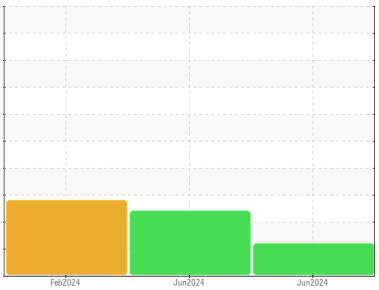
OIL ANALYSIS REPORT

Sample Rating Trend



FUEL

Machine Id
352133
Component
Gasoline Engine
Fluid
PETRO CANADA SUPREME SYNTHETIC 5W30 (--- GAL)

DIAGNOSIS

Recommendation
We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. (Customer Sample Comment: Resample as last reading was fuel in oil)

Wear
All component wear rates are normal.

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

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0061144**	GFL0061143	GFL0097577
Sample Date		Client Info		**12 Jun 2024**	09 Jun 2024	15 Feb 2024
Machine Age	kms	Client Info		**48328**	0	0
Oil Age	kms	Client Info		**738**	0	0
Oil Changed		Client Info		**Not Changd**	N/A	N/A
Sample Status				**ABNORMAL**	SEVERE	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>150	**2**	8	8
Chromium	ppm	ASTM D5185(m)	>20	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>5	**0**	0	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)	>2	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>40	**<1**	1	3
Lead	ppm	ASTM D5185(m)	>50	**0**	0	0
Copper	ppm	ASTM D5185(m)	>155	**<1**	1	2
Tin	ppm	ASTM D5185(m)	>10	**0**	0	0
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	history1	history2
Boron	ppm	ASTM D5185(m)	186	**154**	33	37
Barium	ppm	ASTM D5185(m)	<1	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	79	**66**	66	63
Manganese	ppm	ASTM D5185(m)	0	**0**	0	0
Magnesium	ppm	ASTM D5185(m)	578	**487**	482	465
Calcium	ppm	ASTM D5185(m)	1002	**1153**	1164	1134
Phosphorus	ppm	ASTM D5185(m)	745	**616**	598	628
Zinc	ppm	ASTM D5185(m)	837	**700**	681	686
Sulfur	ppm	ASTM D5185(m)	2502	**2242**	2242	2385
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>30	**12**	24	20
Sodium	ppm	ASTM D5185(m)	>400	**2**	4	5
Potassium	ppm	ASTM D5185(m)	>20	**0**	<1	<1
Fuel	%	ASTM D7593*	>4.0	▲ **5.3**	▲ 8.7	▲ 11.2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**6.6**	11.3	12.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	**16.1**	23.2	23.0

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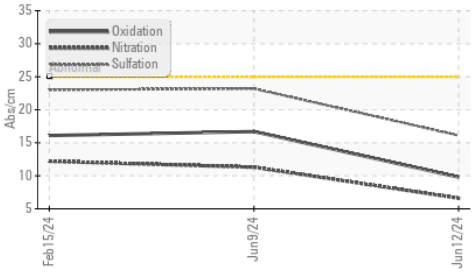
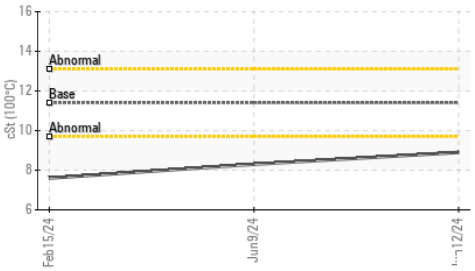
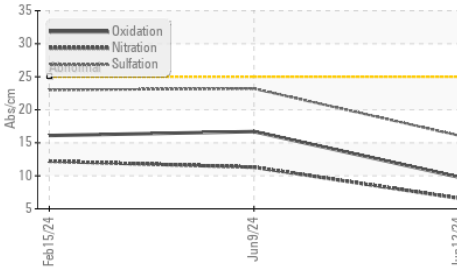
FT-IR (Direct Trend)



Viscosity @ 100°C



FT-IR (Direct Trend)



