



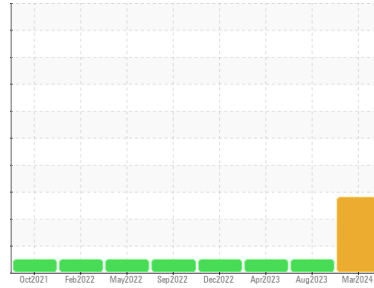
OIL ANALYSIS REPORT

Sample Rating Trend

FUEL



Machine Id
2325
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)



DIAGNOSIS

▲ 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.

Wear

All component wear rates are normal.

▲ Contamination

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

▲ Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. 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		GFL0028559	GFL0088996	GFL0077843
Sample Date	Client Info		06 Mar 2024	28 Aug 2023	15 Apr 2023
Machine Age	hrs	Client Info	22950	22448	22331
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	N/A	N/A
Sample Status			SEVERE	NORMAL	NORMAL

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) >100	17	4	8
Chromium	ppm	ASTM D5185(m) >20	1	<1	<1
Nickel	ppm	ASTM D5185(m) >2	<1	0	<1
Titanium	ppm	ASTM D5185(m) >2	0	0	<1
Silver	ppm	ASTM D5185(m) >2	0	0	0
Aluminum	ppm	ASTM D5185(m) >25	3	<1	2
Lead	ppm	ASTM D5185(m) >40	2	0	0
Copper	ppm	ASTM D5185(m) >330	2	<1	<1
Tin	ppm	ASTM D5185(m) >15	<1	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) 0	<1	5	4
Barium	ppm	ASTM D5185(m) 0	0	0	0
Molybdenum	ppm	ASTM D5185(m) 60	28	58	62
Manganese	ppm	ASTM D5185(m) 0	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	452	966	1015
Calcium	ppm	ASTM D5185(m) 1070	511	1022	1144
Phosphorus	ppm	ASTM D5185(m) 1150	489	1065	1149
Zinc	ppm	ASTM D5185(m) 1270	558	1182	1244
Sulfur	ppm	ASTM D5185(m) 2060	1278	2650	2777
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

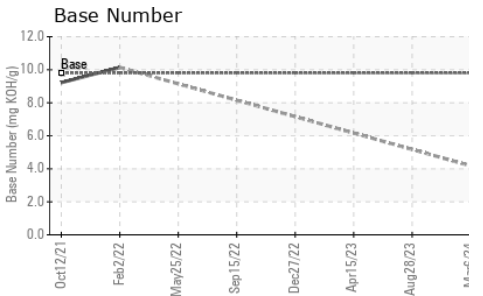
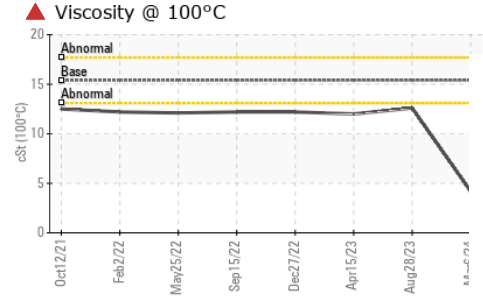
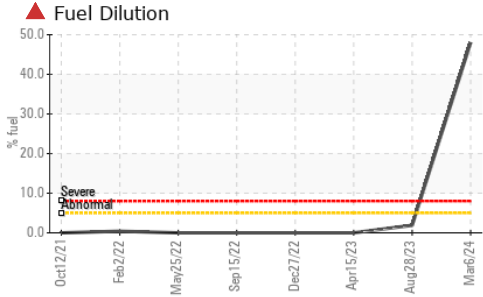
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	6	2	3
Sodium	ppm	ASTM D5185(m)	<1	1	2
Potassium	ppm	ASTM D5185(m) >20	1	0	0
Fuel	%	ASTM D7593* >5	▲ 48	1.9	<1.0

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0.1	0	0
Nitration	Abs/cm	ASTM D7624* >20	8.2	5.8	7.1
Sulfation	Abs./1mm	ASTM D7415* >30	16.9	19.8	19.2



