



# OIL ANALYSIS REPORT

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



Machine Id  
**G3**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0874322</b>	WC0874323	WC0874287
Sample Date		Client Info		<b>04 Jul 2024</b>	25 Jun 2024	10 Feb 2024
Machine Age	mls	Client Info		<b>0</b>	688929	9766
Oil Age	mls	Client Info		<b>0</b>	0	541
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>3</b>	8	3
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	1
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	0	0
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	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.

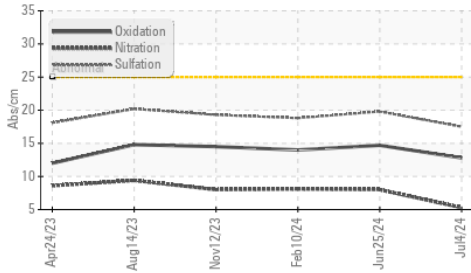
Silicon	ppm	ASTM D5185m	>25	<b>3</b>	6	4
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	4	<1
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	0.5
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>4	<b>0.1</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.3</b>	8.0	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.5</b>	19.8	18.8
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

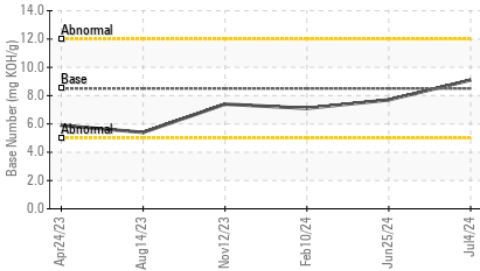
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>158	<b>2</b>	3	2
Boron	ppm	ASTM D5185m	250	<b>19</b>	11	12
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	1
Molybdenum	ppm	ASTM D5185m	100	<b>64</b>	66	61
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	450	<b>816</b>	864	858
Calcium	ppm	ASTM D5185m	3000	<b>1056</b>	1168	1097
Phosphorus	ppm	ASTM D5185m	1150	<b>901</b>	975	963
Zinc	ppm	ASTM D5185m	1350	<b>1073</b>	1202	1152
Sulfur	ppm	ASTM D5185m	4250	<b>2634</b>	3509	2654
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.8</b>	14.7	14.0
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>9.1</b>	7.7	7.1
Visc @ 100°C	cSt	ASTM D445	14.4	<b>12.8</b>	12.3	12.4

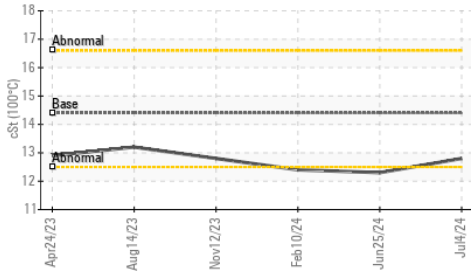
**FT-IR (Direct Trend)**



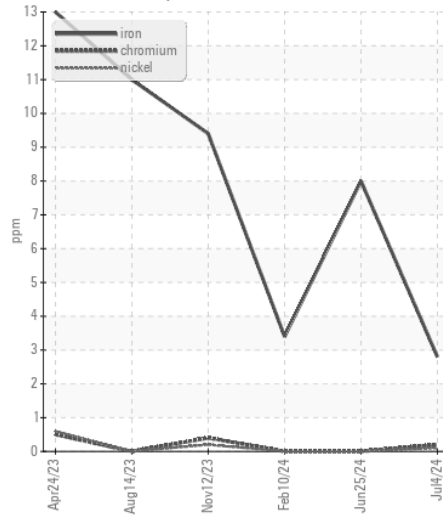
**Base Number**



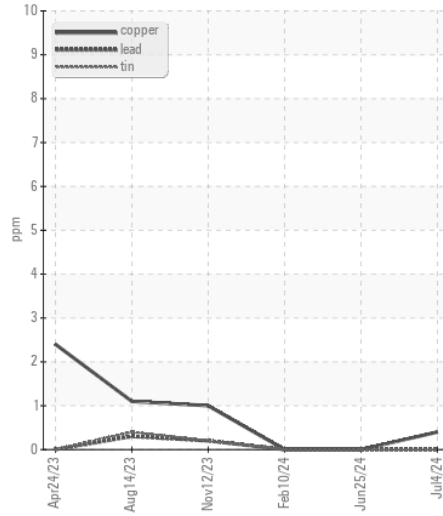
**Viscosity @ 100°C**



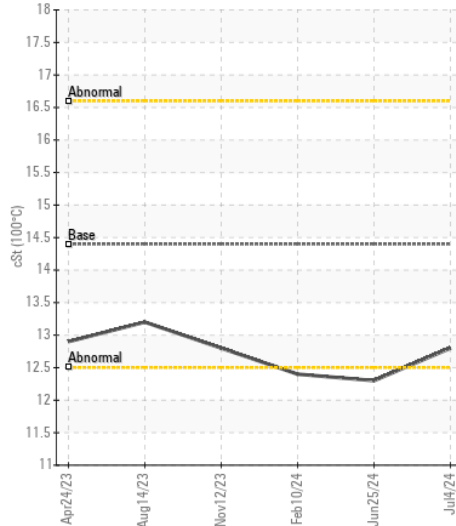
**Ferrous Alloys**



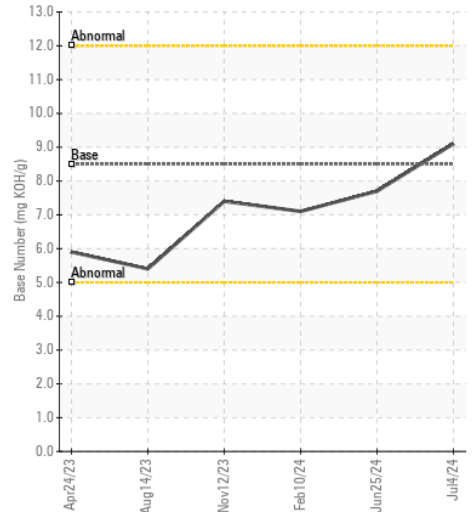
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

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

**Sample No.** : WC0874322

**Lab Number** : 06238673

**Unique Number** : 11127507

**Test Package** : CONST ( Additional Tests: TBN )

**Received** : 16 Jul 2024

**Tested** : 17 Jul 2024

**Diagnosed** : 17 Jul 2024 - Wes Davis

**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: