



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
3309

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 40 (--- QTS)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm. Please specify the component make and model with your next sample.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	RW0004701	---	---
Sample Date	Client Info	06 Sep 2023	---	---
Machine Age	hrs Client Info	435	---	---
Oil Age	hrs Client Info	167	---	---
Oil Changed	Client Info	Changed	---	---
Sample Status		NORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	---	---
Glycol	WC Method	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	4	---	---
Chromium	ppm ASTM D5185m >20	<1	---	---
Nickel	ppm ASTM D5185m >4	0	---	---
Titanium	ppm ASTM D5185m	84	---	---
Silver	ppm ASTM D5185m >3	0	---	---
Aluminum	ppm ASTM D5185m >20	2	---	---
Lead	ppm ASTM D5185m >40	0	---	---
Copper	ppm ASTM D5185m >330	<1	---	---
Tin	ppm ASTM D5185m >15	0	---	---
Vanadium	ppm ASTM D5185m	<1	---	---
Cadmium	ppm ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 250	173	---	---
Barium	ppm ASTM D5185m 10	2	---	---
Molybdenum	ppm ASTM D5185m 100	9	---	---
Manganese	ppm ASTM D5185m	<1	---	---
Magnesium	ppm ASTM D5185m 450	414	---	---
Calcium	ppm ASTM D5185m 3000	1634	---	---
Phosphorus	ppm ASTM D5185m 1150	1022	---	---
Zinc	ppm ASTM D5185m 1350	1201	---	---
Sulfur	ppm ASTM D5185m 4250	4028	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	11	---	---
Sodium	ppm ASTM D5185m >216	3	---	---
Potassium	ppm ASTM D5185m >20	3	---	---

INFRA-RED

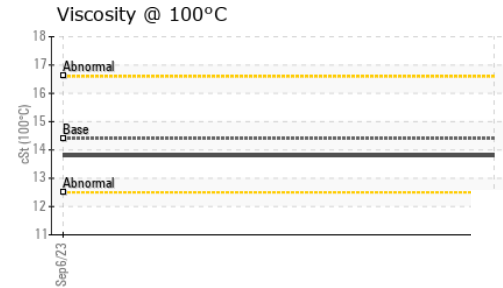
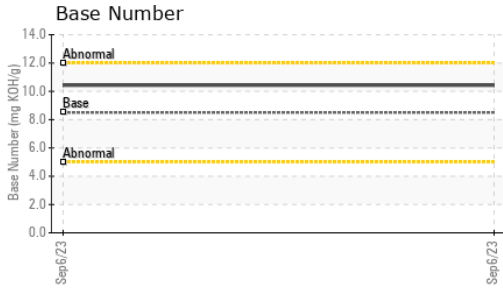
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.1	---	---
Nitration	Abs/cm *ASTM D7624 >20	7.9	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	18.2	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	14.8	---	---
Base Number (BN)	mg KOH/g ASTM D2896 8.5	10.43	---	---



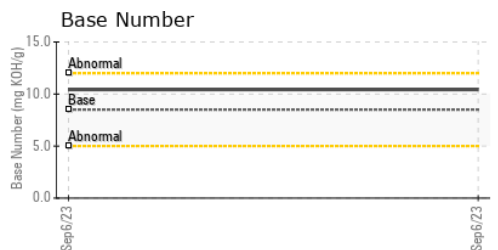
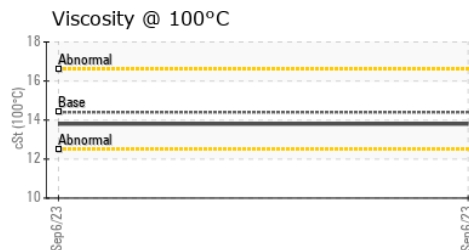
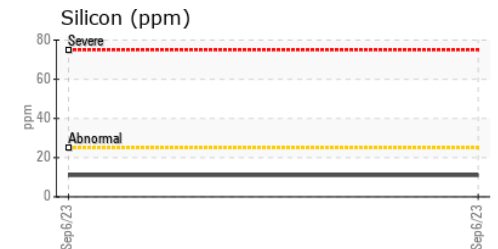
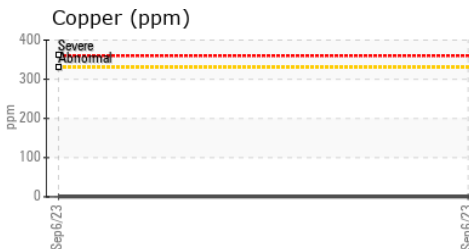
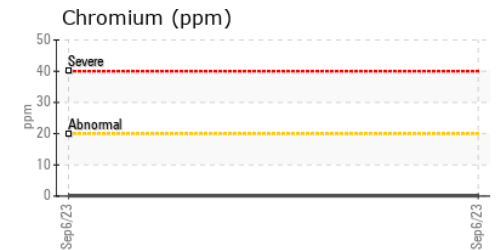
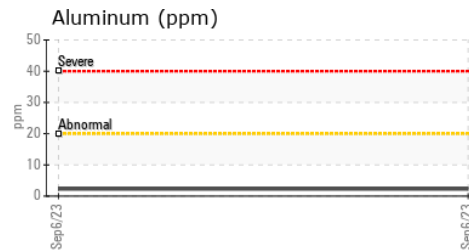
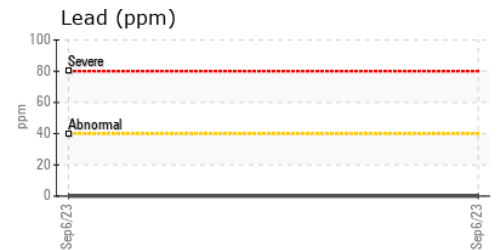
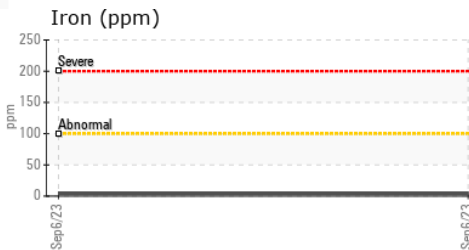
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	13.8	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RW0004701 **Received** : 28 Sep 2023
Lab Number : 05963693 **Diagnosed** : 29 Sep 2023
Unique Number : 10670244 **Diagnostician** : Wes Davis
Test Package : MOB 2

NEWKIRK ELECTRIC
 1875 ROBERTS ST.
 MUSKEGON, MI
 US 49442

Contact: ERIC KING
 ewking@newkirk-electric.com
 T: (231)206-6131
 F: (231)724-4090

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)