



OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area
508 North bay
 Machine Id
22047
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)



DIAGNOSIS

▲ Recommendation

We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

▲ Wear

Iron ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated.

▲ Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0088352	---	---
Sample Date	Client Info	13 Mar 2024	---	---
Machine Age	hrs Client Info	10137	---	---
Oil Age	hrs Client Info	500	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184* >65	8	---	---
Iron	ppm ASTM D5185(m) >80	▲ 113	---	---
Chromium	ppm ASTM D5185(m) >5	3	---	---
Nickel	ppm ASTM D5185(m) >2	1	---	---
Titanium	ppm ASTM D5185(m)	0	---	---
Silver	ppm ASTM D5185(m) >3	0	---	---
Aluminum	ppm ASTM D5185(m) >30	20	---	---
Lead	ppm ASTM D5185(m) >30	<1	---	---
Copper	ppm ASTM D5185(m) >150	2	---	---
Tin	ppm ASTM D5185(m) >5	0	---	---
Antimony	ppm ASTM D5185(m)	0	---	---
Vanadium	ppm ASTM D5185(m)	0	---	---
Beryllium	ppm ASTM D5185(m)	0	---	---
Cadmium	ppm ASTM D5185(m)	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	17	---	---
Barium	ppm ASTM D5185(m) 0	0	---	---
Molybdenum	ppm ASTM D5185(m) 60	35	---	---
Manganese	ppm ASTM D5185(m) 0	<1	---	---
Magnesium	ppm ASTM D5185(m) 1010	465	---	---
Calcium	ppm ASTM D5185(m) 1070	1689	---	---
Phosphorus	ppm ASTM D5185(m) 1150	846	---	---
Zinc	ppm ASTM D5185(m) 1270	1008	---	---
Sulfur	ppm ASTM D5185(m) 2060	2553	---	---
Lithium	ppm ASTM D5185(m)	<1	---	---

CONTAMINANTS

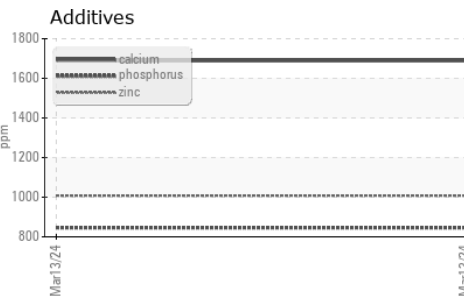
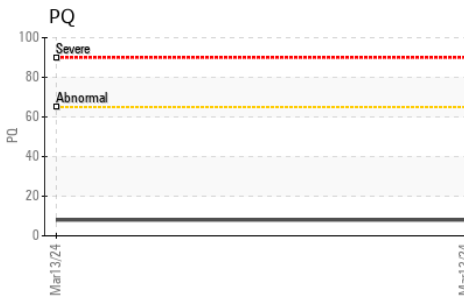
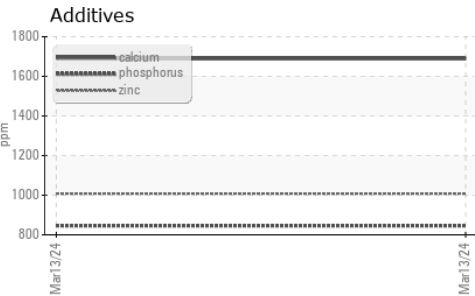
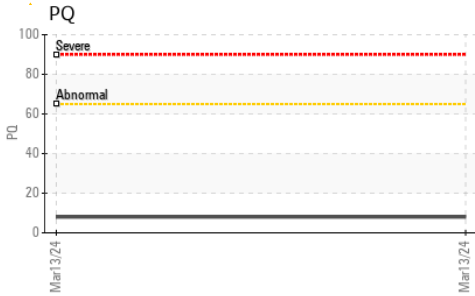
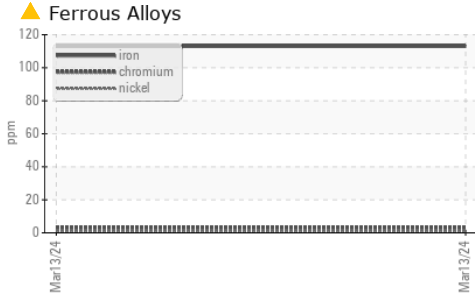
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >20	9	---	---
Sodium	ppm ASTM D5185(m)	4	---	---
Potassium	ppm ASTM D5185(m) >20	5	---	---
Fuel	% ASTM D7593* >5	▲ 2.1	---	---

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	0.7	---	---
Nitration	Abs/cm ASTM D7624* >20	12.5	---	---
Sulfation	Abs./1mm ASTM D7415* >30	24.0	---	---



OIL ANALYSIS REPORT

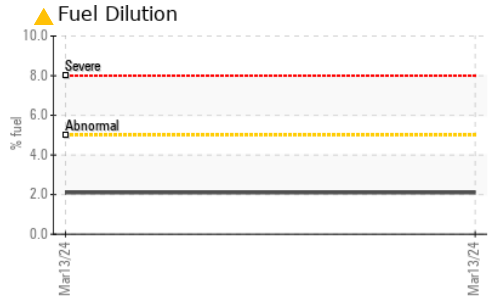
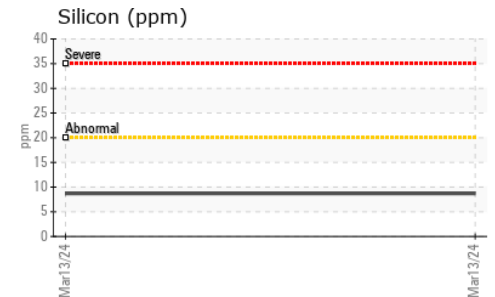
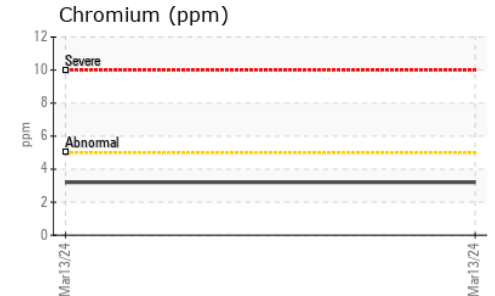
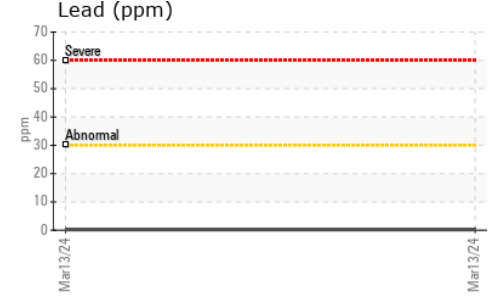
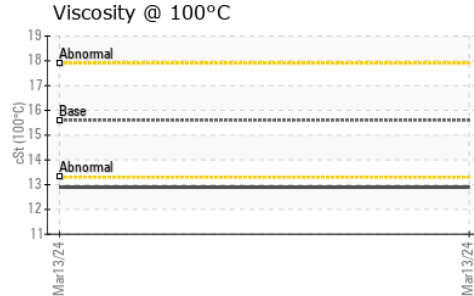
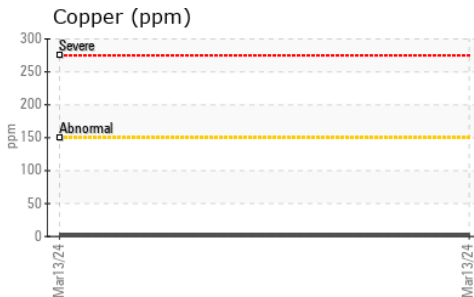
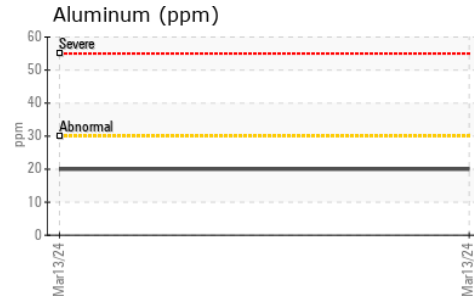
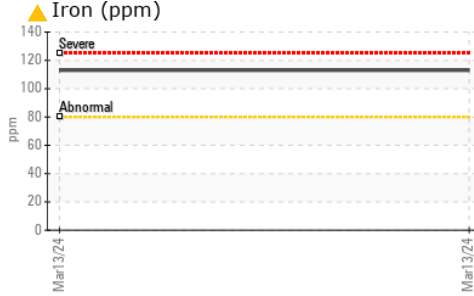


FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	22.0	---

VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	12.9	---

GRAPHS



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
 Sample No. : GFL0088352 Received : 18 Mar 2024
 Lab Number : 02622583 Tested : 19 Mar 2024
 Unique Number : 5747702 Diagnosed : 19 Mar 2024 - Kevin Marson
 Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, PQ)

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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