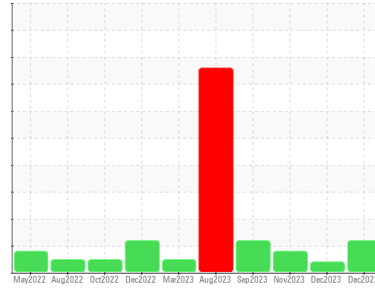




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
811057

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Light fuel dilution occurring.

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 condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0099596	GFL0099584	GFL0099576
Sample Date	Client Info	18 Dec 2023	06 Dec 2023	30 Nov 2023
Machine Age	hrs	731	66308	65621
Oil Age	hrs	111	0	0
Oil Changed	Client Info	N/A	Not Changd	Changed
Sample Status		ABNORMAL	ABNORMAL	MARGINAL

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	14	8	37
Chromium	ppm ASTM D5185(m) >20	<1	<1	2
Nickel	ppm ASTM D5185(m) >2	<1	<1	<1
Titanium	ppm ASTM D5185(m) >2	0	0	0
Silver	ppm ASTM D5185(m) >2	<1	<1	<1
Aluminum	ppm ASTM D5185(m) >25	3	2	2
Lead	ppm ASTM D5185(m) >40	0	0	<1
Copper	ppm ASTM D5185(m) >330	1	<1	2
Tin	ppm ASTM D5185(m) >15	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) 0	2	2	2
Barium	ppm ASTM D5185(m) 0	0	<1	<1
Molybdenum	ppm ASTM D5185(m) 60	58	59	55
Manganese	ppm ASTM D5185(m) 0	0	0	<1
Magnesium	ppm ASTM D5185(m) 1010	943	950	870
Calcium	ppm ASTM D5185(m) 1070	1031	1012	955
Phosphorus	ppm ASTM D5185(m) 1150	998	984	897
Zinc	ppm ASTM D5185(m) 1270	1149	1168	1103
Sulfur	ppm ASTM D5185(m) 2060	2648	2570	2259
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

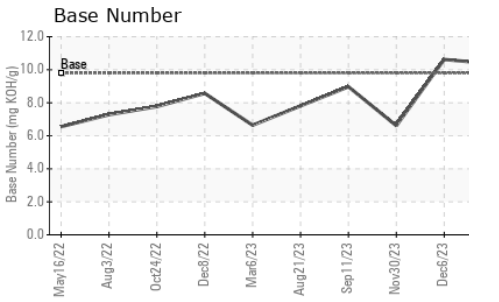
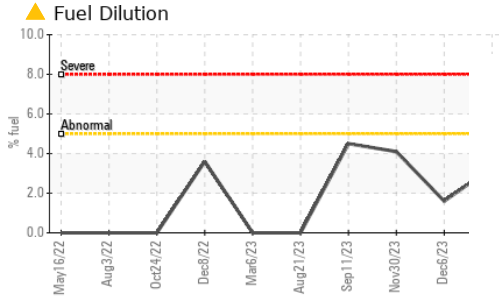
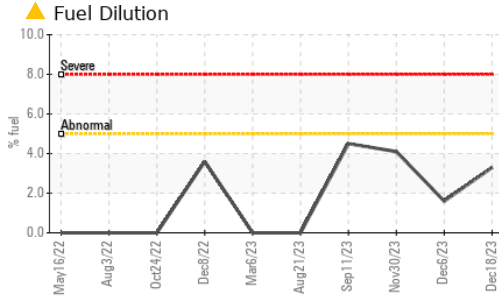
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	4	3	5
Sodium	ppm ASTM D5185(m)	1	1	2
Potassium	ppm ASTM D5185(m) >20	2	0	0
Fuel	% ASTM D7593* >5	▲ 3.3	1.6	▲ 4.1

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	0.1	0	0.4
Nitration	Abs/cm ASTM D7624* >20	6.5	5.5	10.1
Sulfation	Abs/.1mm ASTM D7415* >30	19.0	18.5	21.8



