



WEAR **NORMAL**

CONTAMINATION **NORMAL**

FLUID CONDITION **ATTENTION**

# OIL ANALYSIS REPORT

Area  
**[43071791]**

Machine Id  
**PETERBILT 957-1712 Johnston**

Component  
**Diesel Engine**

Fluid  
**MOBIL DELVAC MX 15W40 (19 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>RPL0016415</b>	RPL0013683	---
Sample Date		Client Info		<b>06 Feb 2024</b>	30 Oct 2023	---
Machine Age	mls	Client Info		<b>27445</b>	20319	---
Oil Age	mls	Client Info		<b>7130</b>	5139	---
Filter Age	mls	Client Info		<b>7130</b>	5139	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>ATTENTION</b>	NORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>14</b>	18	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	4	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>330	<b>2</b>	5	---
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

Fuel content negligible. There is no indication of any contamination in the oil.

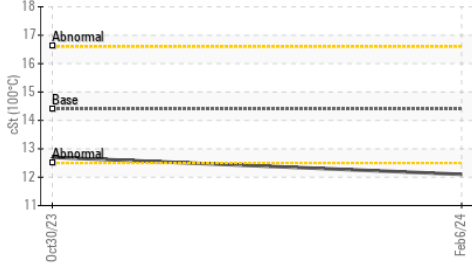
Silicon	ppm	ASTM D5185m	>25	<b>7</b>	9	---
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	2	---
Fuel	%	ASTM D3524	>5	<b>1.6</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.8</b>	7.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.7</b>	18.7	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

## FLUID CONDITION

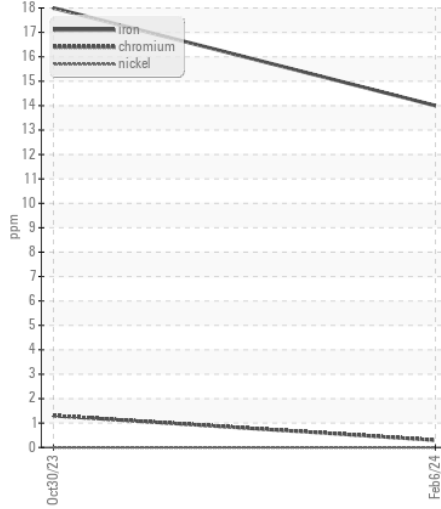
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		<b>0</b>	0	---
Boron	ppm	ASTM D5185m		<b>62</b>	17	---
Barium	ppm	ASTM D5185m		<b>9</b>	<1	---
Molybdenum	ppm	ASTM D5185m		<b>107</b>	64	---
Manganese	ppm	ASTM D5185m		<b>0</b>	1	---
Magnesium	ppm	ASTM D5185m		<b>618</b>	929	---
Calcium	ppm	ASTM D5185m		<b>1083</b>	1059	---
Phosphorus	ppm	ASTM D5185m		<b>632</b>	1002	---
Zinc	ppm	ASTM D5185m		<b>830</b>	1232	---
Sulfur	ppm	ASTM D5185m		<b>2529</b>	2981	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.3</b>	14.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	12	<b>6.3</b>	8.9	---
Visc @ 100°C	cSt	ASTM D445	14.4	<b>▲ 12.1</b>	12.7	---

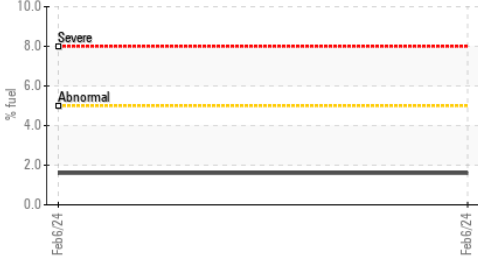
▲ Viscosity @ 100°C



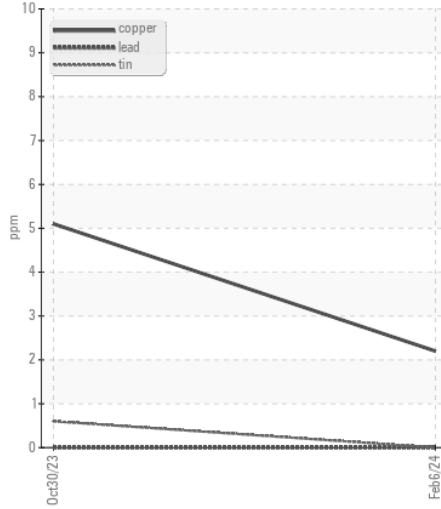
Ferrous Alloys



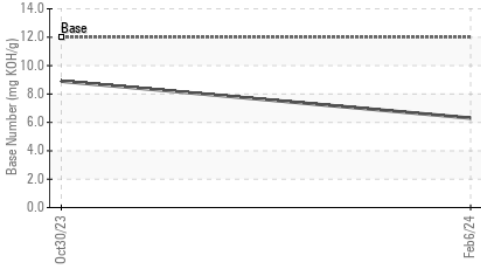
Fuel Dilution



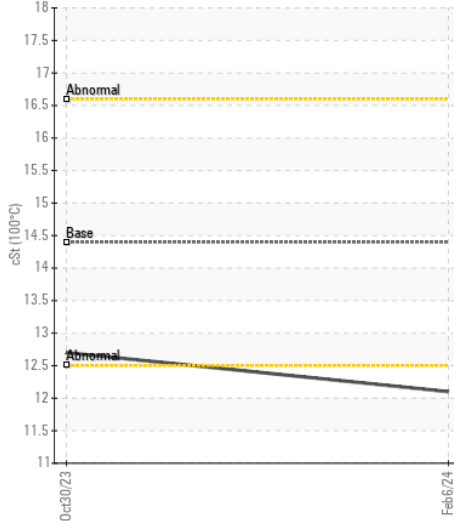
Non-ferrous Metals



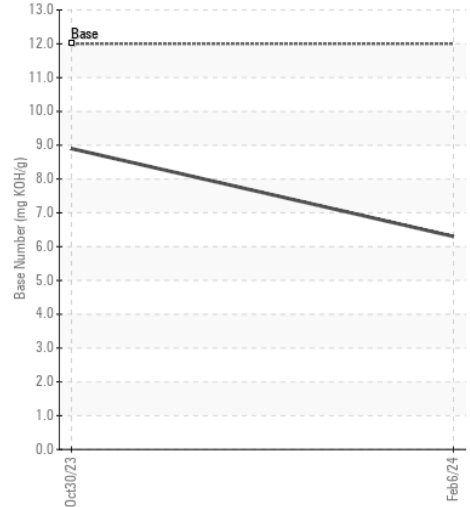
Base Number



▲ Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : RPL0016415

Lab Number : 06088525

Unique Number : 10875970

Test Package : FLEET ( Additional Tests: FuelDilution, PercentFuel )

Received : 14 Feb 2024

Tested : 18 Feb 2024

Diagnosed : 18 Feb 2024 - Don Baldrige

RTL PACLEASE - 7002 - San Antonio

8810 IH-10 Frontage Road

Converse, TX

US 78109

Contact: Mike Friel

FrielM@RushEnterprises.Com

T: (210)901-7283

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)