



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
DFGS273274
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 5W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. 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		WC0911227	WC0814650	WC0526065
Sample Date		Client Info		03 May 2024	31 May 2023	22 Dec 2020
Machine Age	hrs	Client Info		13886	12544	9324
Oil Age	hrs	Client Info		0	0	9324
Filter Age	hrs	Client Info		0	0	9324
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	6	12	26
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	4	12
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	1	2	3
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

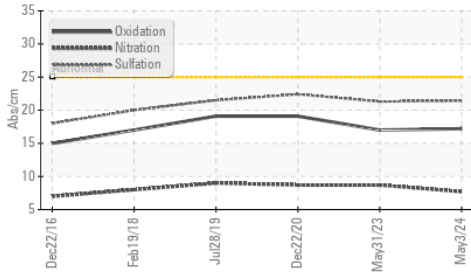
Silicon	ppm	ASTM D5185m	>25	4	6	4
Potassium	ppm	ASTM D5185m	>20	0	3	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.7	8.7	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	21.3	22.4
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

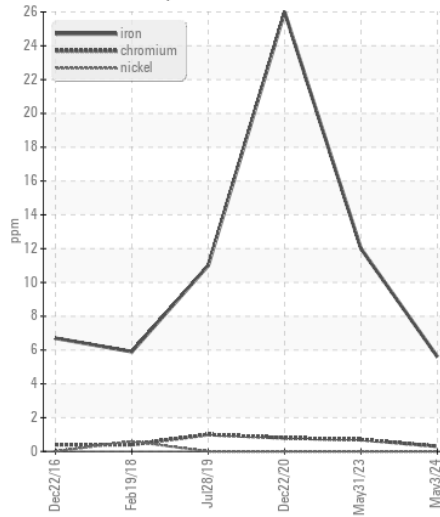
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		49	▲ 388	45
Boron	ppm	ASTM D5185m	250	401	366	327
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	94	91	118
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	408	446	548
Calcium	ppm	ASTM D5185m	3000	1807	1535	1664
Phosphorus	ppm	ASTM D5185m	1150	1052	1017	713
Zinc	ppm	ASTM D5185m	1350	1296	1282	894
Sulfur	ppm	ASTM D5185m	4250	3802	3894	2283
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.2	17.0	19.1
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.9	7.9	8.4
Visc @ 100°C	cSt	ASTM D445	10.9	13.2	13.0	13.5

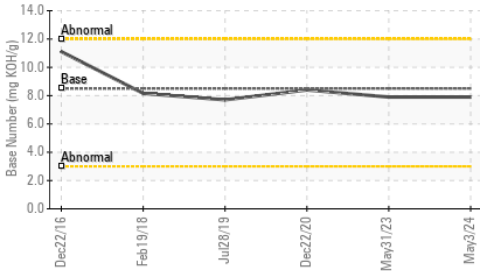
FT-IR (Direct Trend)



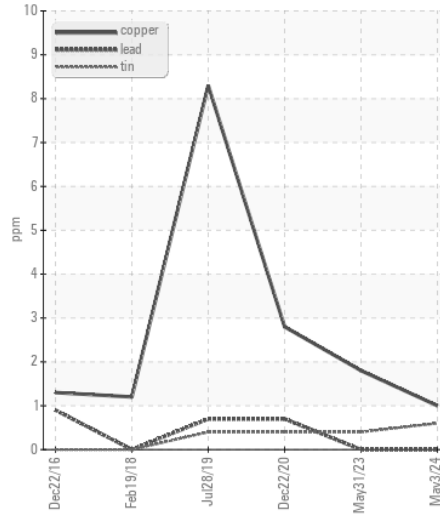
Ferrous Alloys



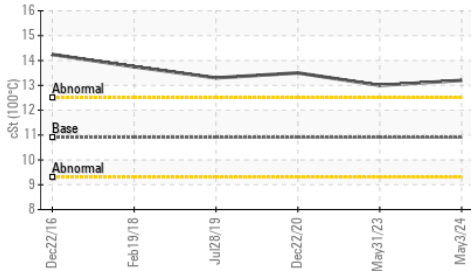
Base Number



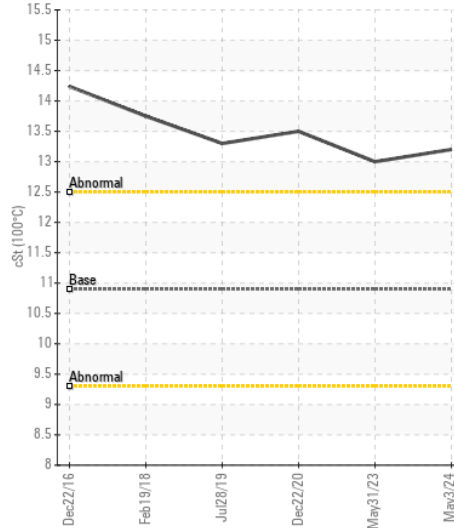
Non-ferrous Metals



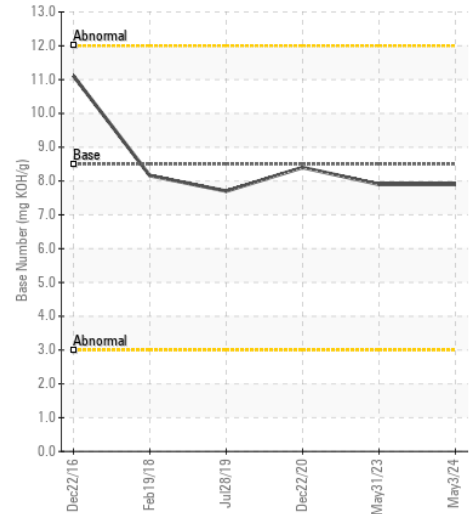
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0911227
Lab Number : 06188424
Unique Number : 11045176
Test Package : FLEET

Received : 22 May 2024
Tested : 24 May 2024
Diagnosed : 24 May 2024 - Wes Davis

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

Contact: LUIS LAPIERRE
 luis.lapierre@dole.com

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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