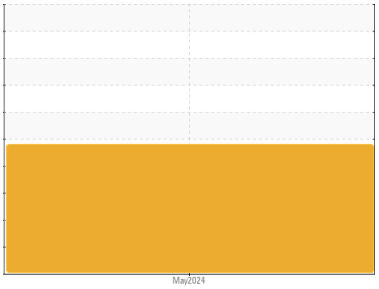
PROBLEM SUMMARY

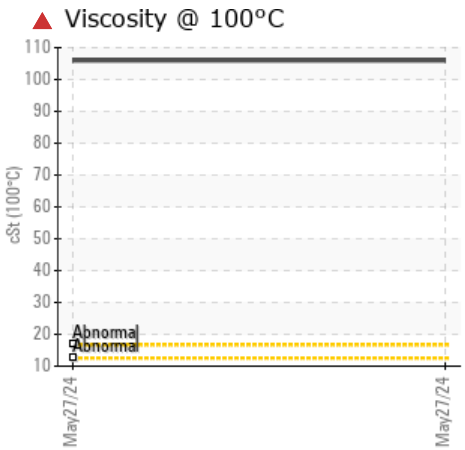
Sample Rating Trend

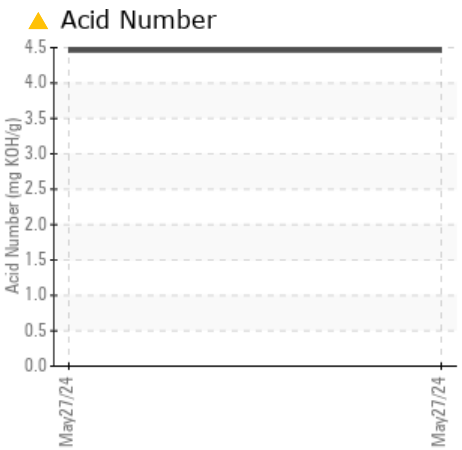


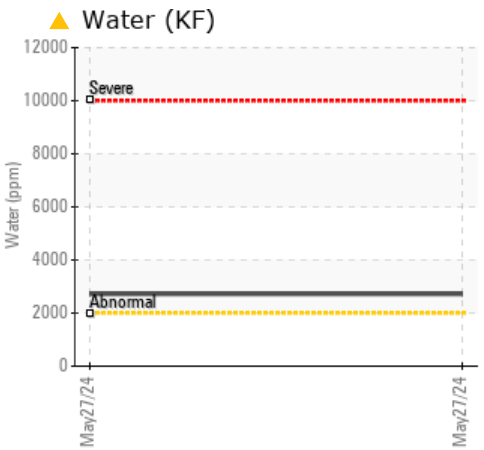
WATER

Machine Id
DODGE Ram 1500
Component
Diesel Engine
Fluid
{not provided} (6 QTS)

COMPONENT CONDITION SUMMARY







RECOMMENDATION

Recommend drain oil if not already done and flush with cleaner before refilling with oil. Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory data and diagnostic comment updates.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	---	---
Water	%	ASTM D6304	>0.2	▲ **0.272**	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ **2720**	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		▲ **4.46**	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		▲ **3.5**	---	---
Visc @ 100°C	cSt	ASTM D445		▲ **106.0**	---	---

Customer Id: KIMNAS
Sample No.: KFS0004943
Lab Number: 06196256
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

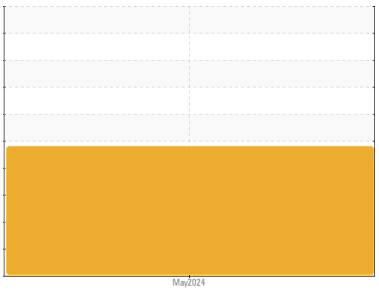
RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Recommend drain oil if not already done and flush with cleaner before refilling with oil.
Flush System	---	---	?	Recommend drain oil if not already done and flush with cleaner before refilling with oil.
Change Filter	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
DODGE Ram 1500
Component
Diesel Engine
Fluid
{not provided} (6 QTS)

DIAGNOSIS

Recommendation
Recommend drain oil if not already done and flush with cleaner before refilling with oil. Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory data and diagnostic comment updates.

Wear
All component wear rates are normal.

Contamination
There is a light concentration of water present in the oil. Test for glycol is negative.

Fluid Condition
The AN level is above the recommended limit. The oil viscosity is higher than normal. The BN level is low. The oil is oxi-polymerized and beyond the limit of serviceability.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**KFS0004943**	---	---
Sample Date		Client Info		**27 May 2024**	---	---
Machine Age	mls	Client Info		**0**	---	---
Oil Age	mls	Client Info		**6000**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**SEVERE**	---	---

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	**88**	---	---
Chromium	ppm	ASTM D5185m	>20	**2**	---	---
Nickel	ppm	ASTM D5185m	>4	**0**	---	---
Titanium	ppm	ASTM D5185m		**0**	---	---
Silver	ppm	ASTM D5185m	>3	**0**	---	---
Aluminum	ppm	ASTM D5185m	>20	**8**	---	---
Lead	ppm	ASTM D5185m	>40	**0**	---	---
Copper	ppm	ASTM D5185m	>330	**86**	---	---
Tin	ppm	ASTM D5185m	>15	**<1**	---	---
Vanadium	ppm	ASTM D5185m		**0**	---	---
Cadmium	ppm	ASTM D5185m		**0**	---	---

