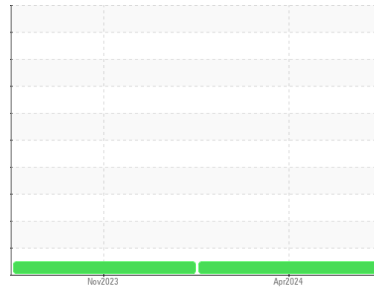




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
825073 PETERBILT 320
 Component
Diesel Engine
 Fluid
TIER ONE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected 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			GFL0102228	GFL0102212	---
Sample Date	Client Info			03 Apr 2024	27 Nov 2023	---
Machine Age	hrs	Client Info		20985	20416	---
Oil Age	hrs	Client Info		13	600	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>110	13	5	---
Chromium	ppm	ASTM D5185m	>4	<1	0	---
Nickel	ppm	ASTM D5185m	>2	0	0	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>25	<1	<1	---
Lead	ppm	ASTM D5185m	>45	0	<1	---
Copper	ppm	ASTM D5185m	>85	0	<1	---
Tin	ppm	ASTM D5185m	>4	0	0	---
Vanadium	ppm	ASTM D5185m		0	<1	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		13	8	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		51	51	---
Manganese	ppm	ASTM D5185m		0	0	---
Magnesium	ppm	ASTM D5185m		822	868	---
Calcium	ppm	ASTM D5185m		1076	1071	---
Phosphorus	ppm	ASTM D5185m		979	1007	---
Zinc	ppm	ASTM D5185m		1115	1207	---
Sulfur	ppm	ASTM D5185m		3559	2914	---

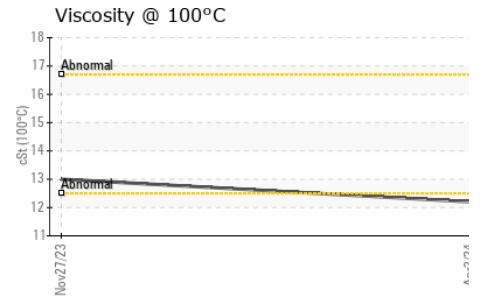
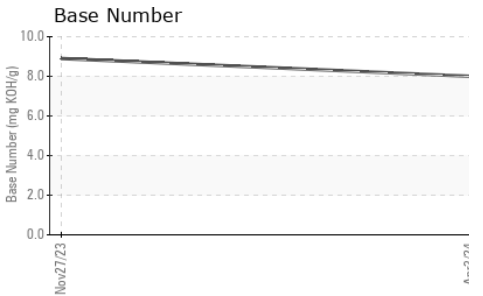
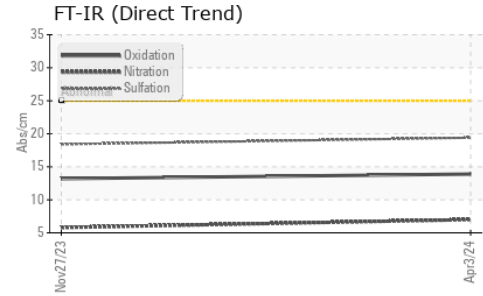
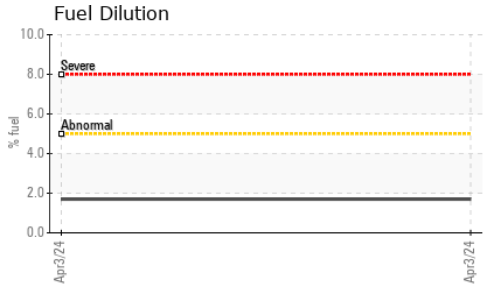
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	3	2	---
Sodium	ppm	ASTM D5185m		1	2	---
Potassium	ppm	ASTM D5185m	>20	0	0	---
Fuel	%	ASTM D3524	>5	1.7	<1.0	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.8	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	7.0	5.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	18.4	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.9	13.2	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.0	8.9	---



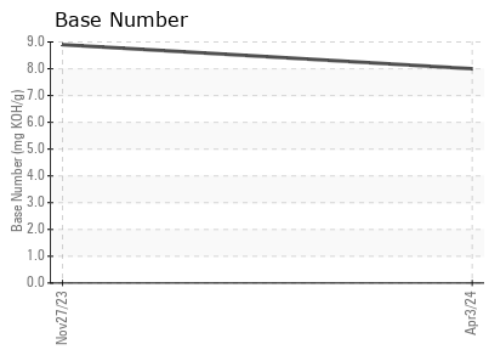
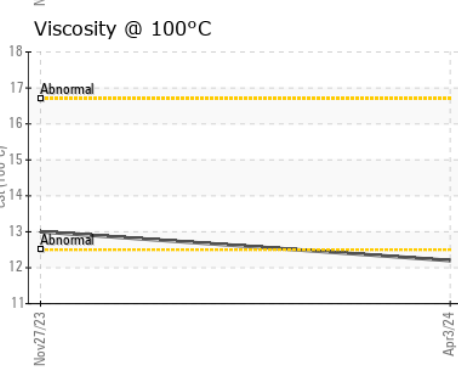
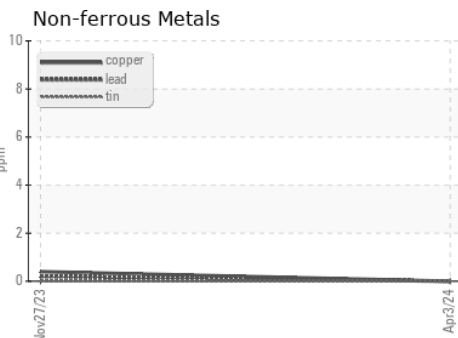
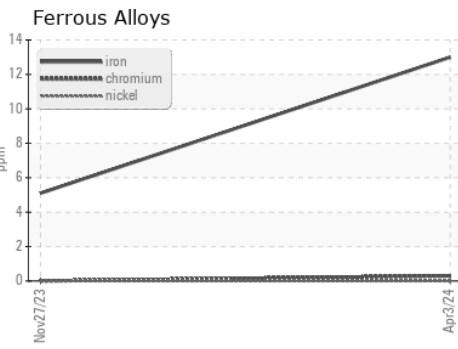
OIL ANALYSIS REPORT



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	12.2	13.0	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0102228 **Received** : 08 Apr 2024
Lab Number : 06141934 **Tested** : 11 Apr 2024
Unique Number : 10966742 **Diagnosed** : 11 Apr 2024 - Wes Davis
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 642- Grand Rapids Hauling
 5826 Alden Nash Ave SE
 Lowell, MI 49331
 Contact: Josh Arnett
 joshuaarnett@gflenv.com

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)