



PacLease

# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**1461144**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RPL0017026</b>	RPL0006859	RPL0002204
Sample Date		Client Info		<b>07 Jun 2024</b>	17 Mar 2023	09 Jul 2022
Machine Age	mls	Client Info		<b>180741</b>	138804	118668
Oil Age	mls	Client Info		<b>0</b>	0	15000
Filter Age	mls	Client Info		<b>0</b>	0	15000
Oil Changed		Client Info		<b>Changed</b>	N/A	N/A
Filter Changed		Client Info		<b>Changed</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>59</b>	5	90
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	<1	1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>8</b>	2	4
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	36	2
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	1
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

There is no indication of any contamination in the oil.

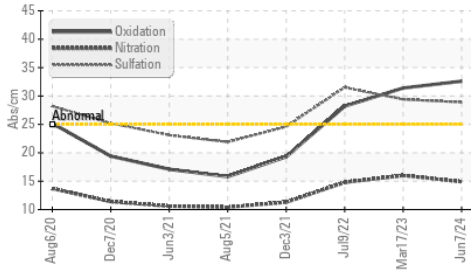
Silicon	ppm	ASTM D5185m	>25	<b>9</b>	6	8
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	<1	4
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>1.1</b>	1.8	1.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>14.9</b>	16.0	14.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>28.9</b>	29.4	31.5
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

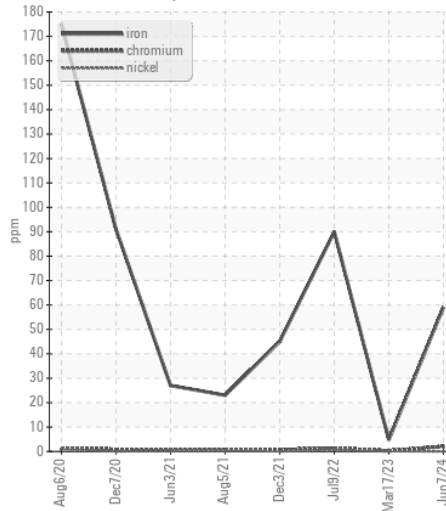
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>158	<b>4</b>	3	2
Boron	ppm	ASTM D5185m	250	<b>48</b>	359	40
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>127</b>	116	7
Manganese	ppm	ASTM D5185m		<b>1</b>	1	1
Magnesium	ppm	ASTM D5185m	450	<b>809</b>	609	670
Calcium	ppm	ASTM D5185m	3000	<b>1581</b>	1508	1446
Phosphorus	ppm	ASTM D5185m	1150	<b>694</b>	802	678
Zinc	ppm	ASTM D5185m	1350	<b>1037</b>	956	821
Sulfur	ppm	ASTM D5185m	4250	<b>3457</b>	3240	3175
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>32.6</b>	31.4	28.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>4.8</b>	4.5	6.4
Visc @ 100°C	cSt	ASTM D445	14.4	<b>14.9</b>	15.5	14.9

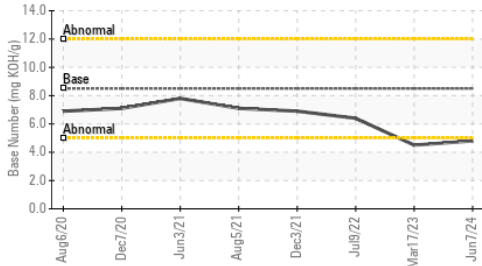
**FT-IR (Direct Trend)**



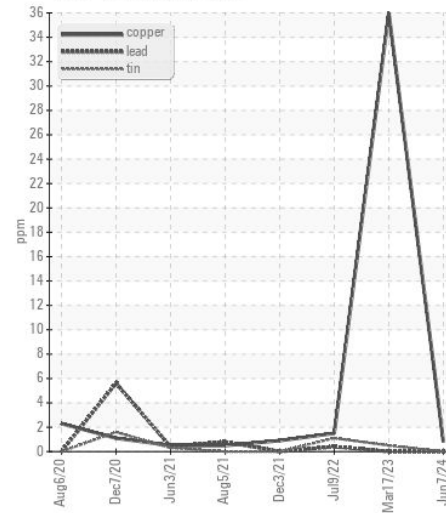
**Ferrous Alloys**



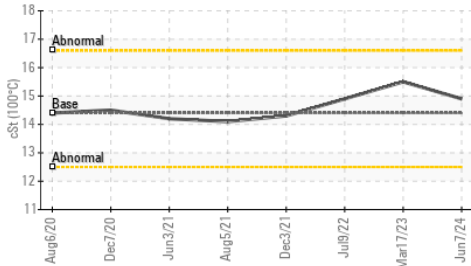
**Base Number**



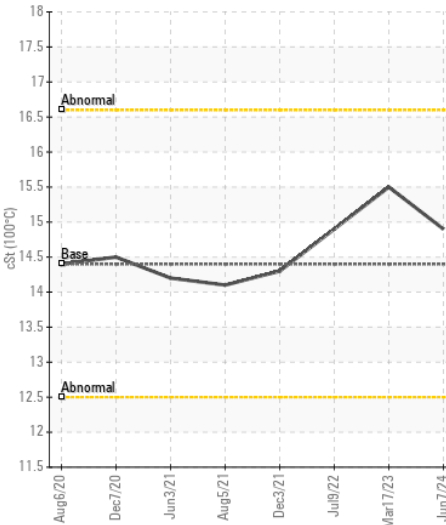
**Non-ferrous Metals**



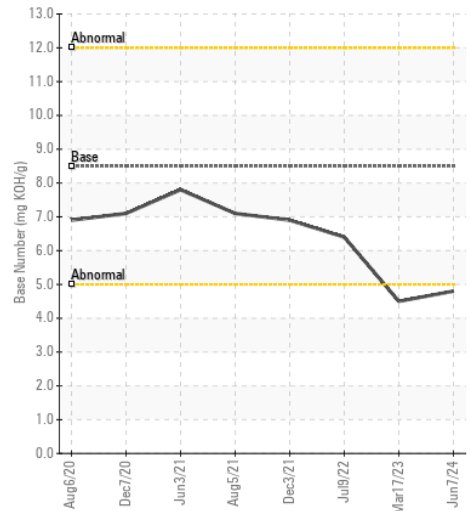
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

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

**Sample No.** : RPL0017026

**Lab Number** : 06222097

**Unique Number** : 11100294

**Test Package** : FLEET

**Received** : 27 Jun 2024

**Tested** : 28 Jun 2024

**Diagnosed** : 28 Jun 2024 - Sean Felton

**RTL PACLEASE - 7008 - Phoenix**

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US 85009

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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)