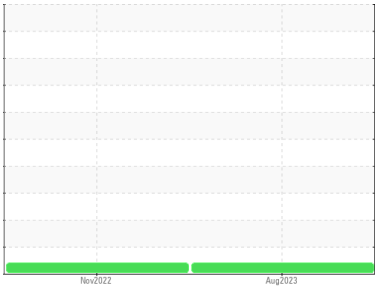
PROBLEM SUMMARY

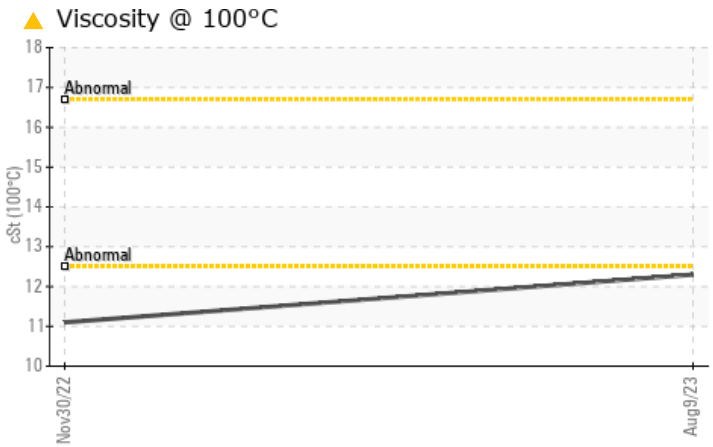
Sample Rating Trend



VISCOSITY

Machine Id
911051 PETERBILT 320
Component
1 Diesel Engine
Fluid
TIER ONE 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

PROBLEMATIC TEST RESULTS

Sample Status				**ATTENTION**	ATTENTION	---
Visc @ 100°C	cSt	ASTM D445		▲ **12.3**	▲ 11.1	---

Customer Id: GFL642
Sample No.: GFL0061454
Lab Number: 05924075
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Sean Felton +1 919-379-4092
sfelton@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

30 Nov 2022 Diag: Don Baldridge

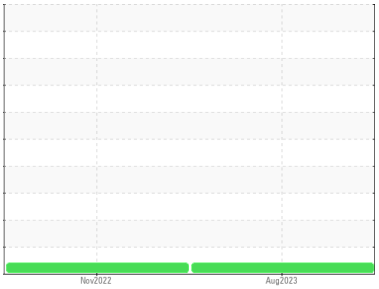
VISCOSITY

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. Fuel content negligible. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY

Machine Id
911051 PETERBILT 320
Component
1 Diesel Engine
Fluid
TIER ONE 15W40 (--- GAL)

DIAGNOSIS

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0061454**	GFL0061452	---
Sample Date		Client Info		**09 Aug 2023**	30 Nov 2022	---
Machine Age	hrs	Client Info		**2490**	737	---
Oil Age	hrs	Client Info		**94**	711	---
Oil Changed		Client Info		**Not Changd**	Changed	---
Sample Status				**ATTENTION**	ATTENTION	---

CONTAMINATION	method	limit/base	current	history1	history2
Glycol	WC Method		**NEG**	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	**12**	49	---
Chromium	ppm	ASTM D5185m	>20	**<1**	4	---
Nickel	ppm	ASTM D5185m	>4	**0**	0	---
Titanium	ppm	ASTM D5185m		**<1**	<1	---
Silver	ppm	ASTM D5185m	>3	**0**	<1	---
Aluminum	ppm	ASTM D5185m	>20	**6**	24	---
Lead	ppm	ASTM D5185m	>40	**<1**	<1	---
Copper	ppm	ASTM D5185m	>330	**3**	83	---
Tin	ppm	ASTM D5185m	>15	**<1**	1	---
Vanadium	ppm	ASTM D5185m		**0**	<1	---
Cadmium	ppm	ASTM D5185m		**0**	0	---

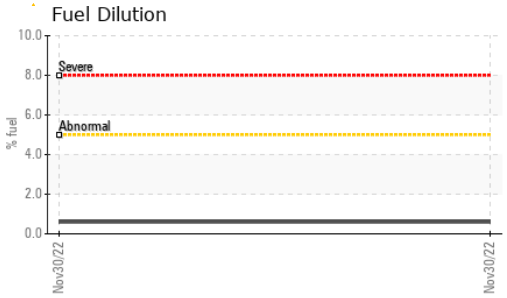
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**4**	39	---
Barium	ppm	ASTM D5185m		**0**	1	---
Molybdenum	ppm	ASTM D5185m		**59**	7	---
Manganese	ppm	ASTM D5185m		**<1**	2	---
Magnesium	ppm	ASTM D5185m		**985**	741	---
Calcium	ppm	ASTM D5185m		**1299**	1421	---
Phosphorus	ppm	ASTM D5185m		**1099**	747	---
Zinc	ppm	ASTM D5185m		**1405**	852	---
Sulfur	ppm	ASTM D5185m		**4114**	3429	---

