



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Machine Id  
**PETERBILT 846-5055**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1 5W40 (44 QTS)**

**RECOMMENDATION**

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RPL0017586</b>	RPL0015522	RPL0013465
Sample Date		Client Info		<b>26 Jan 2024</b>	11 Oct 2023	18 Jul 2023
Machine Age	mls	Client Info		<b>23703</b>	16617	9290
Oil Age	mls	Client Info		<b>23703</b>	16617	9290
Filter Age	mls	Client Info		<b>23703</b>	16617	9290
Oil Changed		Client Info		<b>Changed</b>	Filtered	Filtered
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>110	<b>36</b>	28	19
Chromium	ppm	ASTM D5185m	>4	<b>2</b>	2	1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>11</b>	9	8
Lead	ppm	ASTM D5185m	>45	<b>9</b>	6	0
Copper	ppm	ASTM D5185m	>85	<b>34</b>	30	24
Tin	ppm	ASTM D5185m	>4	<b>3</b>	2	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

Sodium and/or potassium levels remain high. Test for glycol is negative.

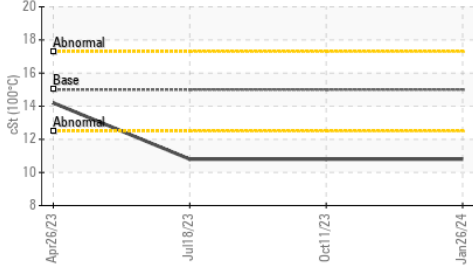
Silicon	ppm	ASTM D5185m	>30	<b>37</b>	39	36
Potassium	ppm	ASTM D5185m	>20	<b>▲ 65</b>	▲ 49	39
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	▲ 3.8
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	%	*ASTM D2982		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.9</b>	9.5	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.8</b>	21.4	19.2
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

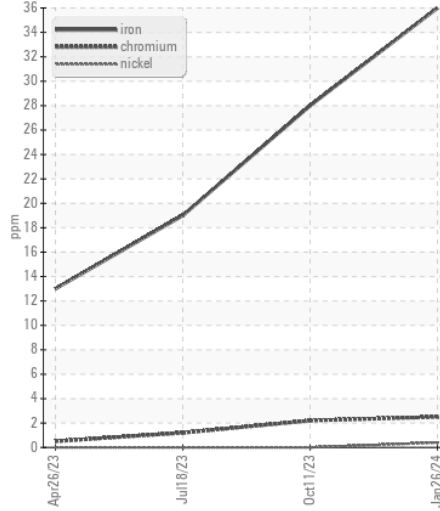
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		<b>1</b>	4	5
Boron	ppm	ASTM D5185m	291	<b>28</b>	41	72
Barium	ppm	ASTM D5185m	0.0	<b>5</b>	3	0
Molybdenum	ppm	ASTM D5185m	8.0	<b>13</b>	12	13
Manganese	ppm	ASTM D5185m		<b>6</b>	5	5
Magnesium	ppm	ASTM D5185m	624	<b>686</b>	746	738
Calcium	ppm	ASTM D5185m	2158	<b>1246</b>	1328	1285
Phosphorus	ppm	ASTM D5185m	1132	<b>698</b>	659	▲ 706
Zinc	ppm	ASTM D5185m	1300	<b>781</b>	846	▲ 816
Sulfur	ppm	ASTM D5185m	3616	<b>3204</b>	2922	3299
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>23.8</b>	19.4	16.6
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	<b>4.2</b>	5.3	6.9
Visc @ 100°C	cSt	ASTM D445	15.0	<b>▲ 10.8</b>	▲ 10.8	▲ 10.8

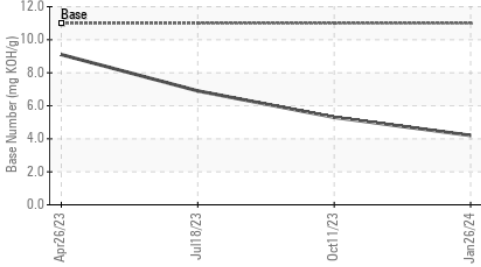
▲ Viscosity @ 100°C



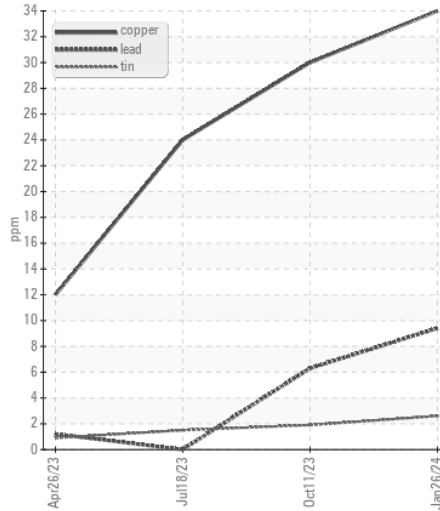
Ferrous Alloys



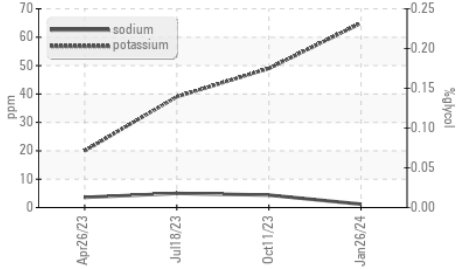
Base Number



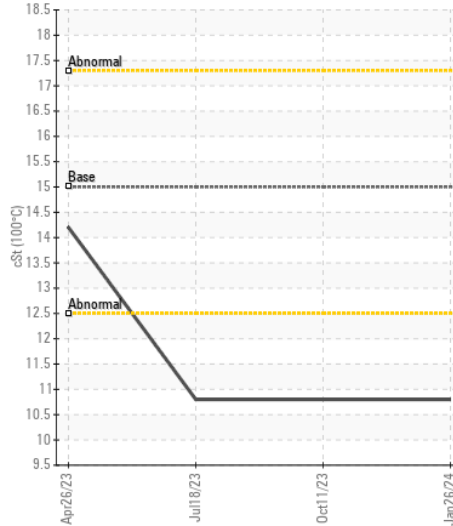
Non-ferrous Metals



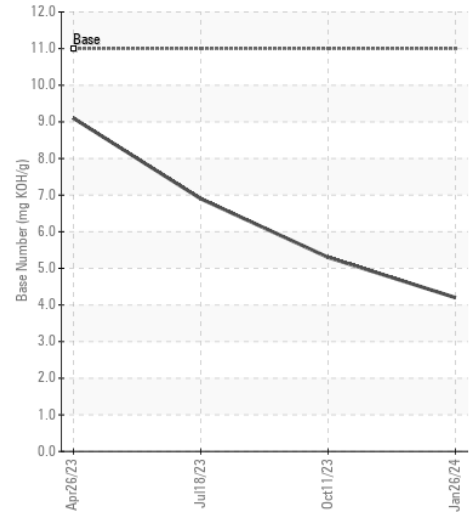
Glycol Contamination



▲ Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : RPL0017586

Lab Number : 06083363

Unique Number : 10870808

Test Package : FLEET ( Additional Tests: Glycol )

Received : 08 Feb 2024

Tested : 12 Feb 2024

Diagnosed : 12 Feb 2024 - Jonathan Hester

RTL PACLEASE - 7006 - Pico Rivera

7837 Telegraph Rd

Pico Rivera, CA

US 90660

Contact: Rudy Trevizo

TrevizoR@RushEnterprises.Com

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)

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F: