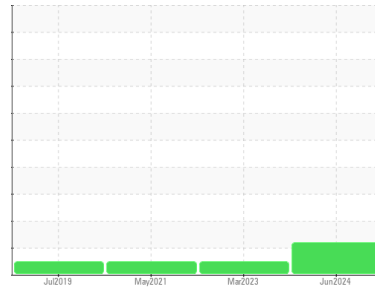




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
TLLG100135

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0949949	WC0779309	WC0552902
Sample Date	Client Info		03 Jun 2024	10 Mar 2023	30 May 2021
Machine Age	hrs	Client Info	6973	5637	3429
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			MARGINAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	6	7	13
Chromium	ppm	ASTM D5185m >20	0	<1	<1
Nickel	ppm	ASTM D5185m >4	0	<1	0
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	3	2	5
Lead	ppm	ASTM D5185m >40	0	0	<1
Copper	ppm	ASTM D5185m >330	<1	4	8
Tin	ppm	ASTM D5185m >15	0	0	<1
Antimony	ppm	ASTM D5185m	---	---	2
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	326	231	203
Barium	ppm	ASTM D5185m 10	0	0	0
Molybdenum	ppm	ASTM D5185m 100	86	75	85
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m 450	428	430	404
Calcium	ppm	ASTM D5185m 3000	1420	1688	2145
Phosphorus	ppm	ASTM D5185m 1150	959	1024	766
Zinc	ppm	ASTM D5185m 1350	1138	1312	904
Sulfur	ppm	ASTM D5185m 4250	3452	4010	2536

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	4	5	5
Sodium	ppm	ASTM D5185m >158	4	9	16
Potassium	ppm	ASTM D5185m >20	0	2	5
Fuel	%	ASTM D3524 >5	▲ 3.6	<1.0	<1.0

INFRA-RED

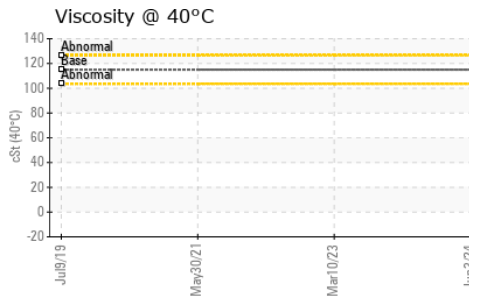
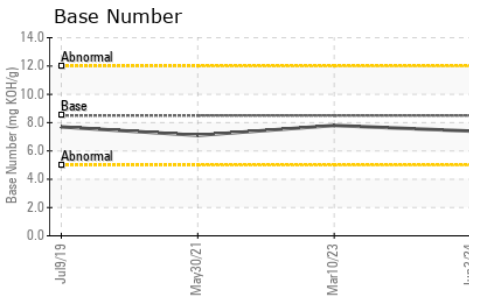
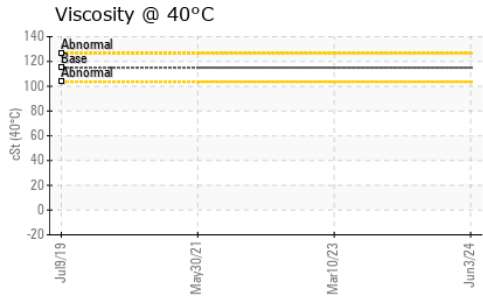
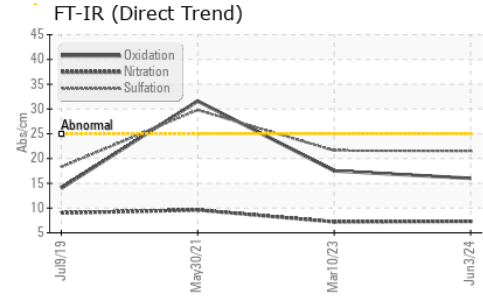
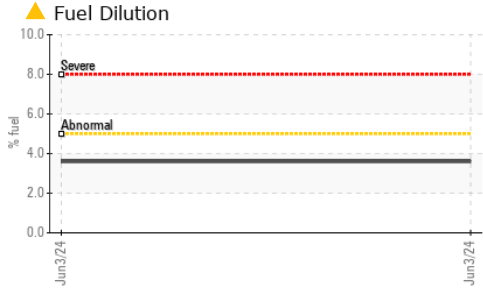
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.1	0.2	0.2
Nitration	Abs/cm	*ASTM D7624 >20	7.3	7.2	9.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	21.5	21.6	29.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.0	17.5	31.6
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	7.4	7.8	7.1



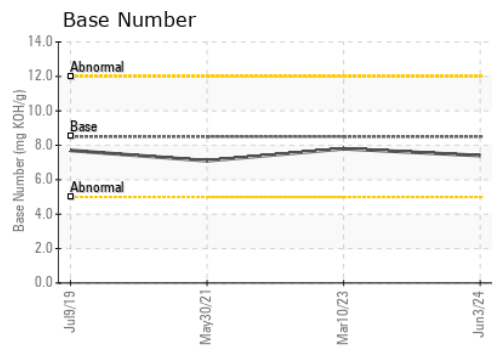
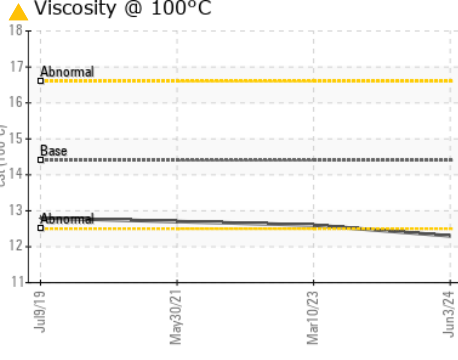
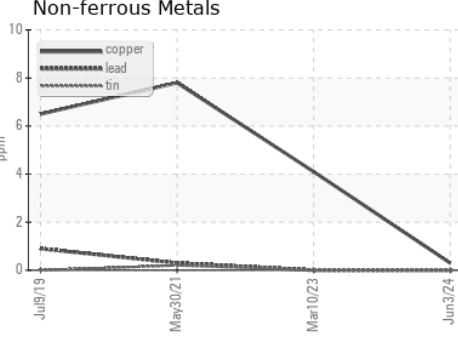
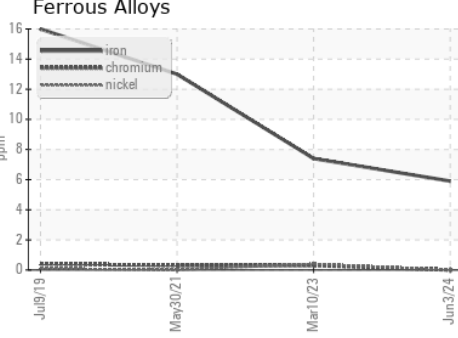
OIL ANALYSIS REPORT



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	▲ 12.3	12.6	12.7

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0949949 **Received** : 17 Jul 2024
Lab Number : 06239723 **Tested** : 19 Jul 2024
Unique Number : 11128557 **Diagnosed** : 19 Jul 2024 - Don Baldrige
Test Package : FLEET (Additional Tests: FuelDilution, KV40, PercentFuel)

DOLE FRESH FRUIT
 PO BOX 725, ATTN: MAINTENANCE AND REPAIR
 NEW CASTLE, DE 19720
 Contact: Timothy Dougherty
 timothy.dougherty@dole.com
 T: (302)540-3112
 F:

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)