OIL ANALYSIS REPORT

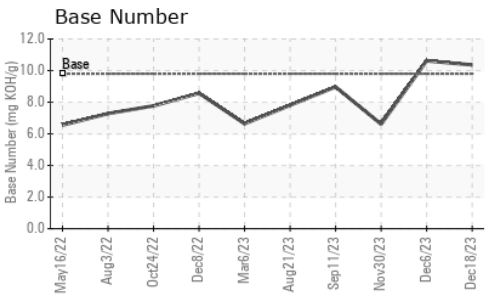
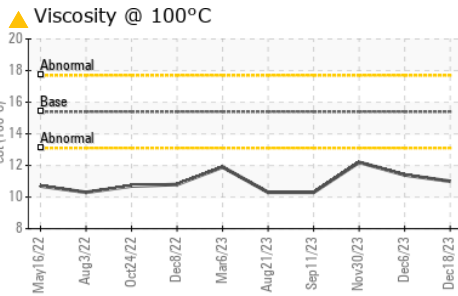
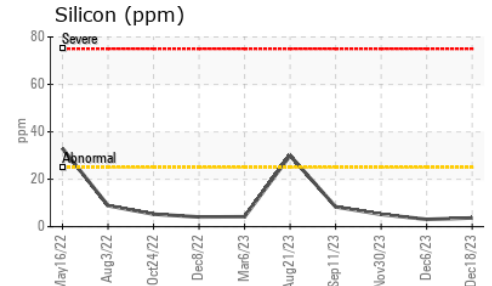
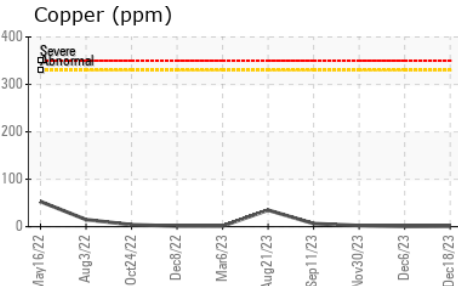
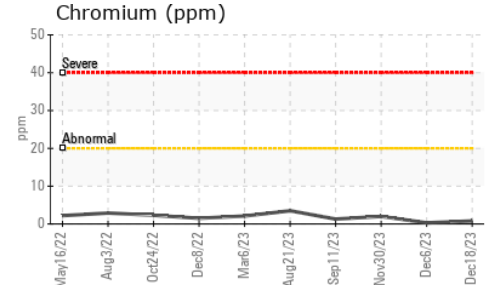
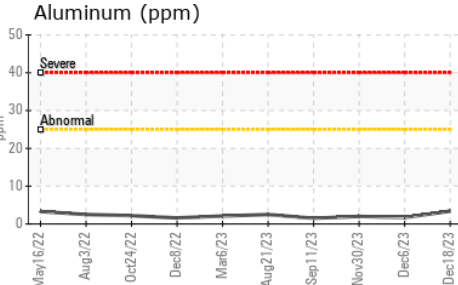
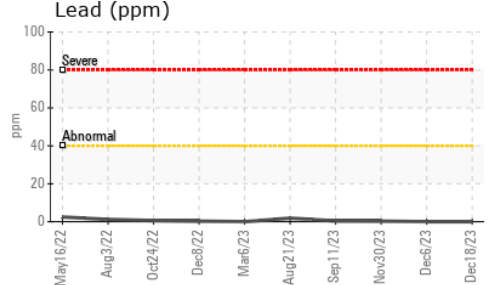
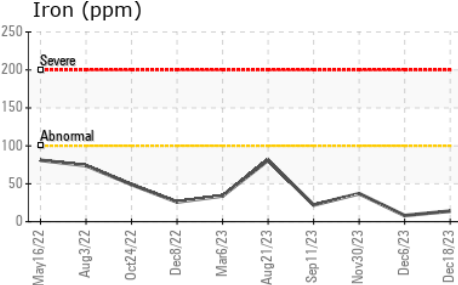


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.4	14.6	20.7
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	10.36	10.62	6.61

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	▲ 11.0	▲ 11.4	12.2

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County
Sample No. : GFL0099596 **Received** : 02 Jan 2024
Lab Number : **02605730** **Diagnosed** : 04 Jan 2024
Unique Number : 5698815 **Diagnostician** : Wes Davis
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)
 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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