



# OIL ANALYSIS REPORT

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



Machine Id  
**G13**  
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>WC0874297</b>	WC0874289	WC0784024
Sample Date		Client Info		<b>09 Mar 2024</b>	24 Feb 2024	25 Sep 2023
Machine Age	hrs	Client Info		<b>8521</b>	8419	7840
Oil Age	hrs	Client Info		<b>294</b>	579	628
Filter Age	hrs	Client Info		<b>294</b>	579	0
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>5</b>	13	18
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	1	2
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	2
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	0	1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

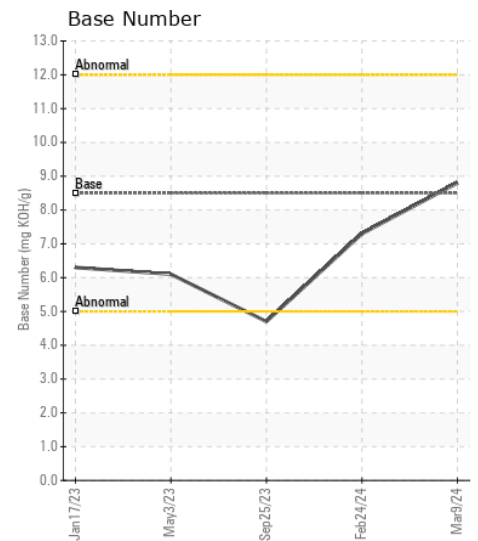
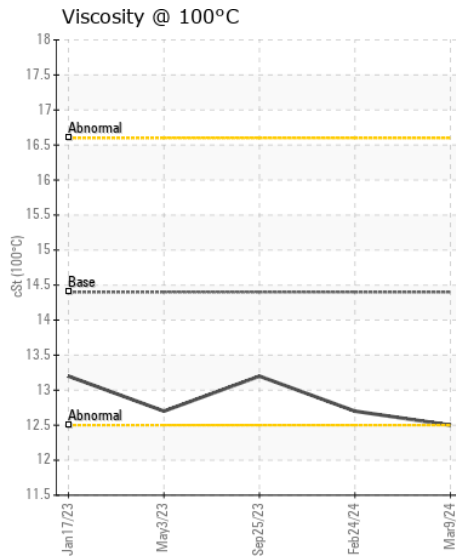
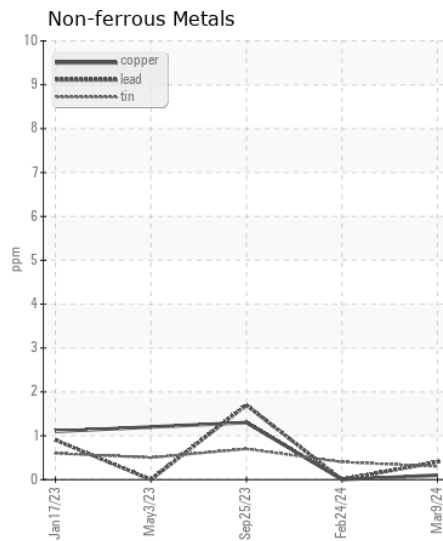
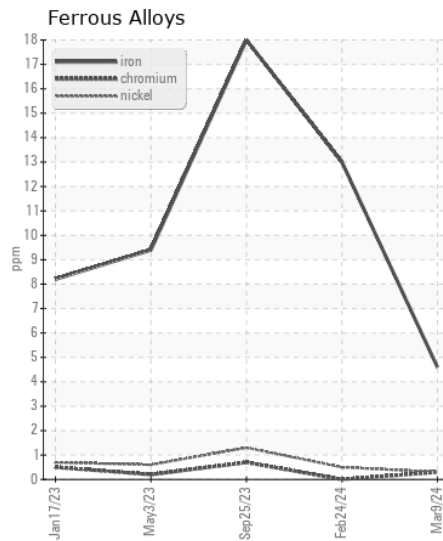
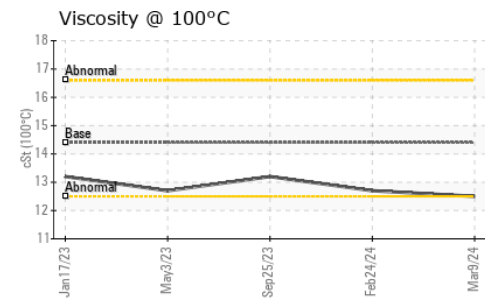
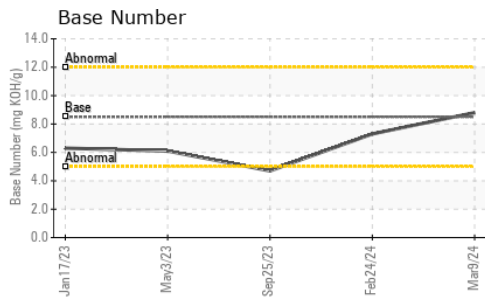
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	6	8
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	2
Fuel		WC Method	>3.0	<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	>4	<b>0.1</b>	0.5	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.3</b>	8.1	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.5</b>	19.5	22.7
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>	4	9
Boron	ppm	ASTM D5185m	250	<b>17</b>	10	9
Barium	ppm	ASTM D5185m	10	<b>0</b>	1	0
Molybdenum	ppm	ASTM D5185m	100	<b>69</b>	61	86
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	450	<b>853</b>	815	148
Calcium	ppm	ASTM D5185m	3000	<b>1196</b>	1222	2001
Phosphorus	ppm	ASTM D5185m	1150	<b>1036</b>	967	993
Zinc	ppm	ASTM D5185m	1350	<b>1198</b>	1160	1226
Sulfur	ppm	ASTM D5185m	4250	<b>3752</b>	2599	3646
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.5</b>	14.1	16.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.8</b>	7.3	4.7
Visc @ 100°C	cSt	ASTM D445	14.4	<b>12.5</b>	12.7	13.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0874297 **Received** : 18 Mar 2024  
**Lab Number** : 06121369 **Tested** : 22 Mar 2024  
**Unique Number** : 10930202 **Diagnosed** : 22 Mar 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: 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)

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F: