



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area
[44186610]
 Machine Id
PETERBILT 957-1967
 Component
Diesel Engine
 Fluid
MOBIL DELVAC MX 15W40 (--- 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		RPL0016479	RPL0016410	---
Sample Date		Client Info		24 Apr 2024	10 Jan 2024	---
Machine Age	mls	Client Info		29560	14648	---
Oil Age	mls	Client Info		29560	14648	---
Filter Age	mls	Client Info		29560	14648	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		Changed	Not Changd	---
Sample Status				ATTENTION	ABNORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	57	38	---
Chromium	ppm	ASTM D5185m	>20	2	1	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	<1	<1	---
Aluminum	ppm	ASTM D5185m	>20	44	29	---
Lead	ppm	ASTM D5185m	>40	2	1	---
Copper	ppm	ASTM D5185m	>330	24	22	---
Tin	ppm	ASTM D5185m	>15	2	1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	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.

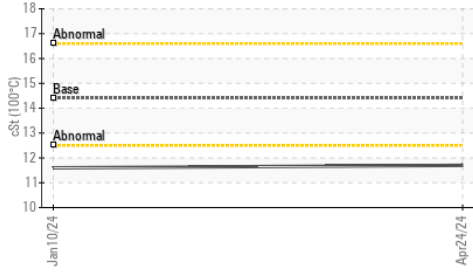
Silicon	ppm	ASTM D5185m	>25	38	▲ 41	---
Potassium	ppm	ASTM D5185m	>20	153	113	---
Fuel		WC Method	>5	<1.0	0.6	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	10.6	8.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.7	20.1	---
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

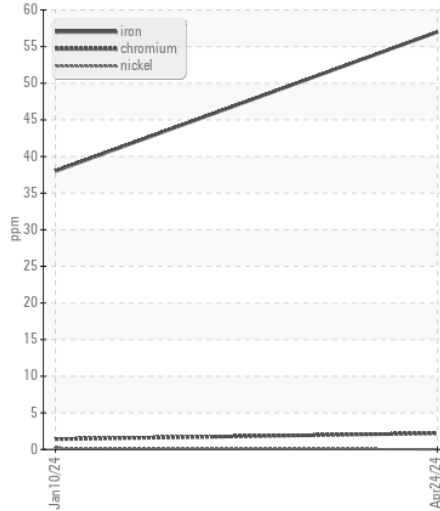
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		5	4	---
Boron	ppm	ASTM D5185m		52	71	---
Barium	ppm	ASTM D5185m		7	0	---
Molybdenum	ppm	ASTM D5185m		26	20	---
Manganese	ppm	ASTM D5185m		5	4	---
Magnesium	ppm	ASTM D5185m		702	720	---
Calcium	ppm	ASTM D5185m		1343	1316	---
Phosphorus	ppm	ASTM D5185m		803	752	---
Zinc	ppm	ASTM D5185m		905	883	---
Sulfur	ppm	ASTM D5185m		3044	2882	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.2	16.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	12	5.6	6.3	---
Visc @ 100°C	cSt	ASTM D445	14.4	● 11.7	● 11.6	---

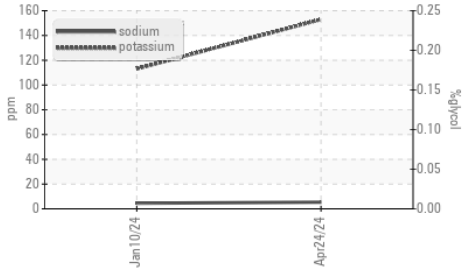
● Viscosity @ 100°C



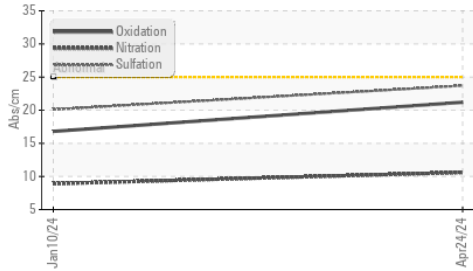
Ferrous Alloys



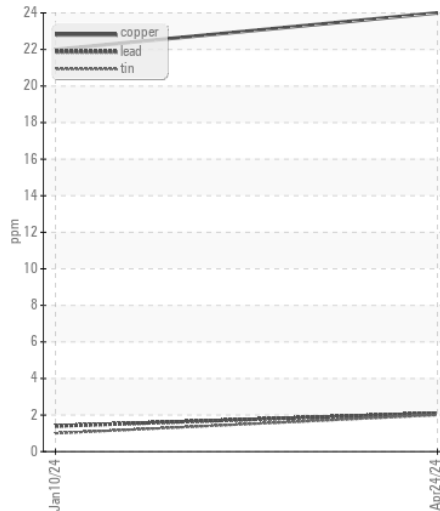
Glycol Contamination



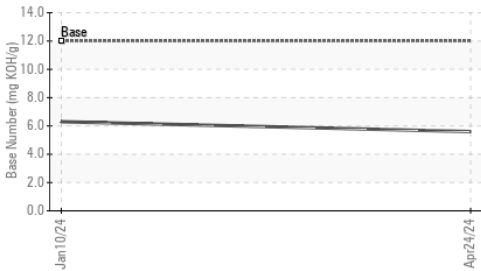
FT-IR (Direct Trend)



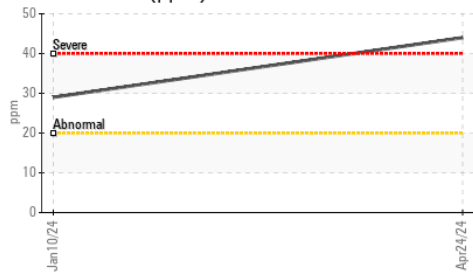
Non-ferrous Metals



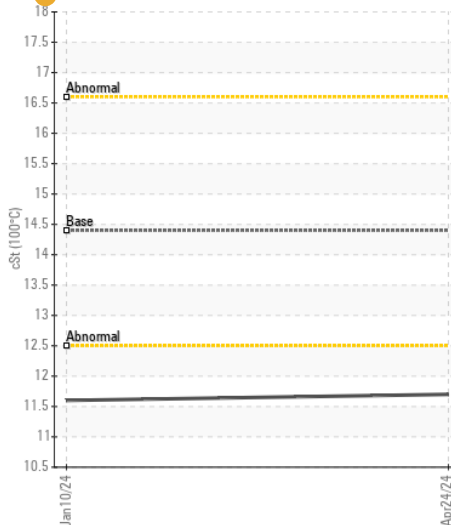
Base Number



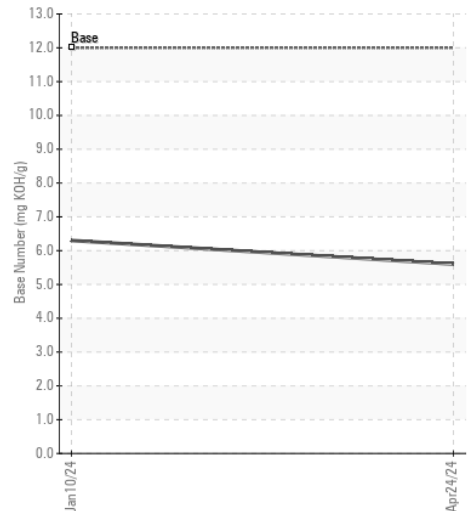
Aluminum (ppm)



● Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : RPL0016479

Lab Number : 06178413

Unique Number : 11029739

Test Package : FLEET

Received : 14 May 2024

Tested : 14 May 2024

Diagnosed : 16 May 2024 - Sean Felton

RTL PACLEASE - 7002 - San Antonio

8810 IH-10 Frontage Road

Converse, TX

US 78109

Contact: Mike Friel

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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)