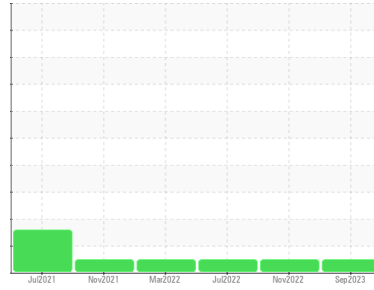




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
(LLC9798)
 Machine Id
Terrie 2020
 Component
Gasoline Engine
 Fluid
KENDALL 10W30 (5 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		WC0680177	WC0606622	WC0680165
Sample Date	Client Info		20 Sep 2023	23 Nov 2022	08 Jul 2022
Machine Age	mls	Client Info	31101	24137	20290
Oil Age	mls	Client Info	6964	3847	4611
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	6	4	5
Chromium	ppm	ASTM D5185m >20	<1	<1	<1
Nickel	ppm	ASTM D5185m >5	<1	0	0
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >40	2	2	3
Lead	ppm	ASTM D5185m >50	0	0	0
Copper	ppm	ASTM D5185m >155	2	1	2
Tin	ppm	ASTM D5185m >10	0	0	0
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	14	15	28
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	71	72	104
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	324	350	391
Calcium	ppm	ASTM D5185m	1201	1102	1154
Phosphorus	ppm	ASTM D5185m	582	572	585
Zinc	ppm	ASTM D5185m	701	678	740
Sulfur	ppm	ASTM D5185m	2312	2219	2236

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >30	13	11	12
Sodium	ppm	ASTM D5185m >400	<1	0	0
Potassium	ppm	ASTM D5185m >20	2	0	1
Fuel	%	ASTM D3524 >4.0	<1.0	<1.0	<1.0

INFRA-RED

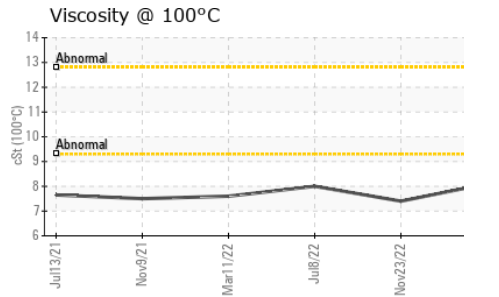
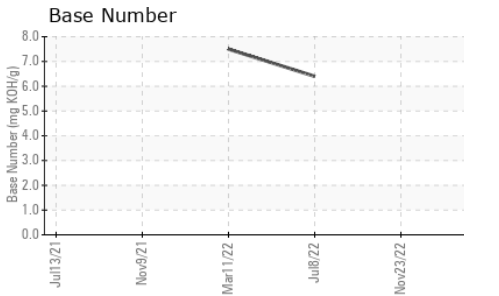
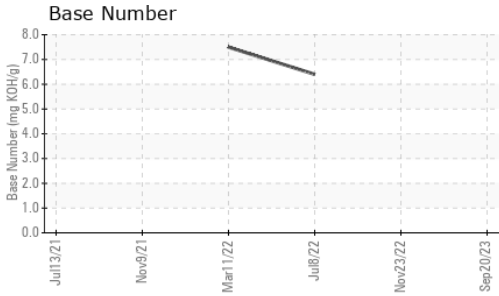
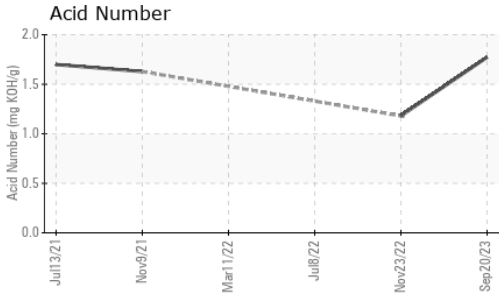
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0.1	0.2
Nitration	Abs/cm	*ASTM D7624 >20	9.9	9.9	9.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	19.8	19.1	20.0

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	13.2	11.1	12.8
Acid Number (AN)	mg KOH/g	ASTM D8045	1.773	1.18	---
Base Number (BN)	mg KOH/g	ASTM D2896	---	---	6.4



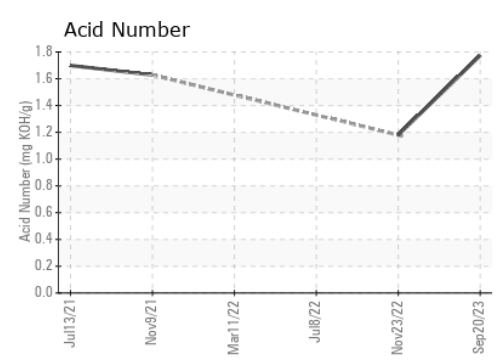
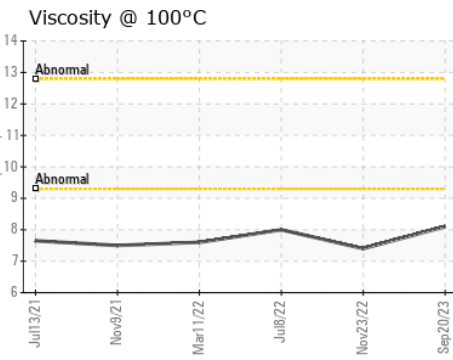
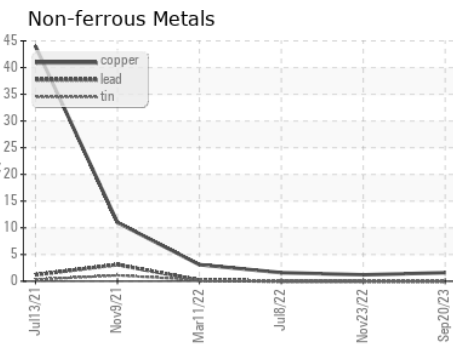
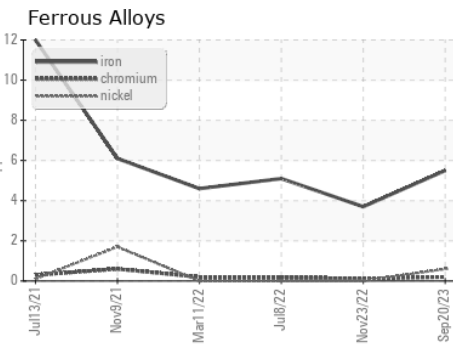
OIL ANALYSIS REPORT



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	8.1	7.4	8

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0680177 **Received** : 25 Sep 2023
Lab Number : 05959463 **Diagnosed** : 29 Sep 2023
Unique Number : 10660676 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

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)

WEARCHECK USA
 501 Madison Ave
 Cary, NC
 US 27513
 Contact: CATHERINE ANASTASIO
 CANASTASIO@WEARCHECKUSA.COM

T:
F: (919)379-4050