



# OIL ANALYSIS REPORT

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

Machine Id  
**DFGS100740**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- QTS)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0869081</b>	WC0779356	WC0495877
Sample Date		Client Info		<b>04 Feb 2024</b>	18 Apr 2023	16 Sep 2020
Machine Age	hrs	Client Info		<b>14739</b>	13359	9957
Oil Age	hrs	Client Info		<b>0</b>	0	9957
Filter Age	hrs	Client Info		<b>0</b>	0	9957
Oil Changed		Client Info		<b>N/A</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>ATTENTION</b>	ABNORMAL	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>6</b>	30	26
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	8	9
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	3	7
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
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

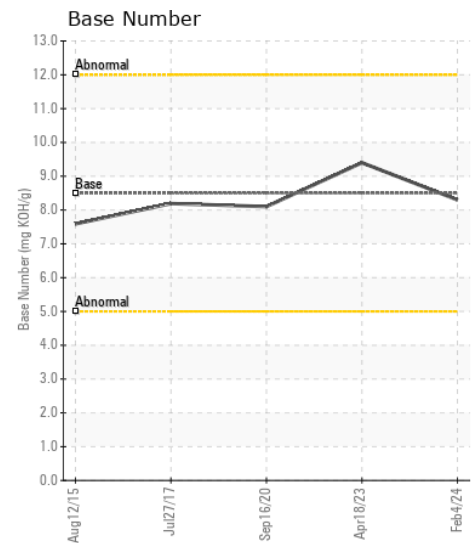
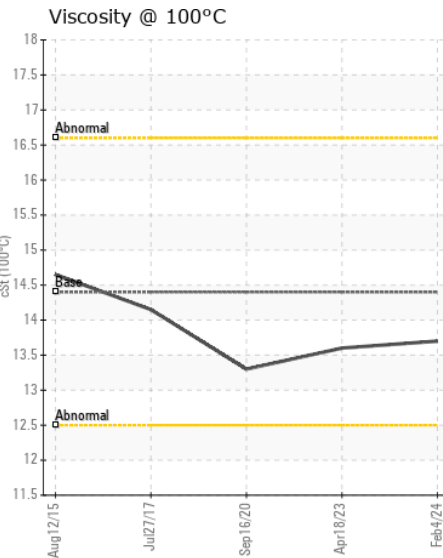
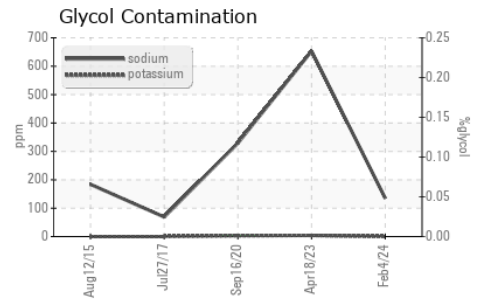
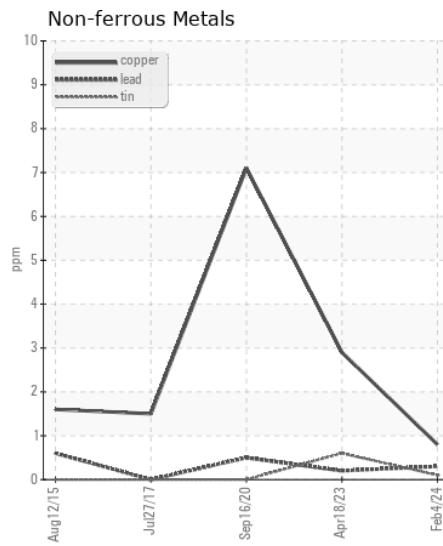
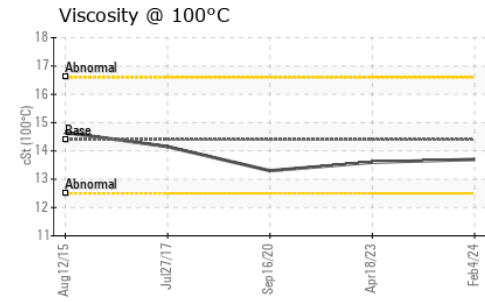
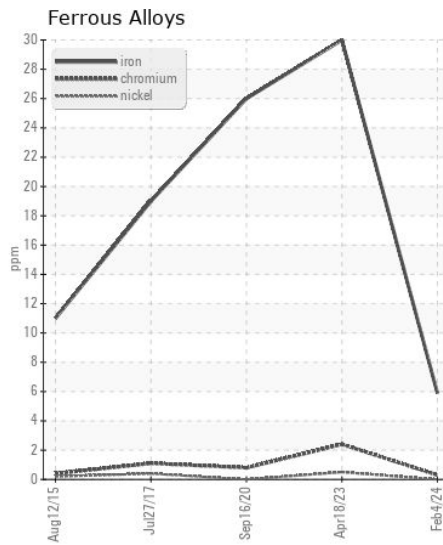
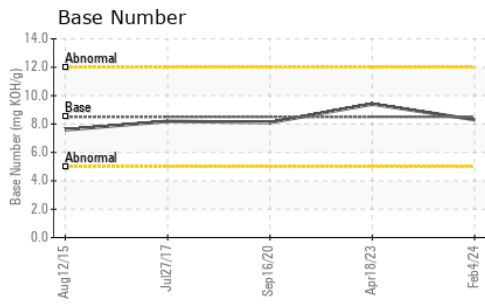
Sodium and/or potassium levels remain high. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	7	5
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	4	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	%	*ASTM D2982		<b>NEG</b>	NEG	0.0
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.8</b>	8.8	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.9</b>	19.5	22.2
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>135</b>	653	329
Boron	ppm	ASTM D5185m	250	<b>415</b>	62	281
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	100	<b>84</b>	73	107
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>404</b>	524	511
Calcium	ppm	ASTM D5185m	3000	<b>1414</b>	1607	1376
Phosphorus	ppm	ASTM D5185m	1150	<b>1007</b>	986	671
Zinc	ppm	ASTM D5185m	1350	<b>1188</b>	1223	845
Sulfur	ppm	ASTM D5185m	4250	<b>3077</b>	3247	2154
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.0</b>	17.4	20.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.3</b>	9.4	8.1
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.7</b>	13.6	13.3



Certificate L2367

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

**Sample No.** : WC0869081

**Lab Number** : 06099782

**Unique Number** : 10898012

**Test Package** : FLEET ( Additional Tests: Glycol )

**Received** : 26 Feb 2024

**Tested** : 28 Feb 2024

**Diagnosed** : 28 Feb 2024 - Jonathan Hester

**DOLE FRESH FRUIT**  
 PO BOX 725, ATTN: MAINTENANCE AND REPAIR  
 NEW CASTLE, DE  
 US 19720

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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)