



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT 453682
Component
Diesel Engine
Fluid
CITGO CITGUARD 600 15W40 (46 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0012819	RPL0004532	---
Sample Date		Client Info		08 Jul 2024	13 Apr 2023	---
Machine Age	hrs	Client Info		9711	7188	---
Oil Age	hrs	Client Info		1977	1190	---
Filter Age	hrs	Client Info		1977	1190	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		Changed	Not Changd	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	16	17	---
Chromium	ppm	ASTM D5185m	>20	0	<1	---
Nickel	ppm	ASTM D5185m	>4	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	2	2	---
Lead	ppm	ASTM D5185m	>40	0	0	---
Copper	ppm	ASTM D5185m	>330	1	1	---
Tin	ppm	ASTM D5185m	>15	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the oil.

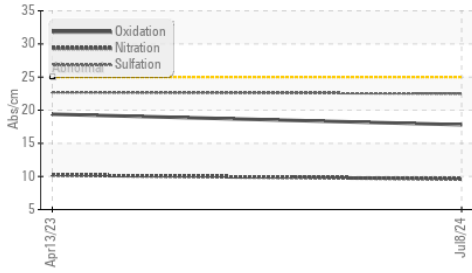
Silicon	ppm	ASTM D5185m	>25	6	6	---
Potassium	ppm	ASTM D5185m	>20	1	1	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.6	0.6	---
Nitration	Abs/cm	*ASTM D7624	>20	9.6	10.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	22.7	---
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	---

FLUID CONDITION

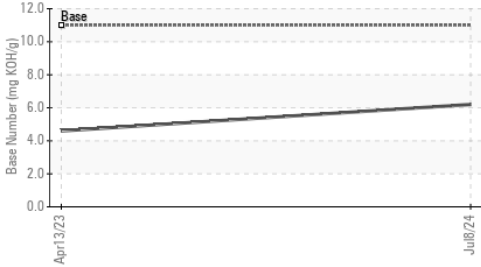
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	<1	---
Boron	ppm	ASTM D5185m	13	0	3	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	57	63	61	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m	825	411	485	---
Calcium	ppm	ASTM D5185m	1100	2011	1669	---
Phosphorus	ppm	ASTM D5185m	933	1094	1042	---
Zinc	ppm	ASTM D5185m	1089	1289	1294	---
Sulfur	ppm	ASTM D5185m	2769	3683	3769	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.8	19.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	6.2	4.6	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	13.9	---

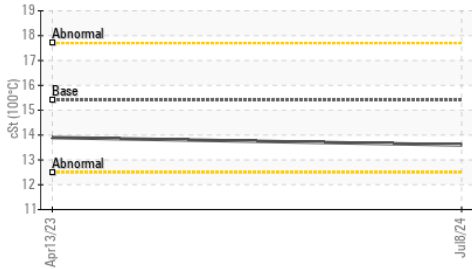
FT-IR (Direct Trend)



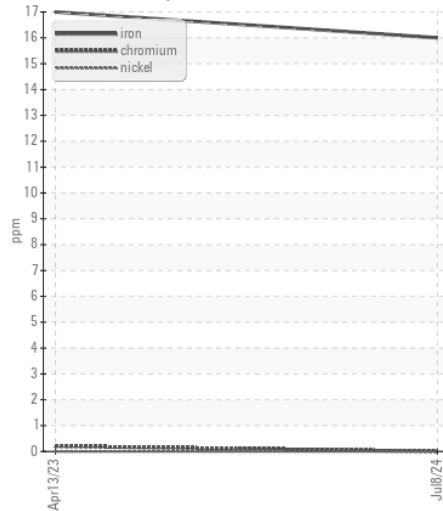
Base Number



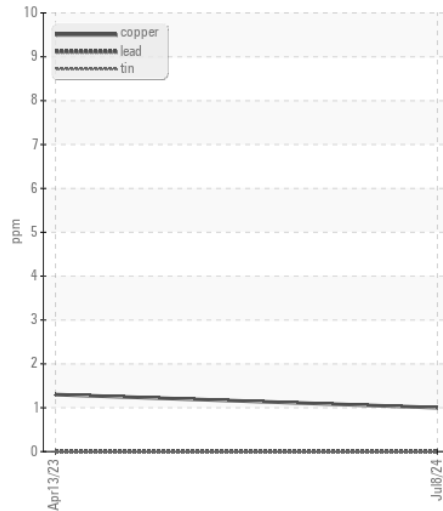
Viscosity @ 100°C



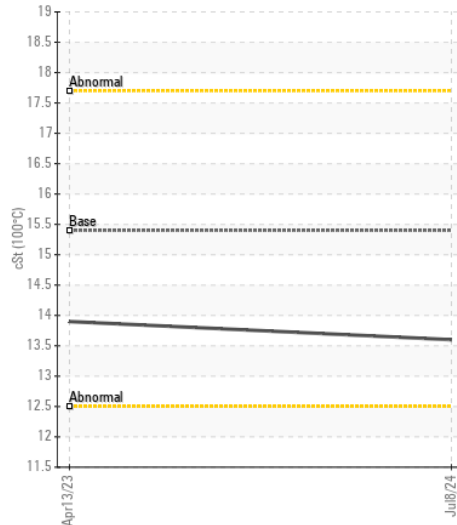
Ferrous Alloys



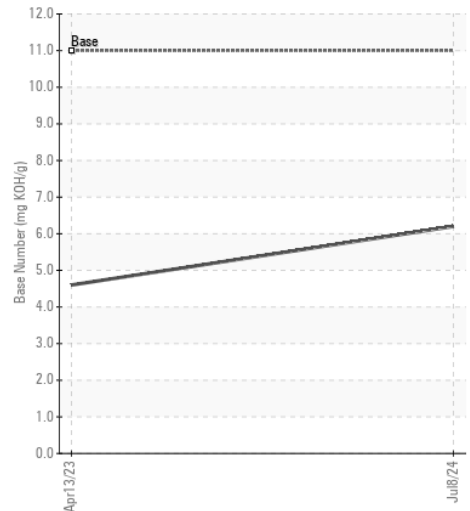
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : RPL0012819

Lab Number : 06234254

Unique Number : 11123088

Test Package : FLEET

Received : 11 Jul 2024

Tested : 12 Jul 2024

Diagnosed : 12 Jul 2024 - Wes Davis

RTL PACLEASE - 7010 - Florida

9407 Bachman Road

Orlando, FL

US 32824

Contact: John Churchwell

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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)