



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**R26**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 5W30 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0874326</b>	WC0784014	WC0758890
Sample Date		Client Info		<b>17 Jun 2024</b>	21 Sep 2023	16 Jun 2023
Machine Age	hrs	Client Info		<b>114587</b>	5351	4696
Oil Age	hrs	Client Info		<b>0</b>	654	616
Filter Age	hrs	Client Info		<b>0</b>	654	616
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>5</b>	8	10
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>4	<b>2</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	<1	2
Lead	ppm	ASTM D5185m	>40	<b>1</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	2
Tin	ppm	ASTM D5185m	>15	<b>1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
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.

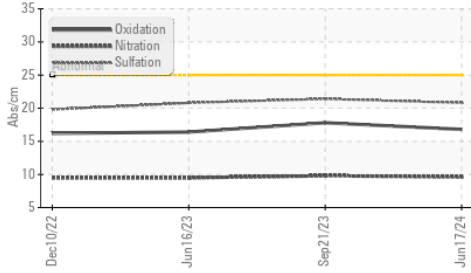
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	7	5
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	5	3
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.6</b>	9.8	9.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.8</b>	21.4	20.8
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

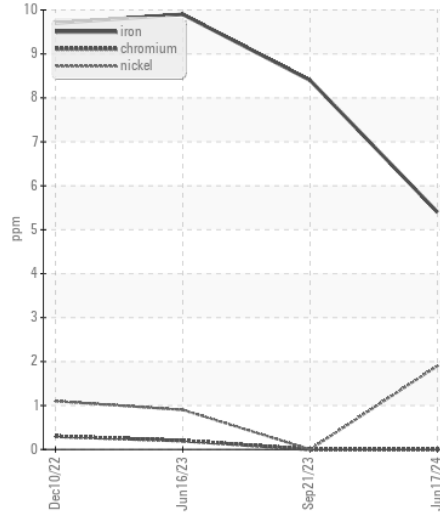
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	5	0
Boron	ppm	ASTM D5185m	250	<b>83</b>	58	43
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>9</b>	10	85
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	450	<b>809</b>	669	182
Calcium	ppm	ASTM D5185m	3000	<b>1276</b>	1498	2135
Phosphorus	ppm	ASTM D5185m	1150	<b>810</b>	769	1015
Zinc	ppm	ASTM D5185m	1350	<b>921</b>	902	1205
Sulfur	ppm	ASTM D5185m	4250	<b>3530</b>	3666	3977
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.8</b>	17.8	16.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>6.7</b>	6.3	5.5
Visc @ 100°C	cSt	ASTM D445	10.9	<b>11.6</b>	11.8	12.7

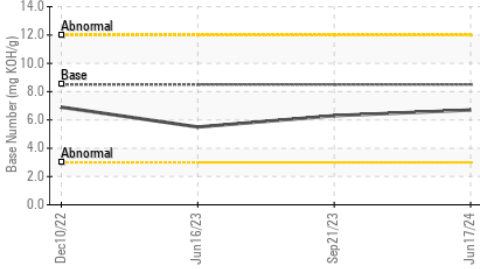
**FT-IR (Direct Trend)**



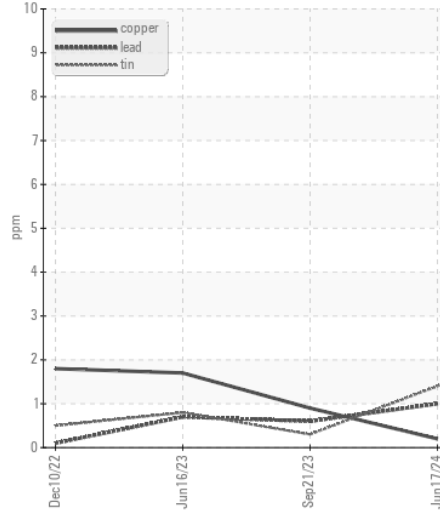
**Ferrous Alloys**



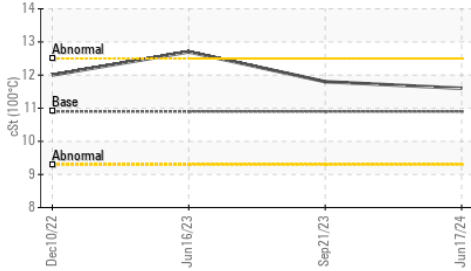
**Base Number**



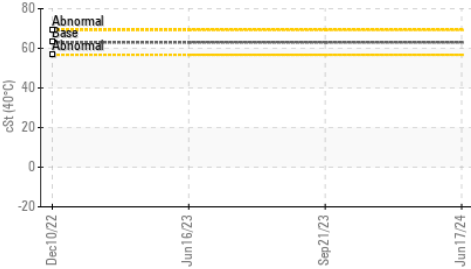
**Non-ferrous Metals**



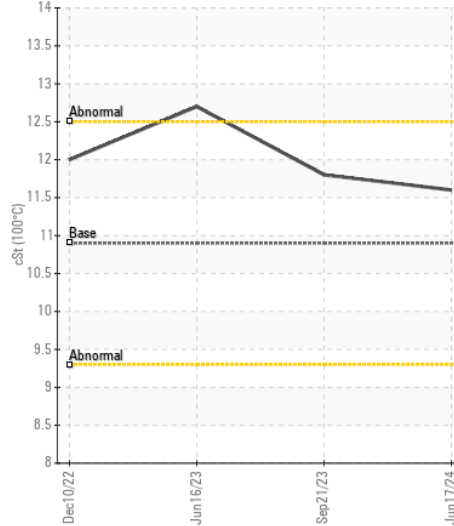
**Viscosity @ 100°C**



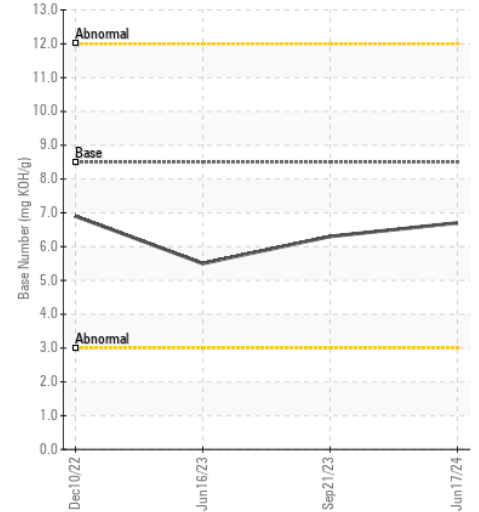
**Viscosity @ 40°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0874326 **Received** : 01 Jul 2024  
**Lab Number** : 06225459 **Tested** : 03 Jul 2024  
**Unique Number** : 11103656 **Diagnosed** : 03 Jul 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: KV40, TBN )

**Apple Valley Waste - EHT Location**  
 6626 Delilah Road  
 Egg Harbor Township, NJ  
 US 08234  
 Contact: Service Manager

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)

T:  
F: