	0	<1	---
Silver	ppm	ASTM D5185(m)	>2	1	0	---
Aluminum	ppm	ASTM D5185(m)	>15	9	5	---
Lead	ppm	ASTM D5185(m)	>25	0	3	---
Copper	ppm	ASTM D5185(m)	>100	30	7	---
Tin	ppm	ASTM D5185(m)	>4	2	1	---
Vanadium	ppm	ASTM D5185(m)		0	<1	---

CONTAMINATION

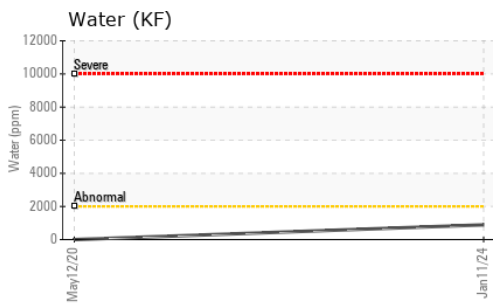
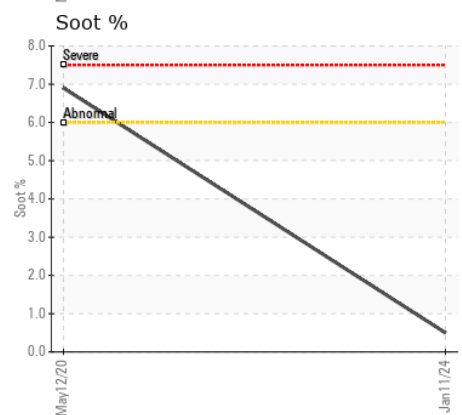
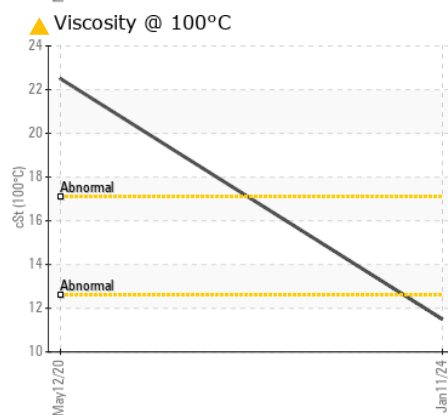
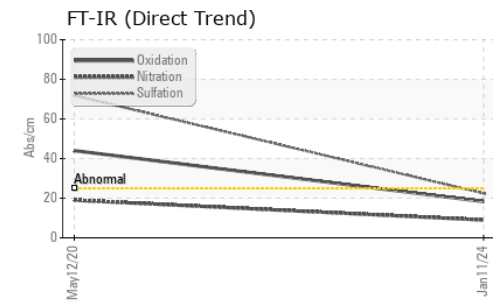
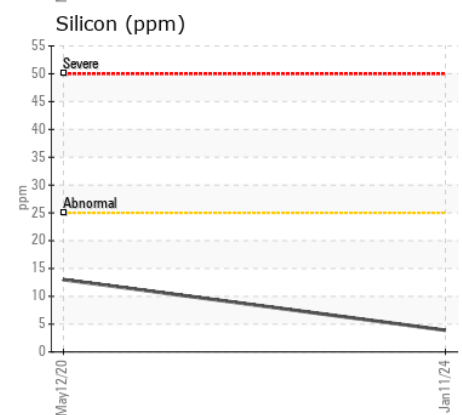
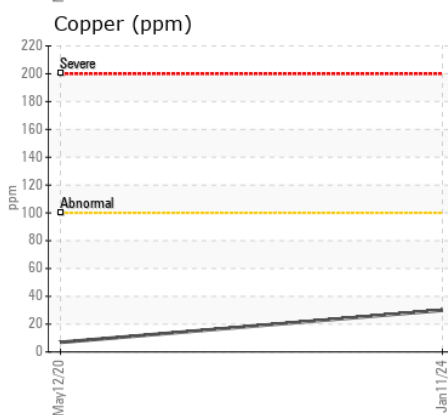
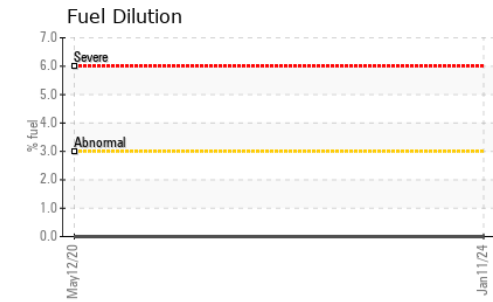
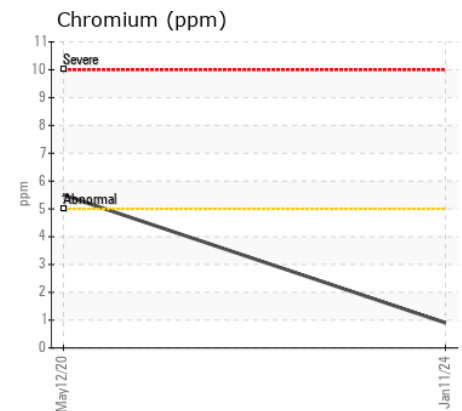
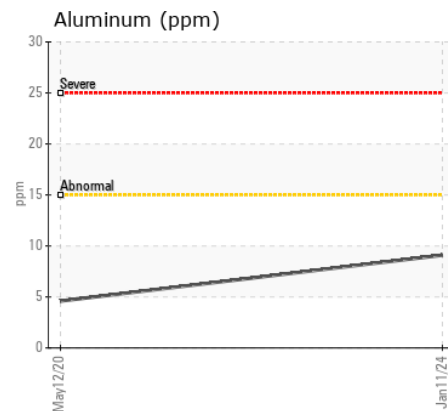
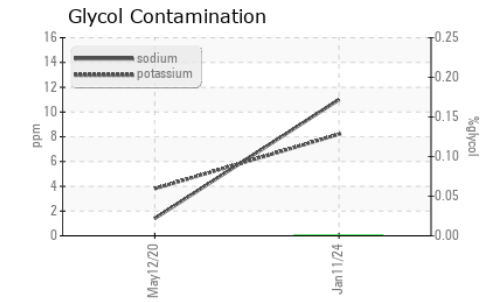
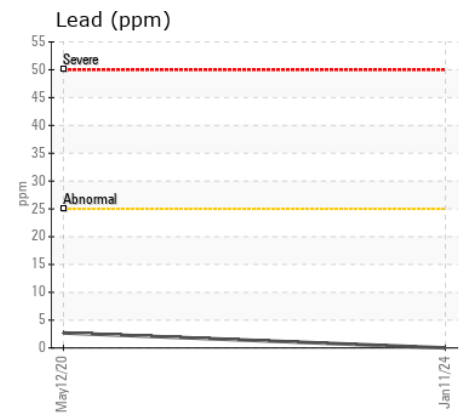
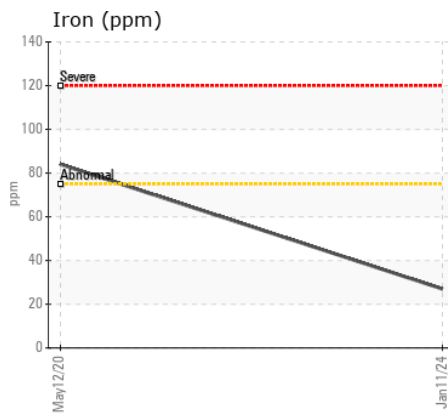
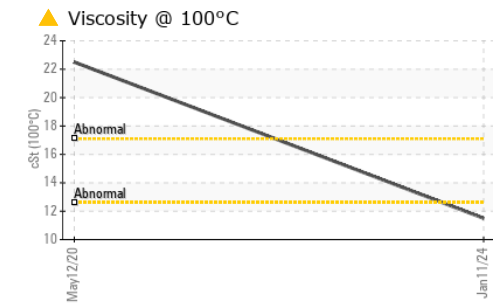
Tests indicate that there is no fuel present in the oil. The water content is negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	13	---
Potassium	ppm	ASTM D5185(m)	>20	8	4	---
Fuel	%	ASTM D7593*	>3.0	0.0	<1.0	---
Water	%	ASTM D6304*	>0.2	0.088	---	---
ppm Water	ppm	ASTM D6304*	>2000	890	---	---
Glycol	%	ASTM D7922*		0.0	NEG	---
Soot %	%	ASTM D7844*	>6	0.5	▲ 6.9	---
Nitration	Abs/cm	ASTM D7624*	>20	9.0	19.0	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.4	71.8	---
Emulsified Water	scalar	Visual*	>0.2	.2%	NEG	---

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		11	1	---
Boron	ppm	ASTM D5185(m)		2	1	---
Barium	ppm	ASTM D5185(m)		0	0	---
Molybdenum	ppm	ASTM D5185(m)		63	38	---
Manganese	ppm	ASTM D5185(m)		<1	2	---
Magnesium	ppm	ASTM D5185(m)		938	596	---
Calcium	ppm	ASTM D5185(m)		1210	1463	---
Phosphorus	ppm	ASTM D5185(m)		971	958	---
Zinc	ppm	ASTM D5185(m)		1235	1164	---
Sulfur	ppm	ASTM D5185(m)		2084	2670	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.3	44.0	---
Visc @ 100°C	cSt	ASTM D7279(m)		▲ 11.5	▲ 22.5	---



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0812457
Lab Number : 02640621
Unique Number : 5789783
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, KF, PercentFuel)

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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.*