OIL ANALYSIS REPORT

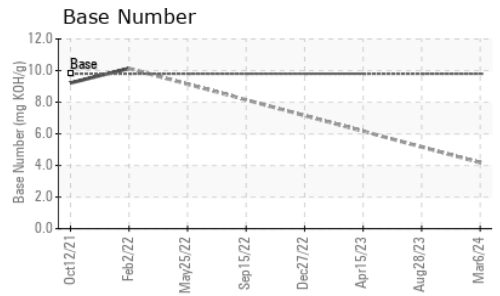
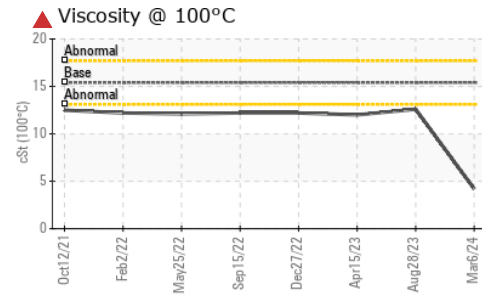
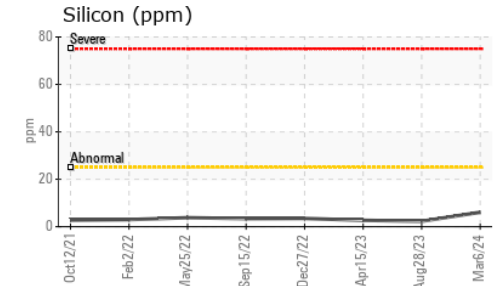
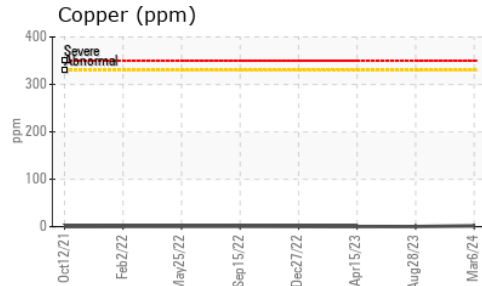
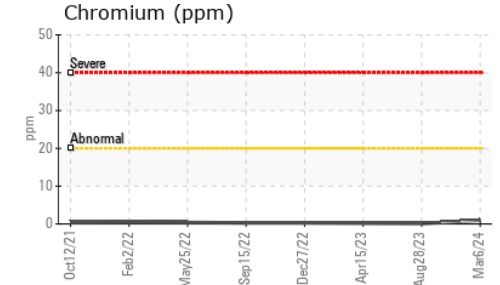
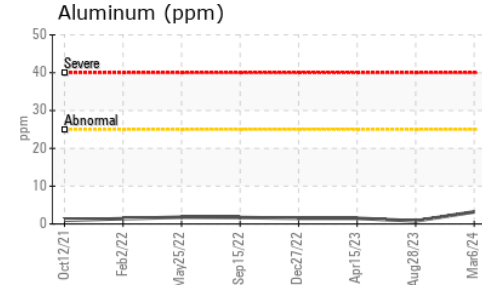
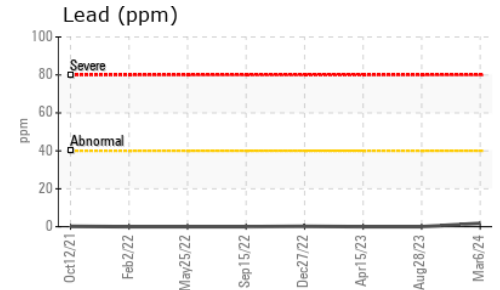
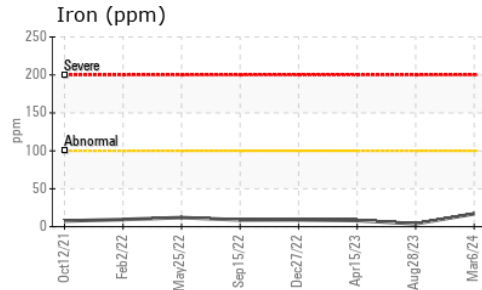


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.7	14.5	15.4
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	4.18	---	---

VISUAL		method	limit/base	current	history1	history2
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)	15.4	▲ 4.2	12.6	12.0

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0028559 **Received** : 07 Mar 2024
Lab Number : **02620430** **Tested** : 08 Mar 2024
Unique Number : 5737540 **Diagnosed** : 08 Mar 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: FuelDilution, 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.