



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT 272408
Component
Diesel Engine
Fluid
CASTROL VECTON 15W40 CK4 (23 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0011854	RPL0007550	---
Sample Date		Client Info		24 Jun 2024	03 Jul 2023	---
Machine Age	mls	Client Info		80091	74125	---
Oil Age	mls	Client Info		5966	15715	---
Filter Age	mls	Client Info		5966	15715	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	27	28	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>2	0	<1	---
Titanium	ppm	ASTM D5185m	>2	<1	<1	---
Silver	ppm	ASTM D5185m	>2	<1	0	---
Aluminum	ppm	ASTM D5185m	>20	10	17	---
Lead	ppm	ASTM D5185m	>40	0	<1	---
Copper	ppm	ASTM D5185m	>330	2	3	---
Tin	ppm	ASTM D5185m	>15	0	<1	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
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.

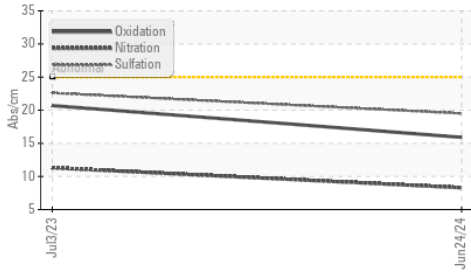
Silicon	ppm	ASTM D5185m	>25	5	11	---
Potassium	ppm	ASTM D5185m	>20	4	21	---
Fuel		WC Method	>3.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>6	0.3	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	8.3	11.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	22.6	---
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

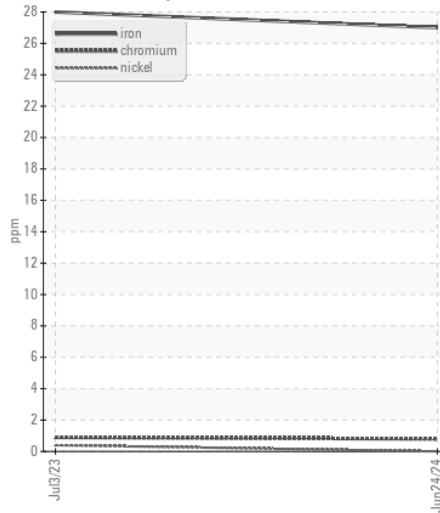
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		5	2	---
Boron	ppm	ASTM D5185m		39	9	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		73	66	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		561	763	---
Calcium	ppm	ASTM D5185m		1681	1418	---
Phosphorus	ppm	ASTM D5185m		971	973	---
Zinc	ppm	ASTM D5185m		1138	1265	---
Sulfur	ppm	ASTM D5185m		3636	3690	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	20.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	8.3	7.7	---
Visc @ 100°C	cSt	ASTM D445	15.5	13.6	13.1	---

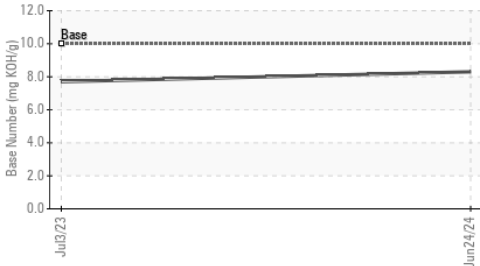
FT-IR (Direct Trend)



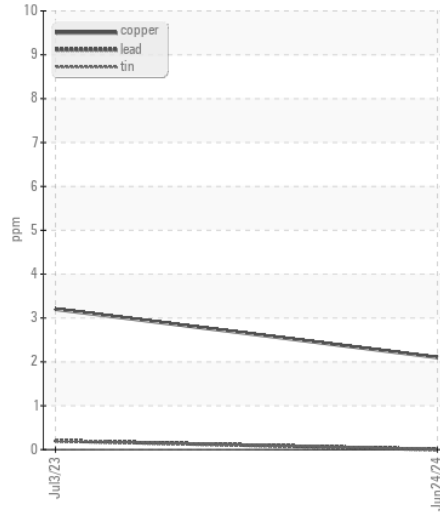
Ferrous Alloys



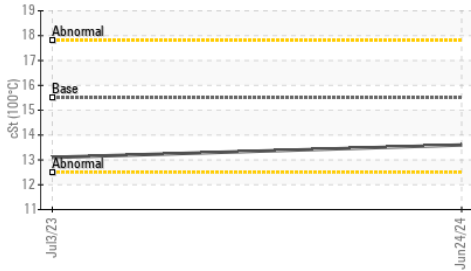
Base Number



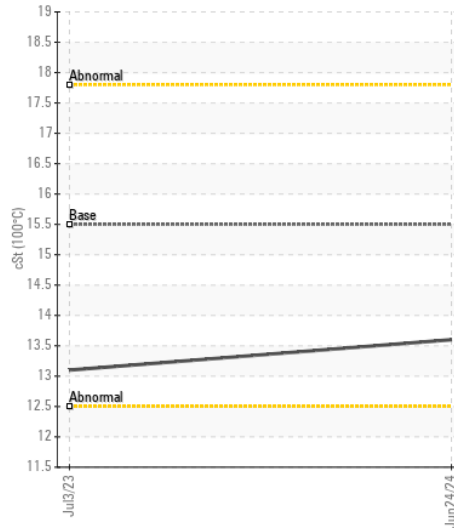
Non-ferrous Metals



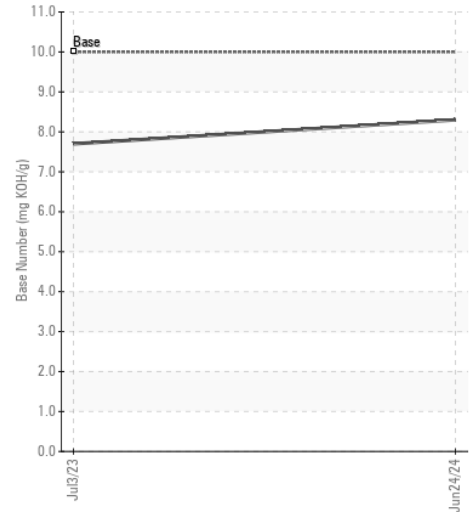
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : RPL0011854

Lab Number : 06228383

Unique Number : 11111876

Test Package : FLEET

Received : 05 Jul 2024

Tested : 08 Jul 2024

Diagnosed : 08 Jul 2024 - Wes Davis

RTL PACLEASE - 7039 - Denver

379 W 66TH WAY

DENVER, CO

US 80221

Contact: JEFF THOMAS

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T:

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)