



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**G10**  
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>WC0874283</b>	WC0784019	WC0758888
Sample Date		Client Info		<b>07 Feb 2024</b>	21 Sep 2023	02 Jun 2023
Machine Age	hrs	Client Info		<b>9986</b>	9440	526
Oil Age	hrs	Client Info		<b>546</b>	663	526
Filter Age	hrs	Client Info		<b>546</b>	0	526
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	>120	<b>9</b>	11	30
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	1
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>1</b>	<1	3
Lead	ppm	ASTM D5185m	>40	<b>0</b>	1	3
Copper	ppm	ASTM D5185m	>330	<b>1</b>	1	6
Tin	ppm	ASTM D5185m	>15	<b>1</b>	<1	<1
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

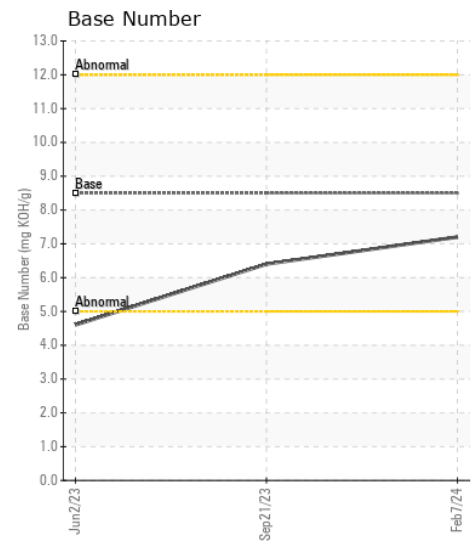
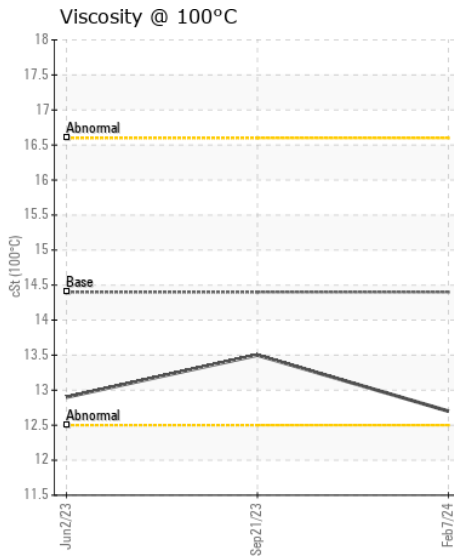
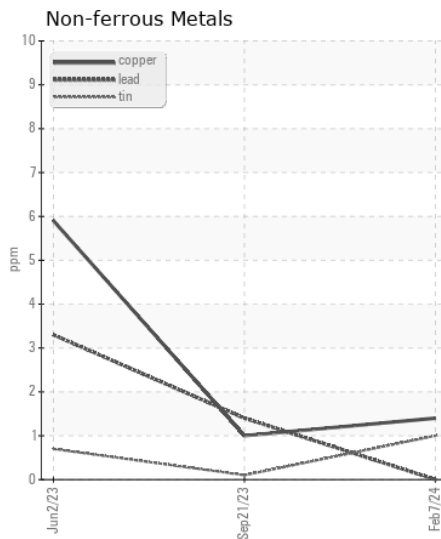
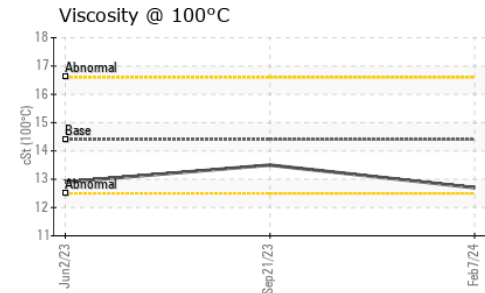
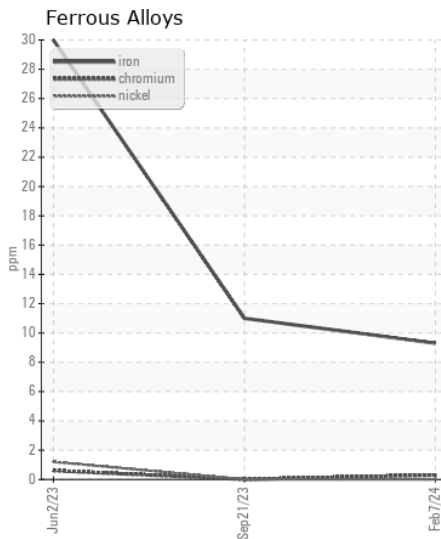
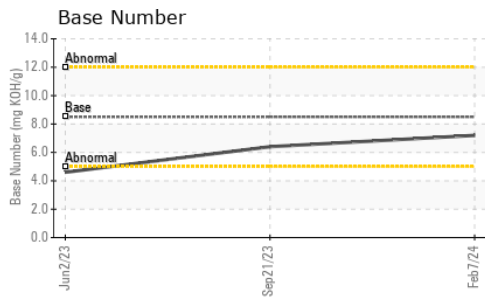
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	6	6
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	3	4
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>0.4</b>	0.4	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.3</b>	9.0	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.8</b>	20.7	25.5
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>	9	6
Boron	ppm	ASTM D5185m	250	<b>10</b>	10	6
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>60</b>	68	33
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	450	<b>845</b>	335	126
Calcium	ppm	ASTM D5185m	3000	<b>1214</b>	2073	2329
Phosphorus	ppm	ASTM D5185m	1150	<b>969</b>	1068	971
Zinc	ppm	ASTM D5185m	1350	<b>1191</b>	1343	1179
Sulfur	ppm	ASTM D5185m	4250	<b>2950</b>	4439	3748
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.8</b>	15.4	16.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.2</b>	6.4	4.6
Visc @ 100°C	cSt	ASTM D445	14.4	<b>12.7</b>	13.5	12.9



Certificate L2367

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

**Sample No.** : WC0874283

**Lab Number** : 06084248

**Unique Number** : 10871693

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

**Received** : 08 Feb 2024

**Tested** : 09 Feb 2024

**Diagnosed** : 09 Feb 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)

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F: