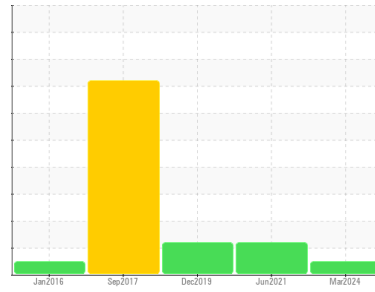




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**DFGS273065**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm. Please specify the component make and model with your next sample.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### 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.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC0910993</b>	WC0590416	WC0422987
Sample Date	Client Info	<b>08 Mar 2024</b>	17 Jun 2021	26 Dec 2019
Machine Age	hrs	<b>11603</b>	9878	8162
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	Changed	Changed
Sample Status		<b>NORMAL</b>	ABNORMAL	ATTENTION

## CONTAMINATION

method	limit/base	current	history1	history2
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

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>6</b>	12	11
Chromium	ppm ASTM D5185m >20	<b>0</b>	<1	<1
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm ASTM D5185m	<b>0</b>	<1	0
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>3</b>	5	6
Lead	ppm ASTM D5185m >40	<b>0</b>	0	<1
Copper	ppm ASTM D5185m >330	<b>0</b>	2	2
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	2	<1
Antimony	ppm ASTM D5185m	<b>---</b>	0	0
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 250	<b>380</b>	316	260
Barium	ppm ASTM D5185m 10	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 100	<b>93</b>	114	104
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 450	<b>424</b>	511	466
Calcium	ppm ASTM D5185m 3000	<b>1472</b>	1442	1337
Phosphorus	ppm ASTM D5185m 1150	<b>860</b>	624	633
Zinc	ppm ASTM D5185m 1350	<b>1064</b>	803	758
Sulfur	ppm ASTM D5185m 4250	<b>3138</b>	2032	2758

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>4</b>	5	3
Sodium	ppm ASTM D5185m >216	<b>28</b>	▲ 286	● 398
Potassium	ppm ASTM D5185m >20	<b>0</b>	6	2

## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm *ASTM D7624 >20	<b>8.4</b>	9.5	9.2
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>21.4</b>	20.7	21.1

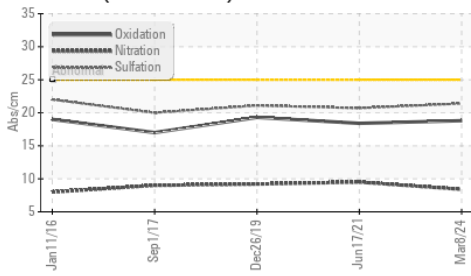
## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>18.8</b>	18.4	19.3
Base Number (BN)	mg KOH/g ASTM D2896 8.5	<b>7.5</b>	7.5	7.5

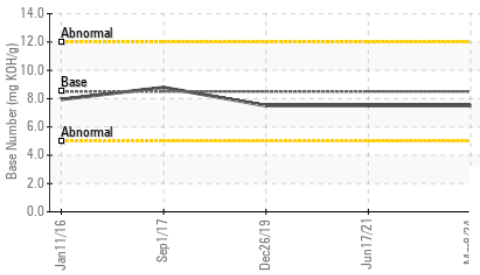


# OIL ANALYSIS REPORT

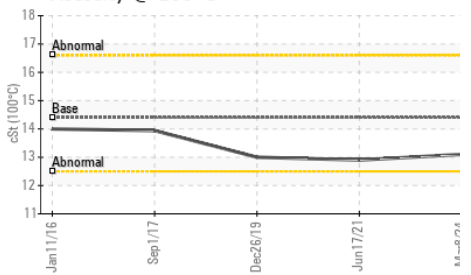
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

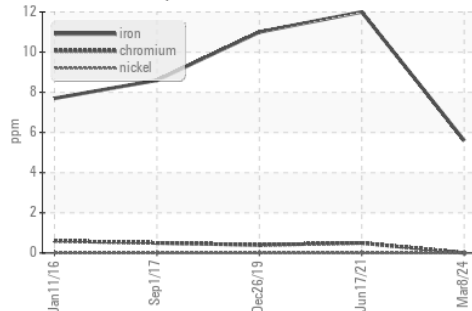


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

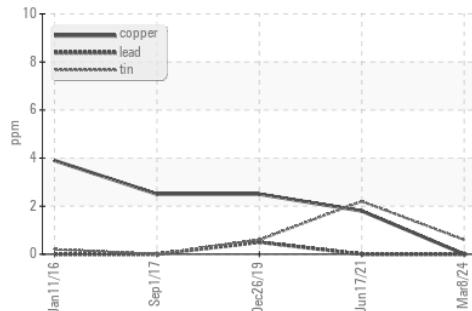
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	13.1	12.9

## GRAPHS

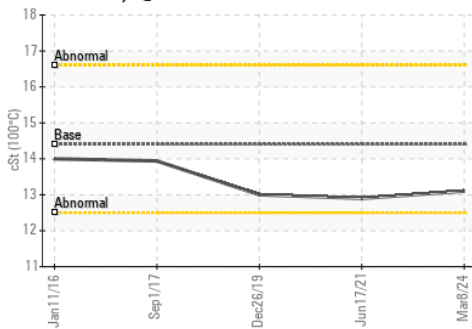
Ferrous Alloys



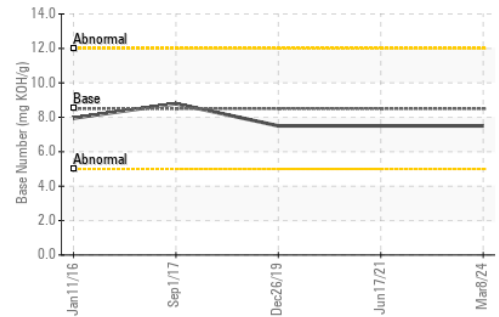
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0910993  
**Lab Number** : 06144938  
**Unique Number** : 10969746  
**Test Package** : FLEET

**Received** : 10 Apr 2024  
**Tested** : 11 Apr 2024  
**Diagnosed** : 11 Apr 2024 - Wes Davis

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

Contact: Timothy Dougherty  
 timothy.dougherty@dole.com  
 T: (302)540-3112

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)