



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
DFGS273100
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

Sodium and/or potassium levels are high.

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil.

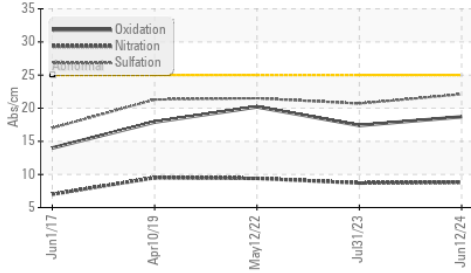
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0950029	WC0838988	WC0688912
Sample Date		Client Info		12 Jun 2024	31 Jul 2023	12 May 2022
Machine Age	hrs	Client Info		12267	10679	9112
Oil Age	hrs	Client Info		12267	10679	0
Filter Age	hrs	Client Info		12267	10679	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

Iron	ppm	ASTM D5185m	>100	12	13	17
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	6	5	6
Lead	ppm	ASTM D5185m	>40	0	<1	1
Copper	ppm	ASTM D5185m	>330	1	2	4
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

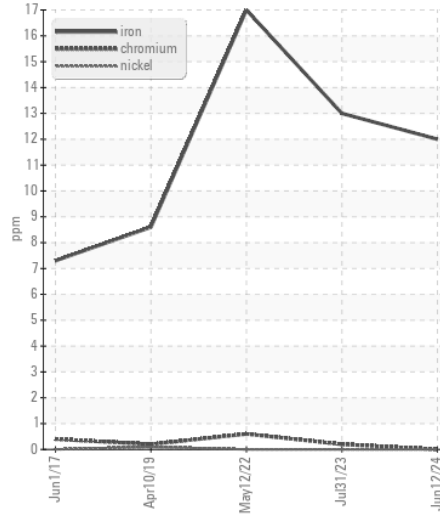
Silicon	ppm	ASTM D5185m	>25	4	4	5
Potassium	ppm	ASTM D5185m	>20	<1	2	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.8	8.7	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.1	20.7	21.5
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

Sodium	ppm	ASTM D5185m	>158	▲ 237	▲ 505	▲ 458
Boron	ppm	ASTM D5185m	250	386	429	372
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	87	85	106
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	450	401	380	452
Calcium	ppm	ASTM D5185m	3000	1400	1621	1469
Phosphorus	ppm	ASTM D5185m	1150	1028	994	822
Zinc	ppm	ASTM D5185m	1350	1217	1266	1072
Sulfur	ppm	ASTM D5185m	4250	3671	3764	3393
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.7	17.4	20.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.4	7.7	7.2
Visc @ 100°C	cSt	ASTM D445	14.4	12.9	12.5	13.0

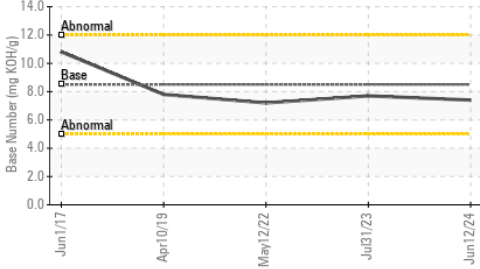
FT-IR (Direct Trend)



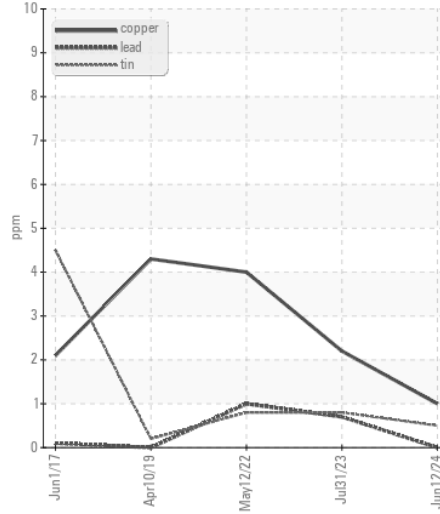
Ferrous Alloys



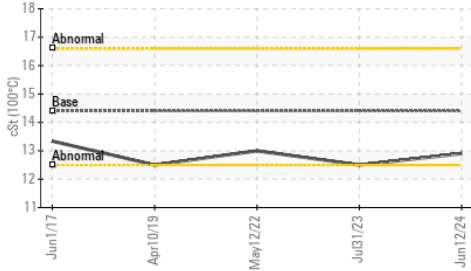
Base Number



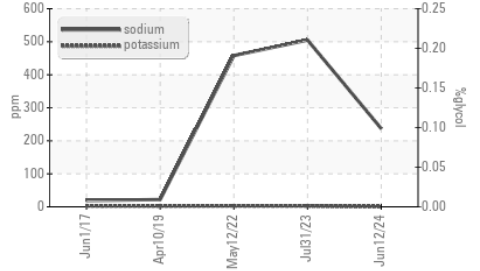
Non-ferrous Metals



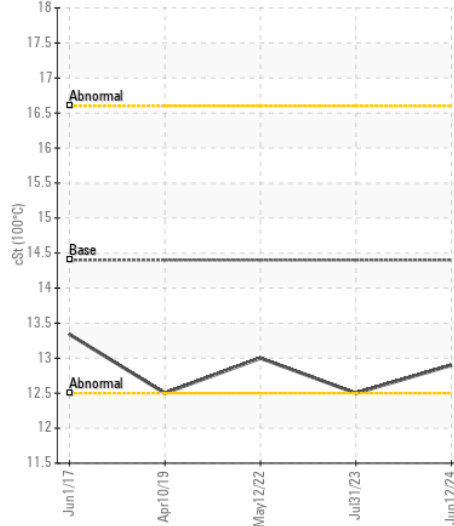
Viscosity @ 100°C



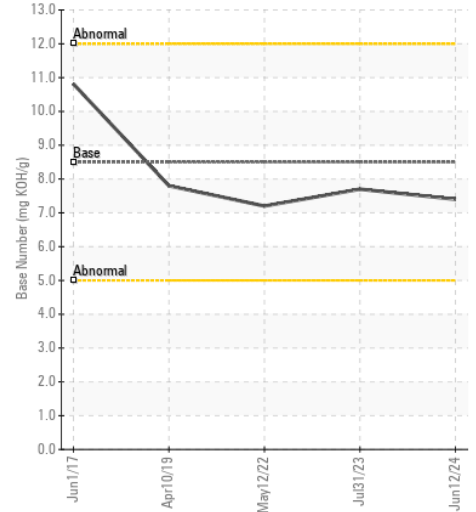
Glycol Contamination



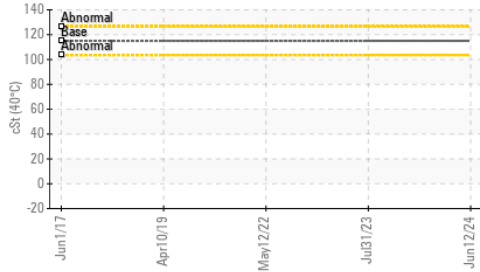
Viscosity @ 100°C



Base Number



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0950029 **Received** : 17 Jul 2024
Lab Number : 06239722 **Tested** : 19 Jul 2024
Unique Number : 11128556 **Diagnosed** : 19 Jul 2024 - Sean Felton
Test Package : FLEET (Additional Tests: Glycol, KV40)

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

Contact: LUIS LAPIERRE
 luis.lapierre@dole.com
 T: (302)652-6344
 F: (302)652-6061

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)