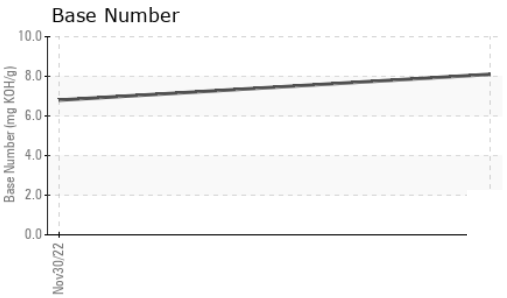
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**3**	13	---
Sodium	ppm	ASTM D5185m		**1**	5	---
Potassium	ppm	ASTM D5185m	>20	**10**	62	---
Fuel	%	ASTM D3524	>5	**<1.0**	0.6	---

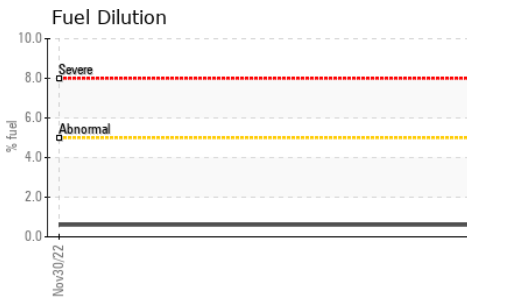
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.3**	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	**8.4**	10.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	**19.1**	22.6	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**15.0**	17.4	---
Base Number (BN)	mg KOH/g	ASTM D2896		**8.1**	6.8	---

OIL ANALYSIS REPORT



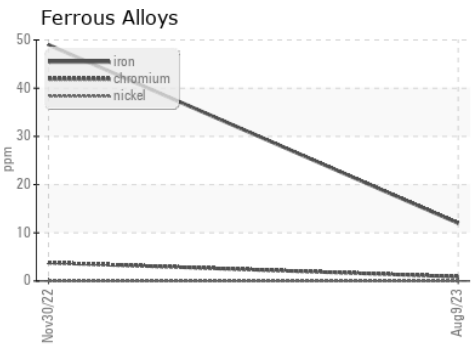


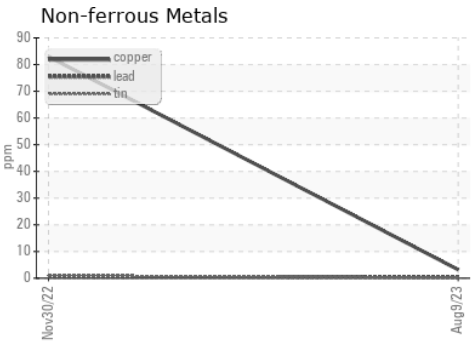


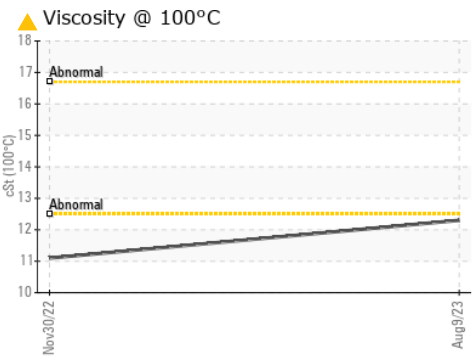
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.2	**NEG**	NEG	---
Free Water	scalar	*Visual		**NEG**	NEG	---

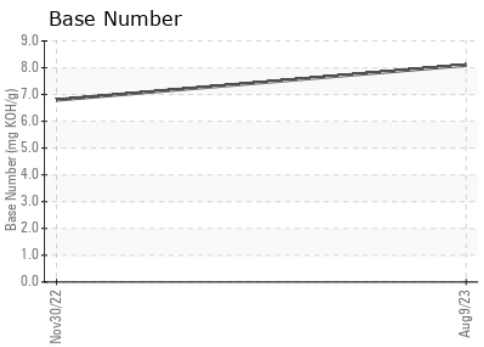
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445		▲ **12.3**	▲ 11.1	---

GRAPHS









Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0061454 **Received** : 14 Aug 2023
Lab Number : 05924075 **Diagnosed** : 15 Aug 2023
Unique Number : 10604022 **Diagnostician** : Sean Felton
Test Package : FLEET (Additional Tests: FuelDilution)

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)

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