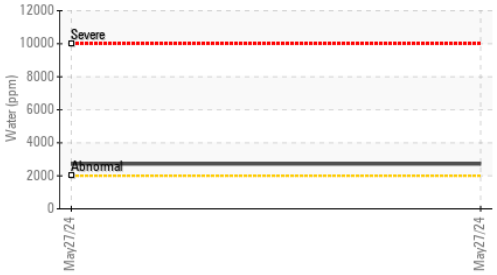
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**17**	---	---
Barium	ppm	ASTM D5185m		**<1**	---	---
Molybdenum	ppm	ASTM D5185m		**118**	---	---
Manganese	ppm	ASTM D5185m		**12**	---	---
Magnesium	ppm	ASTM D5185m		**425**	---	---
Calcium	ppm	ASTM D5185m		**1059**	---	---
Phosphorus	ppm	ASTM D5185m		**607**	---	---
Zinc	ppm	ASTM D5185m		**706**	---	---
Sulfur	ppm	ASTM D5185m		**1776**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**15**	---	---
Sodium	ppm	ASTM D5185m		**4**	---	---
Potassium	ppm	ASTM D5185m	>20	**4**	---	---
Water	%	ASTM D6304	>0.2	▲ **0.272**	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ **2720**	---	---

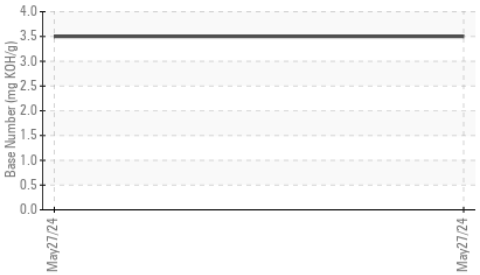
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.1**	---	---
Nitration	Abs/cm	*ASTM D7624	>20	**18.1**	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	**26.3**	---	---

OIL ANALYSIS REPORT

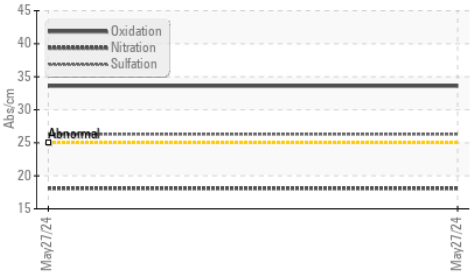
Water (KF)



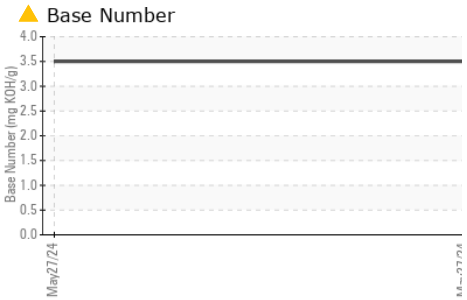
Base Number



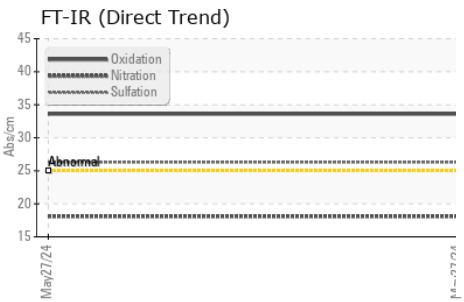
FT-IR (Direct Trend)



Base Number



FT-IR (Direct Trend)



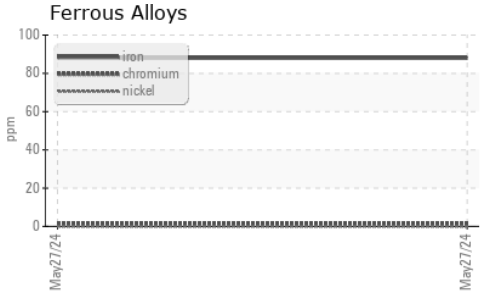
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**33.6**	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		▲ **4.46**	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		▲ **3.5**	---	---

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**	---	---

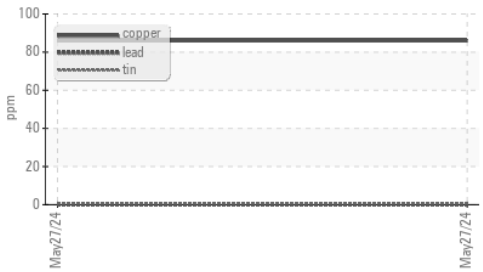
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445		▲ **106.0**	---	---

GRAPHS

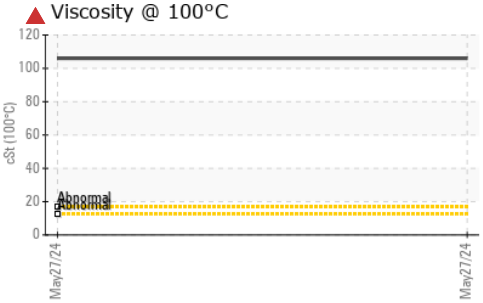
Ferrous Alloys



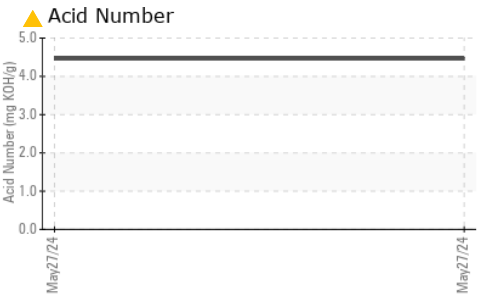
Non-ferrous Metals



Viscosity @ 100°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0004943 **Received** : 31 May 2024
Lab Number : 06196256 **Tested** : 12 Jun 2024
Unique Number : 11058379 **Diagnosed** : 12 Jun 2024 - Doug Bogart
Test Package : FLEET (Additional Tests: KF, TAN MAN)

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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Report Id: KIMNAS [WUSCAR] 06196256 (Generated: 06/12/2024 17:38:21) Rev: 3

Submitted By: JERRY BAILEY