



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
KENWORTH 413060
 Component
Diesel Engine
 Fluid
MOBIL DELVAC ELITE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0111291	GFL0111265	GFL0111350
Sample Date		Client Info		19 Jun 2024	05 Apr 2024	26 Jan 2024
Machine Age	hrs	Client Info		3138	2691	2262
Oil Age	hrs	Client Info		447	429	500
Filter Age	hrs	Client Info		0	0	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	21	12	6
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	12	8	5
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	1	1	<1
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

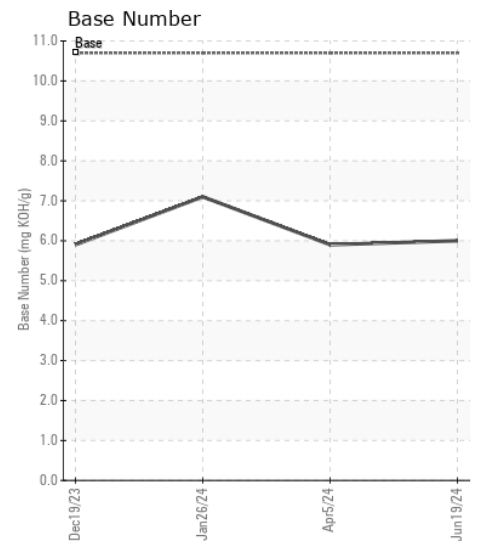
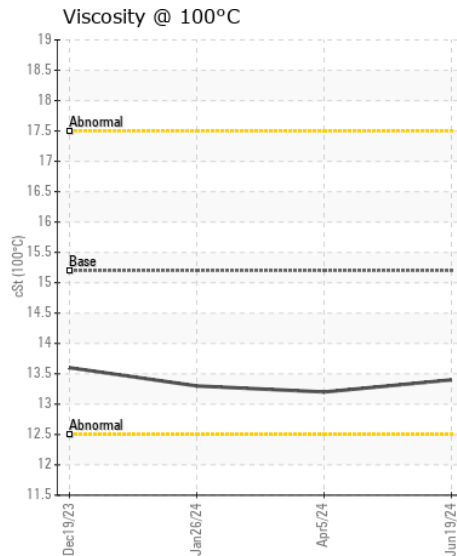
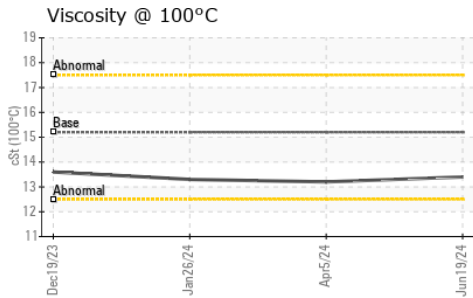
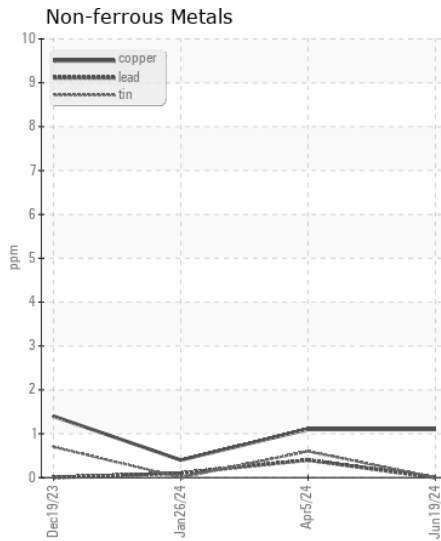
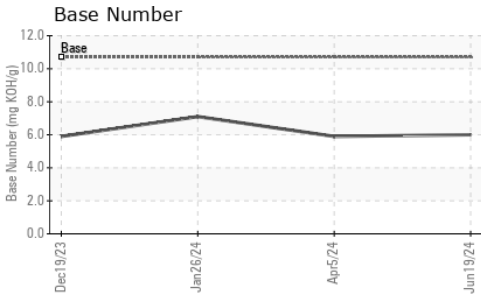
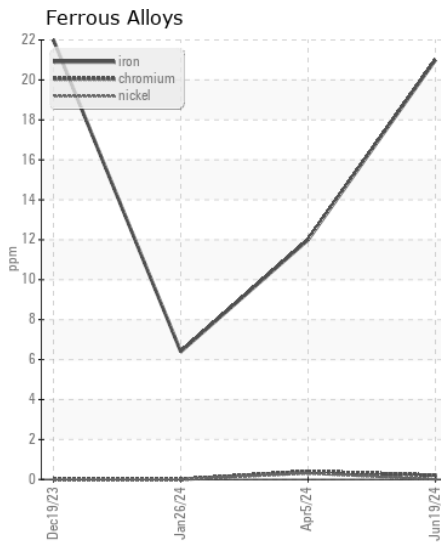
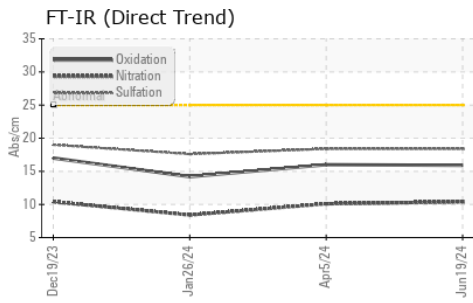
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	11	10	8
Potassium	ppm	ASTM D5185m	>20	26	15	6
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	0.3	0.3	0.1
Nitration	Abs/cm	*ASTM D7624	>20	10.4	10.1	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.4	18.4	17.6
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		3	1	3
Boron	ppm	ASTM D5185m		70	88	119
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		149	140	118
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		776	720	629
Calcium	ppm	ASTM D5185m		1417	1330	1153
Phosphorus	ppm	ASTM D5185m		834	774	682
Zinc	ppm	ASTM D5185m		1004	908	767
Sulfur	ppm	ASTM D5185m		3579	3530	2949
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	16.0	14.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	6.0	5.9	7.1
Visc @ 100°C	cSt	ASTM D445	15.2	13.4	13.2	13.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0111291
Lab Number : 06241414
Unique Number : 11130248
Test Package : FLEET

Received : 19 Jul 2024
Tested : 20 Jul 2024
Diagnosed : 20 Jul 2024 - Wes Davis

GFL Environmental - 981 - Port Arthur Hauling
 1000 S Business Park Dr
 Port Arthur, TX
 US 77640

Contact: MICHAEL KAY
 mkay@gflenv.com
 T: (336)660-9331

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)

F: