



OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area
(C0852977)
Machine Id
934032
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Piston, ring and cylinder wear is indicated. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0103425	---	---
Sample Date	Client Info		05 Mar 2024	---	---
Machine Age	hrs	Client Info	1130	---	---
Oil Age	hrs	Client Info	1130	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	▲ 63	---	---
Chromium	ppm	ASTM D5185m >4	1	---	---
Nickel	ppm	ASTM D5185m >2	1	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m >3	0	---	---
Aluminum	ppm	ASTM D5185m >9	▲ 15	---	---
Lead	ppm	ASTM D5185m >30	2	---	---
Copper	ppm	ASTM D5185m >35	15	---	---
Tin	ppm	ASTM D5185m >4	2	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	7	---	---
Barium	ppm	ASTM D5185m 0	2	---	---
Molybdenum	ppm	ASTM D5185m 60	67	---	---
Manganese	ppm	ASTM D5185m 0	8	---	---
Magnesium	ppm	ASTM D5185m 1010	850	---	---
Calcium	ppm	ASTM D5185m 1070	1114	---	---
Phosphorus	ppm	ASTM D5185m 1150	800	---	---
Zinc	ppm	ASTM D5185m 1270	1021	---	---
Sulfur	ppm	ASTM D5185m 2060	2110	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	20	---	---
Sodium	ppm	ASTM D5185m	4	---	---
Potassium	ppm	ASTM D5185m >20	31	---	---

INFRA-RED

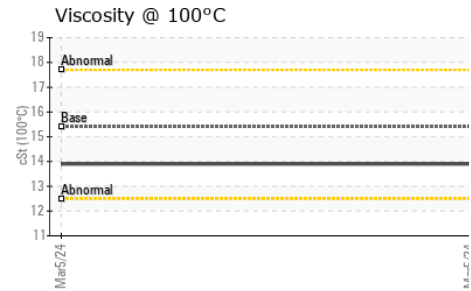
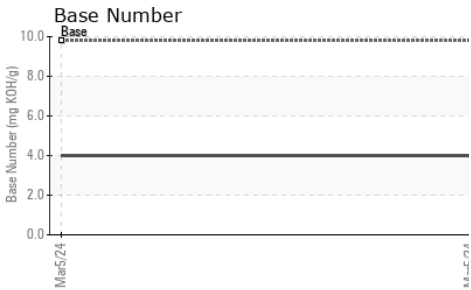
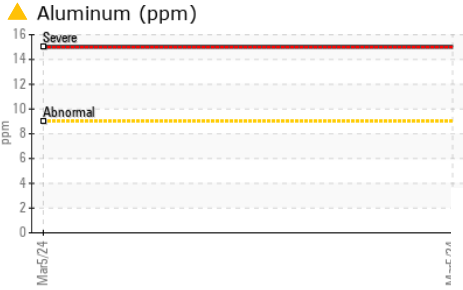
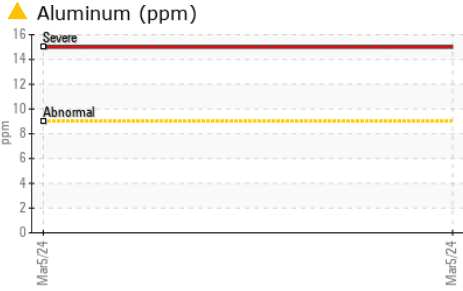
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	---	---
Nitration	Abs/cm	*ASTM D7624 >20	12.5	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	24.5	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	22.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	4.0	---	---



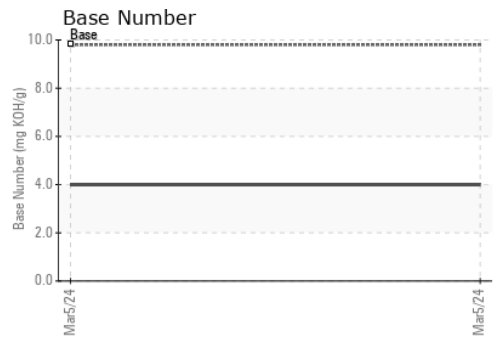
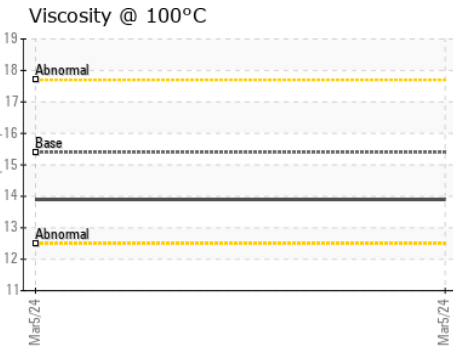
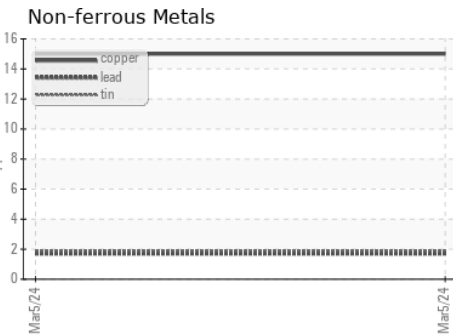
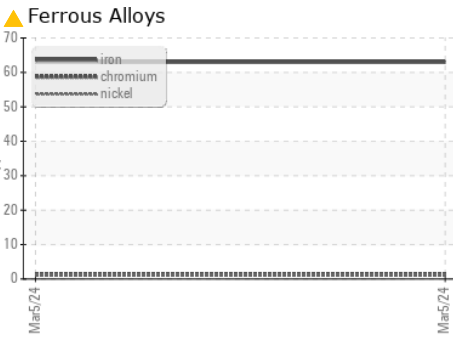
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	13.9	---	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0103425
 Lab Number : 06112067
 Unique Number : 10915564
 Test Package : FLEET

Received : 07 Mar 2024
 Tested : 08 Mar 2024
 Diagnosed : 10 Mar 2024 - Don Baldrige

GFL Environmental - 095 - Atlanta West
 2699 Cochran Industrial Blvd
 Douglasville, GA
 US 30127-1332
 Contact: Darrell Welch
 darrell.welch@gflenv.com
 T: (800)207-6618
 F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)