OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
DFGS273113
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check for possible coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

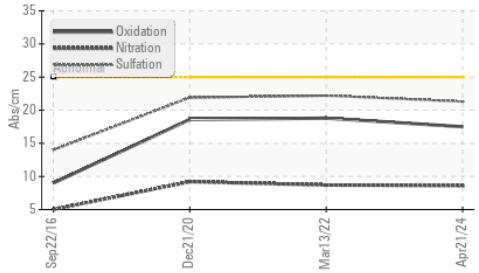
Sodium and/or potassium levels are high.

FLUID CONDITION

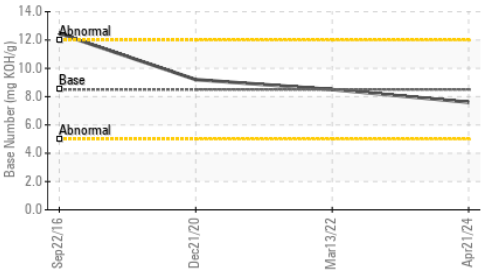
The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0911124	WC0641968	WC0526067
Sample Date		Client Info		21 Apr 2024	13 Mar 2022	21 Dec 2020
Machine Age	hrs	Client Info		15496	12377	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	16	9	10
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	1	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	10	4	3
Lead	ppm	ASTM D5185m	>40	<1	1	<1
Copper	ppm	ASTM D5185m	>330	2	<1	1
Tin	ppm	ASTM D5185m	>15	<1	1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	6	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	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.6	8.7	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	22.2	21.9
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	▲ 176	▲ 264	33
Boron	ppm	ASTM D5185m	250	338	370	316
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	92	101	116
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	494	492	544
Calcium	ppm	ASTM D5185m	3000	1570	1586	1998
Phosphorus	ppm	ASTM D5185m	1150	1054	859	692
Zinc	ppm	ASTM D5185m	1350	1300	1055	870
Sulfur	ppm	ASTM D5185m	4250	3768	2621	2291
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.5	18.8	18.6
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.6	8.5	9.2
Visc @ 100°C	cSt	ASTM D445	14.4	13.2	13.4	13.7

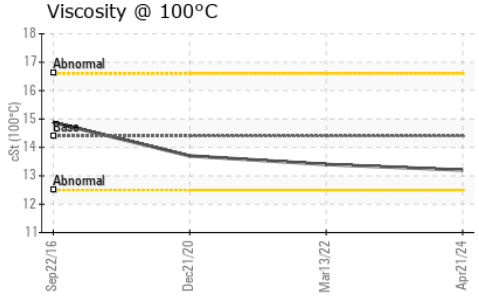
FT-IR (Direct Trend)



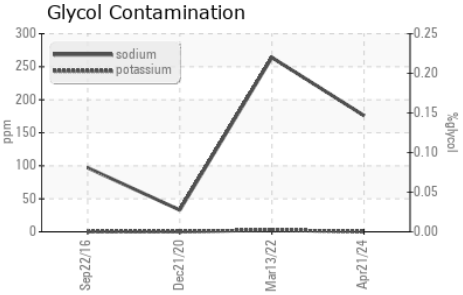
Base Number



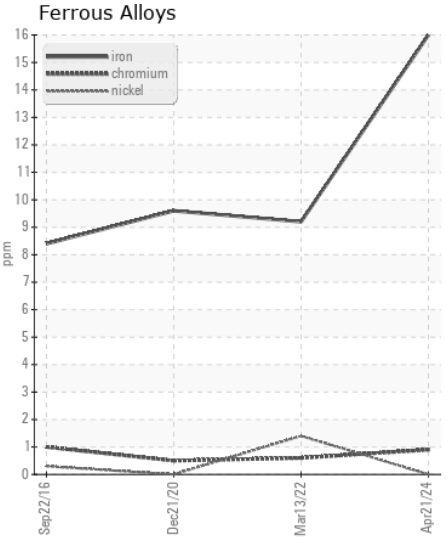
Viscosity @ 100°C



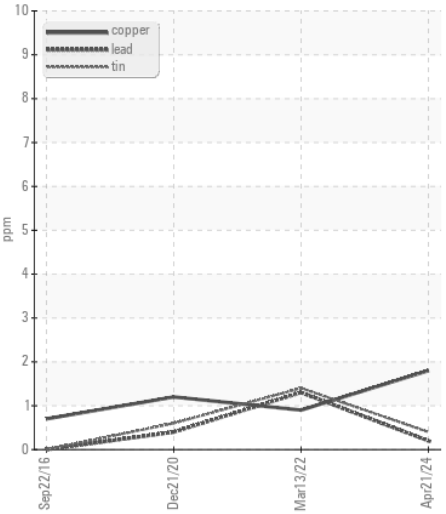
Glycol Contamination



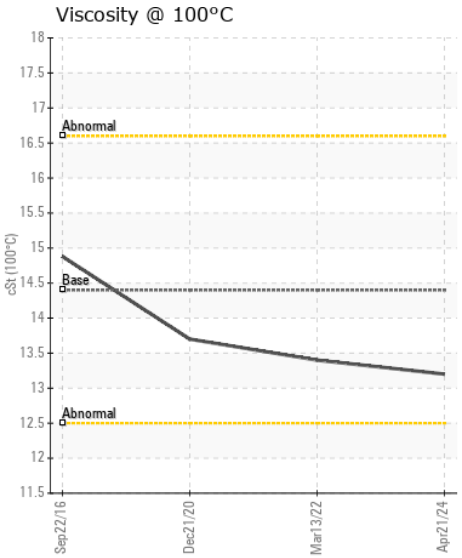
Ferrous Alloys



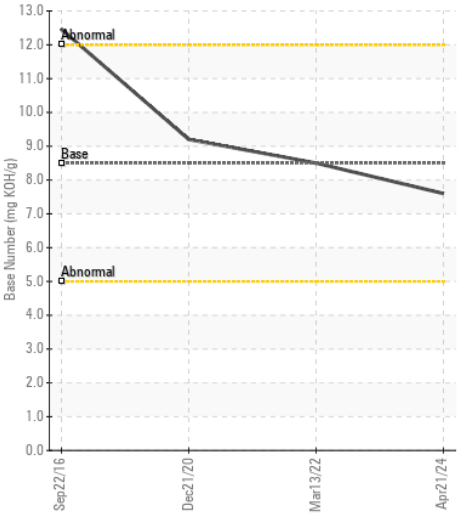
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0911124 **Received** : 22 May 2024
Lab Number : 06188413 **Tested** : 28 May 2024
Unique Number : 11045165 **Diagnosed** : 28 May 2024 - Sean Felton
Test Package : FLEET (Additional Tests: Glycol)

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)

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