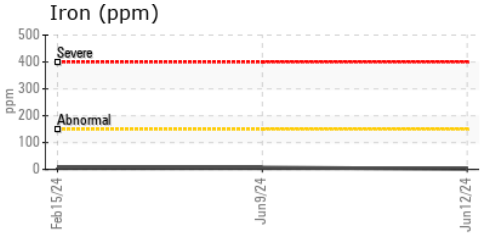
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**9.8**	16.7	16.1

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	---	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	---	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	---	NONE
Silt	scalar	Visual*	NONE	**NONE**	---	NONE
Debris	scalar	Visual*	NONE	**NONE**	---	NONE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	---	NONE
Appearance	scalar	Visual*	NORML	**NORML**	---	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

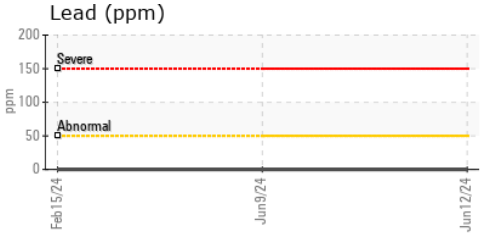
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	11.4	▲ **8.9**	▲ 8.3	▲ 7.6

GRAPHS

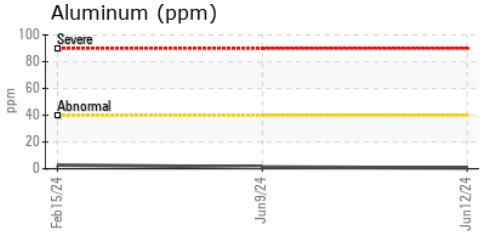
Iron (ppm)



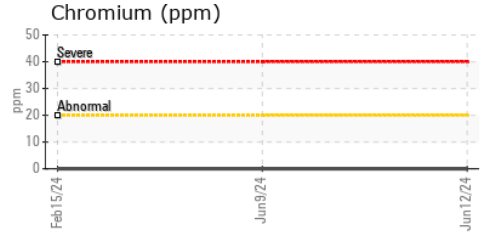
Lead (ppm)



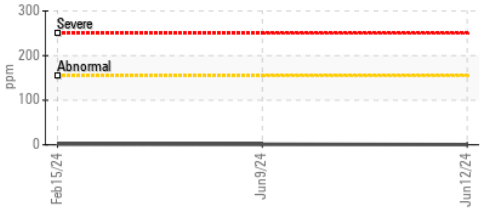
Aluminum (ppm)



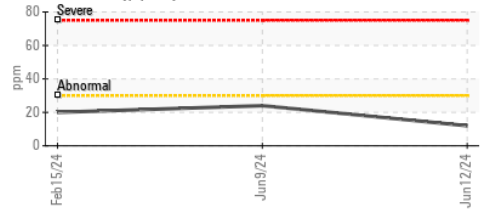
Chromium (ppm)



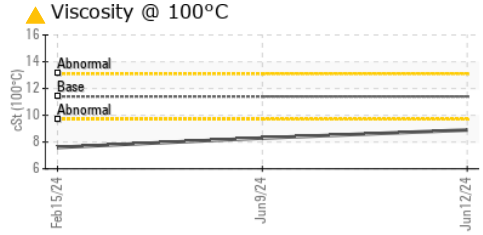
Copper (ppm)



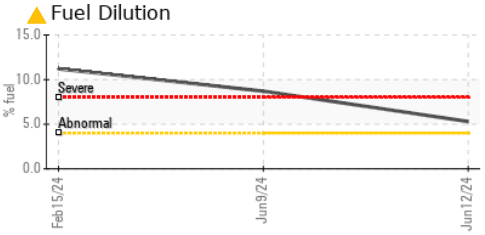
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0061144 **Received** : 13 Jun 2024
Lab Number : 02641654 **Tested** : 14 Jun 2024
Unique Number : 5799193 **Diagnosed** : 14 Jun 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: PercentFuel, Visual)

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.

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