



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
DFGS273261
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

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		WC0911236	WC0779325	WC0641929
Sample Date		Client Info		03 Jun 2024	27 Mar 2023	26 Jan 2022
Machine Age	hrs	Client Info		13789	12010	10524
Oil Age	hrs	Client Info		0	0	10524
Filter Age	hrs	Client Info		0	0	10524
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				ATTENTION	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	11	15	20
Chromium	ppm	ASTM D5185m	>20	<1	2	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	4	9
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	1	2	4
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

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

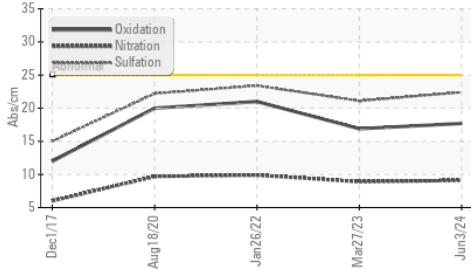
Silicon	ppm	ASTM D5185m	>25	5	6	7
Potassium	ppm	ASTM D5185m	>20	1	3	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	9.1	8.9	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	21.1	23.4
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

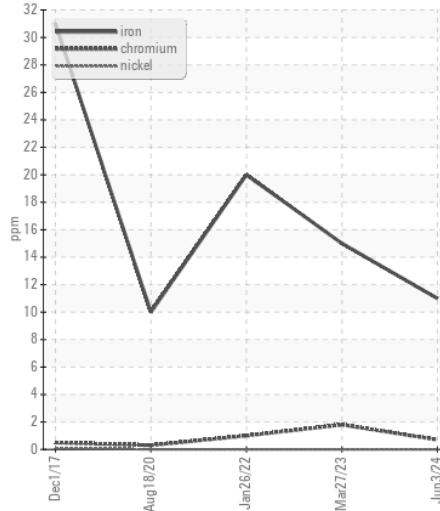
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>216	134	104	363
Boron	ppm	ASTM D5185m	250	372	371	367
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	91	93	111
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	450	436	542	500
Calcium	ppm	ASTM D5185m	3000	1581	1550	1513
Phosphorus	ppm	ASTM D5185m	1150	1109	1047	783
Zinc	ppm	ASTM D5185m	1350	1345	1332	914
Sulfur	ppm	ASTM D5185m	4250	3775	3944	2626
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.7	16.9	21.0
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.6	8.3	8.1
Visc @ 100°C	cSt	ASTM D445	14.4	13.9	13.7	13.4

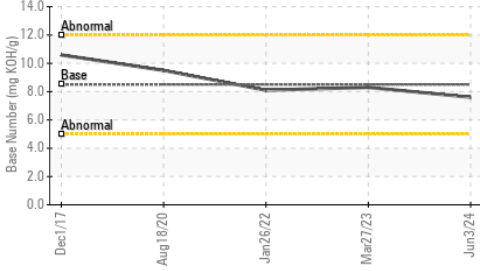
FT-IR (Direct Trend)



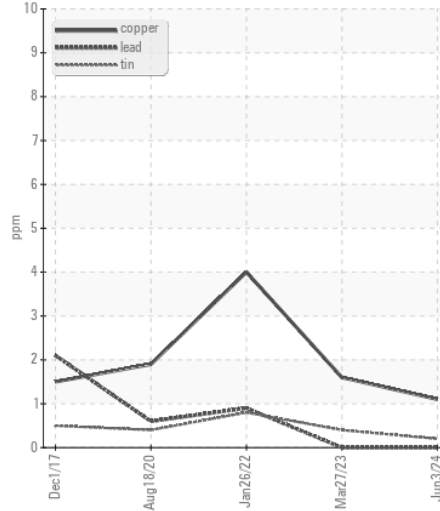
Ferrous Alloys



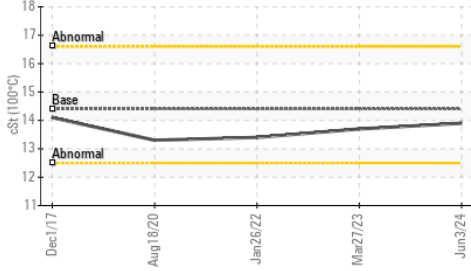
Base Number



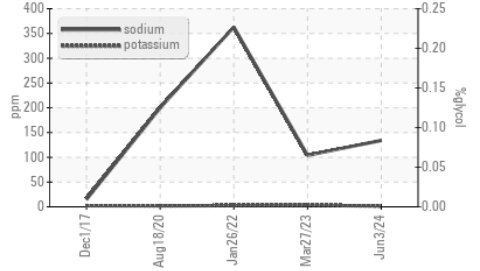
Non-ferrous Metals



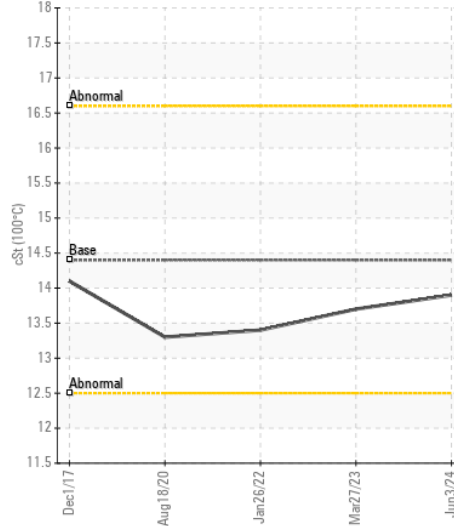
Viscosity @ 100°C



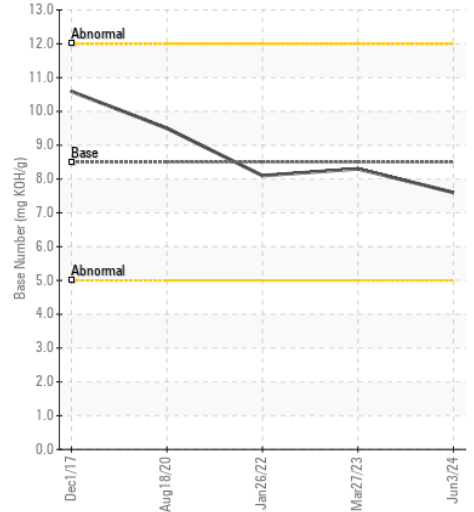
Glycol Contamination



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0911236 **Received** : 17 Jul 2024
Lab Number : 06239725 **Tested** : 19 Jul 2024
Unique Number : 11128559 **Diagnosed** : 19 Jul 2024 - Sean Felton
Test Package : FLEET (Additional Tests: Glycol)

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)