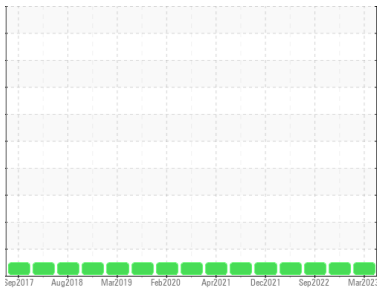
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
(ZKG 1742) [W-1349293]
Machine Id
KEN F-150
Component
Gasoline Engine
Fluid
KENDALL GT-1 HIGH PERFORMANCE SYNTH 5W20 (8 QTS)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0680174**	WC0606620	WC0493967
Sample Date		Client Info		**02 Mar 2023**	10 Nov 2022	02 Sep 2022
Machine Age	mls	Client Info		**79765**	76382	70275
Oil Age	mls	Client Info		**3384**	6107	3769
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	**<1.0**	<1.0	<1.0
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	>150	**4**	6	6
Chromium	ppm	ASTM D5185m	>20	**0**	<1	0
Nickel	ppm	ASTM D5185m	>5	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>40	**1**	1	1
Lead	ppm	ASTM D5185m	>50	**<1**	<1	1
Copper	ppm	ASTM D5185m	>155	**<1**	1	1
Tin	ppm	ASTM D5185m	>10	**0**	<1	<1
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**47**	25	43
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**116**	102	48
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**426**	433	553
Calcium	ppm	ASTM D5185m		**1276**	1182	837
Phosphorus	ppm	ASTM D5185m	770	**624**	620	550
Zinc	ppm	ASTM D5185m	850	**811**	719	615
Sulfur	ppm	ASTM D5185m		**2110**	2366	2057

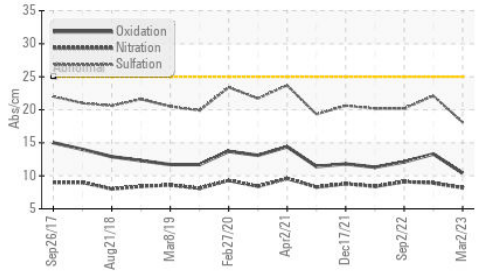
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	**6**	6	6
Sodium	ppm	ASTM D5185m	>400	**<1**	0	1
Potassium	ppm	ASTM D5185m	>20	**2**	0	3

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		**0.1**	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	**8.2**	8.9	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	**18.1**	22.1	20.2

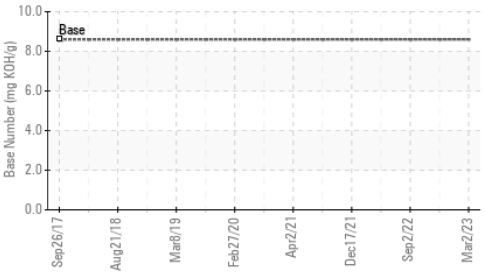
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**10.4**	13.3	12.1
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.29**	1.12	1.320

OIL ANALYSIS REPORT

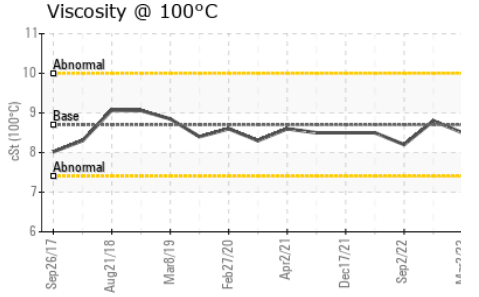
FT-IR (Direct Trend)



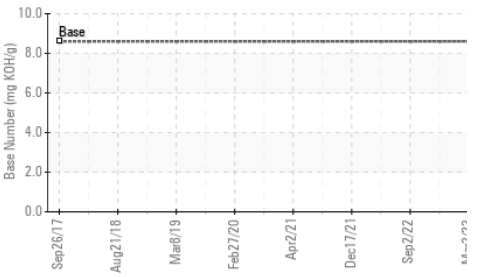
Base Number



Viscosity @ 100°C



Base Number

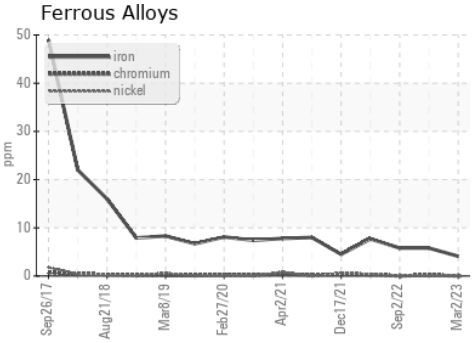


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

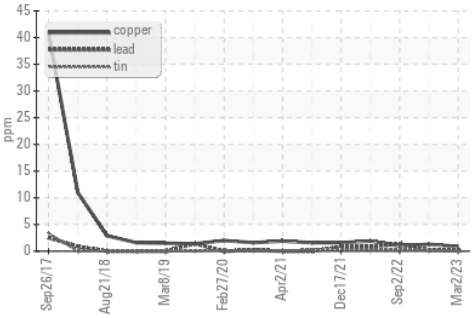
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	8.7	**8.5**	8.8	8.2

GRAPHS

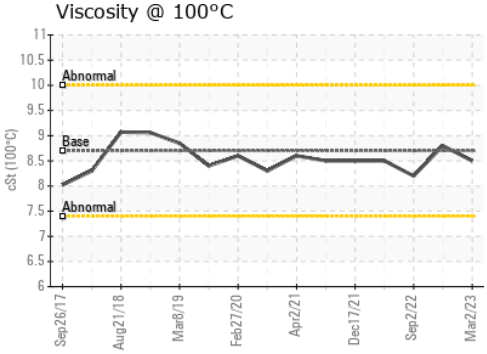
Ferrous Alloys



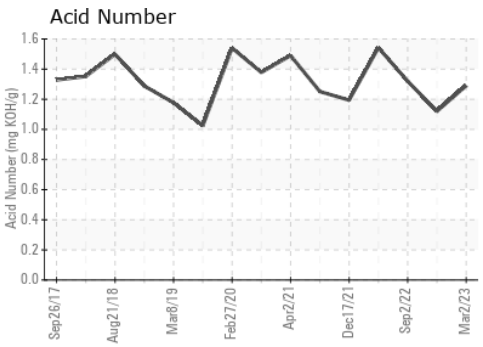
Non-ferrous Metals



Viscosity @ 100°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0680174
Lab Number : 05784750
Unique Number : 10364420
Test Package : FLEET

Received : 07 Mar 2023
Tested : 14 Mar 2023
Diagnosed : 14 Mar 2023 - Jonathan Hester

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)

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