



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[PAC7025]
 Machine Id
PETERBILT 496499
 Component
Diesel Engine
 Fluid
CITGO CITGUARD 600 15W40 (48 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0004222	RPL0004366	---
Sample Date		Client Info		06 Jun 2024	01 Jul 2023	---
Machine Age	mls	Client Info		145194	84975	---
Oil Age	mls	Client Info		60219	56492	---
Filter Age	mls	Client Info		60219	56492	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	76	87	---
Chromium	ppm	ASTM D5185m	>20	1	1	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	<1	---
Aluminum	ppm	ASTM D5185m	>20	14	31	---
Lead	ppm	ASTM D5185m	>40	1	1	---
Copper	ppm	ASTM D5185m	>330	5	8	---
Tin	ppm	ASTM D5185m	>15	1	2	---
Vanadium	ppm	ASTM D5185m		<1	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.

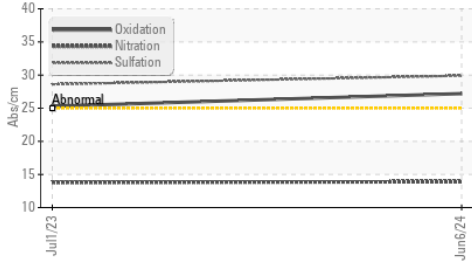
Silicon	ppm	ASTM D5185m	>25	13	15	---
Potassium	ppm	ASTM D5185m	>20	32	95	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.8	0.7	---
Nitration	Abs/cm	*ASTM D7624	>20	13.9	13.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	29.9	28.6	---
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

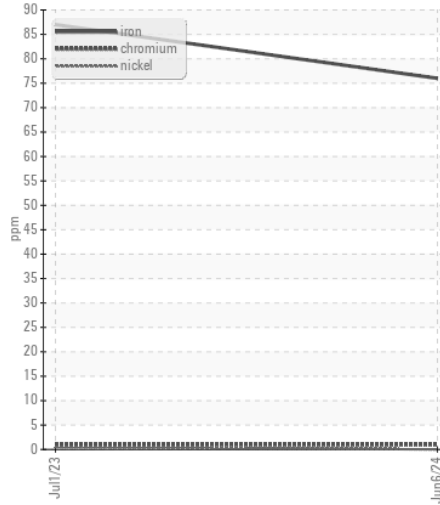
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		2	0	---
Boron	ppm	ASTM D5185m	13	4	15	---
Barium	ppm	ASTM D5185m	0	0	10	---
Molybdenum	ppm	ASTM D5185m	57	69	62	---
Manganese	ppm	ASTM D5185m		1	2	---
Magnesium	ppm	ASTM D5185m	825	485	481	---
Calcium	ppm	ASTM D5185m	1100	2181	1758	---
Phosphorus	ppm	ASTM D5185m	933	1208	928	---
Zinc	ppm	ASTM D5185m	1089	1551	1283	---
Sulfur	ppm	ASTM D5185m	2769	3805	3363	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.2	25.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	4.5	▲ 3.5	---
Visc @ 100°C	cSt	ASTM D445	15.4	14.3	14.1	---

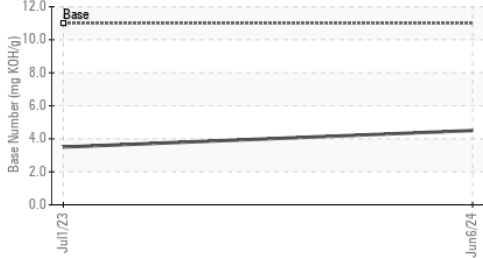
FT-IR (Direct Trend)



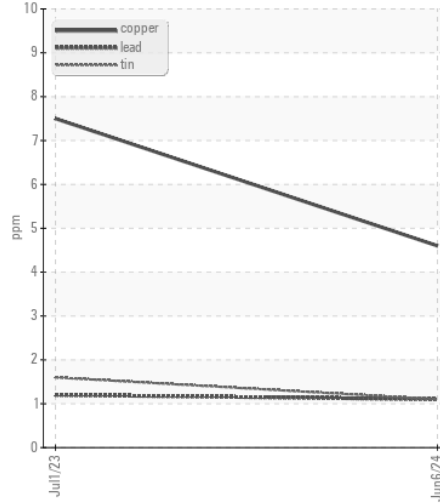
Ferrous Alloys



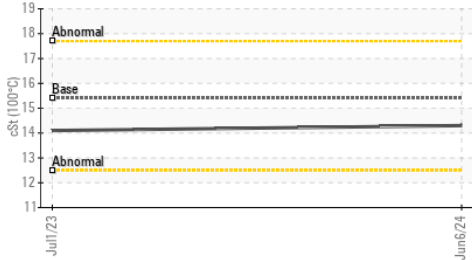
Base Number



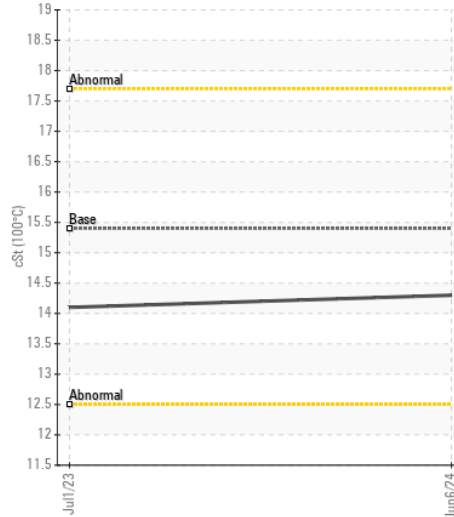
Non-ferrous Metals



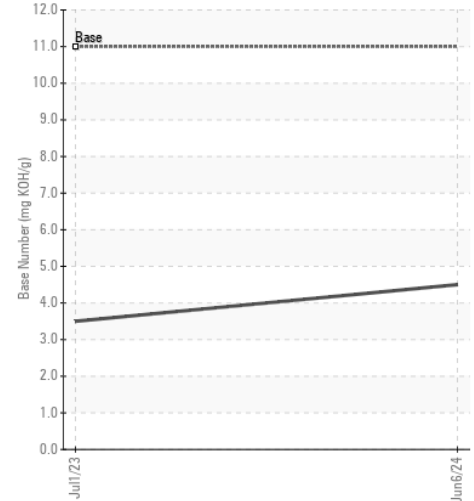
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : RPL0004222

Lab Number : 06223367

Unique Number : 11101564

Test Package : FLEET

Received : 28 Jun 2024

Tested : 01 Jul 2024

Diagnosed : 01 Jul 2024 - Don Baldrige

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)