



OIL ANALYSIS REPORT

Sample Rating Trend

GLYCOL



Area
[GFL865]
 Machine Id
2024 Peterbilt 520
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)



DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: Engine oil sample)

Wear

Metal levels are typical for a new component breaking in.

Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

Fluid Condition

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0103933	---	---
Sample Date	Client Info	18 Jan 2024	---	---
Machine Age	hrs Client Info	594	---	---
Oil Age	hrs Client Info	594	---	---
Oil Changed	Client Info	Changed	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	---	---
Water	WC Method >0.2	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >110	42	---	---
Chromium	ppm ASTM D5185m >4	2	---	---
Nickel	ppm ASTM D5185m >2	1	---	---
Titanium	ppm ASTM D5185m	0	---	---
Silver	ppm ASTM D5185m >2	0	---	---
Aluminum	ppm ASTM D5185m >25	58	---	---
Lead	ppm ASTM D5185m >45	2	---	---
Copper	ppm ASTM D5185m >85	16	---	---
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 50	9	---	---
Barium	ppm ASTM D5185m 5	15	---	---
Molybdenum	ppm ASTM D5185m 50	49	---	---
Manganese	ppm ASTM D5185m 0	12	---	---
Magnesium	ppm ASTM D5185m 560	874	---	---
Calcium	ppm ASTM D5185m 1510	1427	---	---
Phosphorus	ppm ASTM D5185m 780	797	---	---
Zinc	ppm ASTM D5185m 870	892	---	---
Sulfur	ppm ASTM D5185m 2040	2410	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >30	31	---	---
Sodium	ppm ASTM D5185m	4	---	---
Potassium	ppm ASTM D5185m >20	▲ 239	---	---
Glycol	% *ASTM D2982	NEG	---	---

INFRA-RED

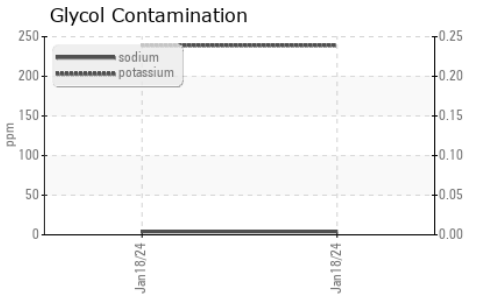
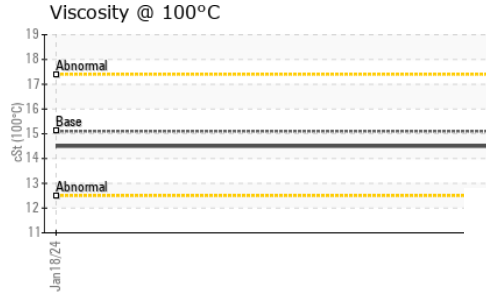
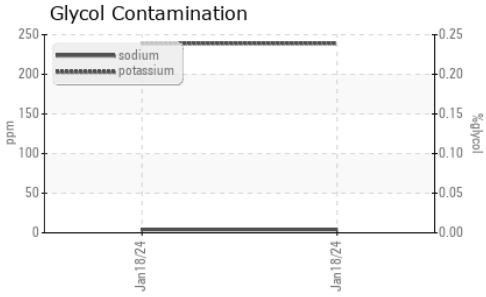
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0	---	---
Nitration	Abs/cm *ASTM D7624 >20	11.5	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	22.9	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	20.5	---	---
Base Number (BN)	mg KOH/g ASTM D2896 10.2	4.1	---	---



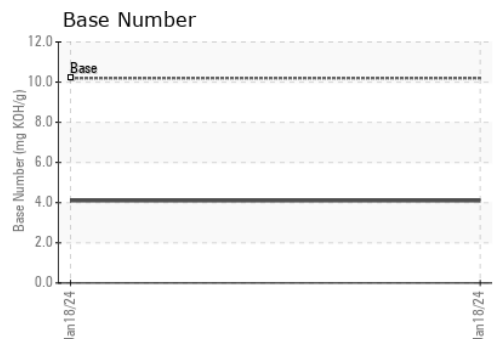
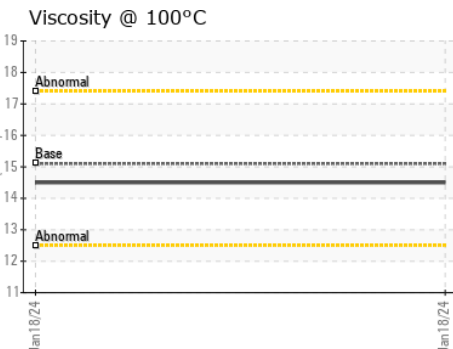
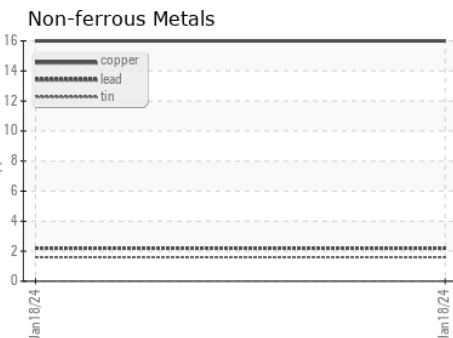
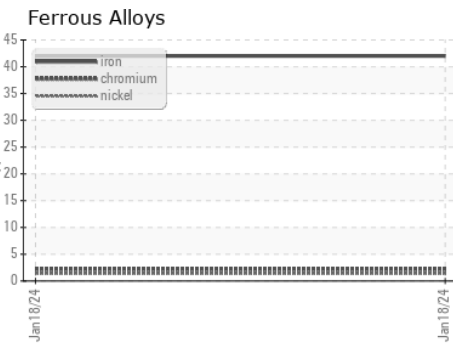
OIL ANALYSIS REPORT



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	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.5	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0103933 **Received** : 25 Jan 2024
Lab Number : 06070351 **Diagnosed** : 29 Jan 2024
Unique Number : 10847028 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 865 - East Mount Hauling
 7213 East Mount Houston Road
 Houston, TX
 US 77050
 Contact: Saul Castillo
 saul.castillo@gflenv.com
 T:
 F:

Certificate L2367
 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)