



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT 496670
Component
Diesel Engine
Fluid
CITGO CITGUARD 600 15W40 (24 QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0004337	---	---
Sample Date		Client Info		08 May 2024	---	---
Machine Age	mls	Client Info		35578	---	---
Oil Age	mls	Client Info		35578	---	---
Filter Age	mls	Client Info		35578	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	159	---	---
Chromium	ppm	ASTM D5185m	>20	6	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	36	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	32	---	---
Tin	ppm	ASTM D5185m	>15	2	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

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.

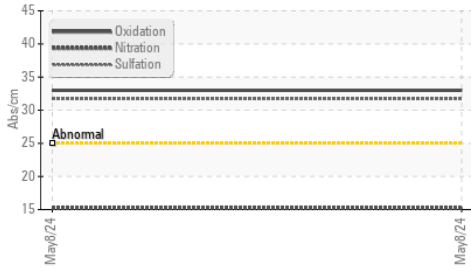
Silicon	ppm	ASTM D5185m	>25	35	---	---
Potassium	ppm	ASTM D5185m	>20	91	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	1.4	---	---
Nitration	Abs/cm	*ASTM D7624	>20	15.2	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	31.7	---	---
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	---	---

FLUID CONDITION

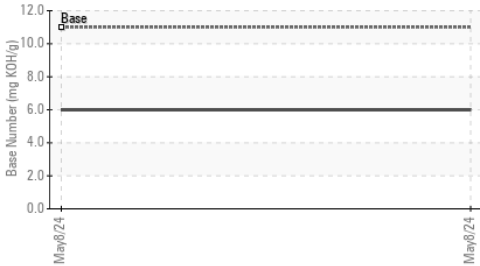
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		6	---	---
Boron	ppm	ASTM D5185m	13	73	---	---
Barium	ppm	ASTM D5185m	0	4	---	---
Molybdenum	ppm	ASTM D5185m	57	117	---	---
Manganese	ppm	ASTM D5185m		7	---	---
Magnesium	ppm	ASTM D5185m	825	740	---	---
Calcium	ppm	ASTM D5185m	1100	1662	---	---
Phosphorus	ppm	ASTM D5185m	933	818	---	---
Zinc	ppm	ASTM D5185m	1089	1013	---	---
Sulfur	ppm	ASTM D5185m	2769	2851	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	33.0	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	6.0	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.4	---	---

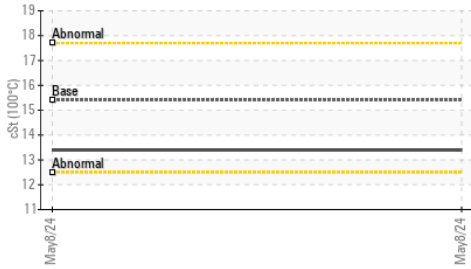
FT-IR (Direct Trend)



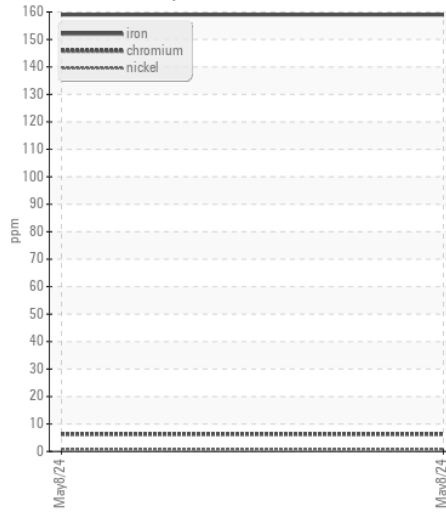
Base Number



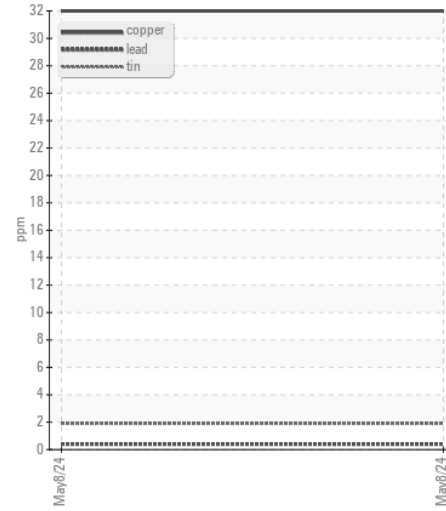
Viscosity @ 100°C



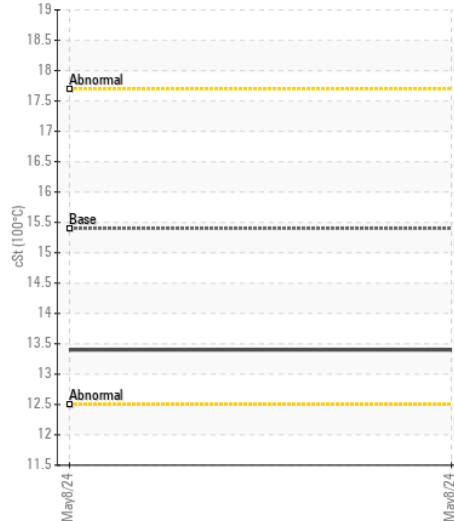
Ferrous Alloys



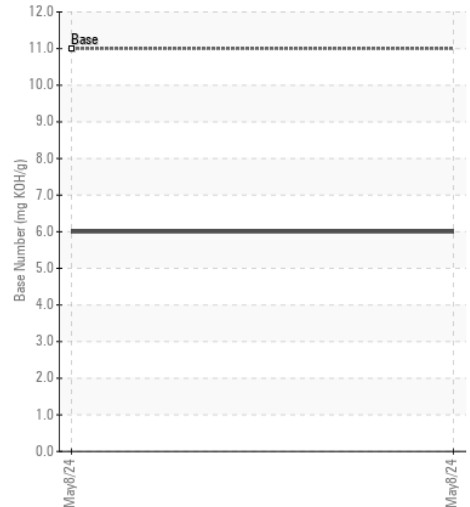
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0004337 **Received** : 28 May 2024
Lab Number : 06193412 **Tested** : 30 May 2024
Unique Number : 11050164 **Diagnosed** : 30 May 2024 - Sean Felton
Test Package : FLEET

RTL PACLEASE - 7025 - Tampa
 8109 East Adamo Drive
 Tampa, FL
 US 33619
 Contact: Michael Reid
 REIDM@RushEnterprises.com
 T: (813)371-2130
 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)