

# PROBLEM SUMMARY

Sample Rating Trend

WEAR

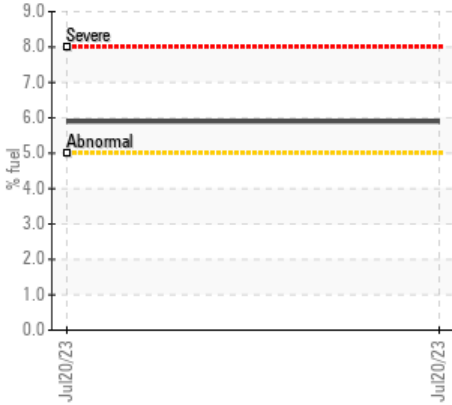


Machine Id  
**DODGE 2022 DODGE 3500**  
Component  
**Diesel Engine**  
Fluid  
**NOT GIVEN (--- QTS)**

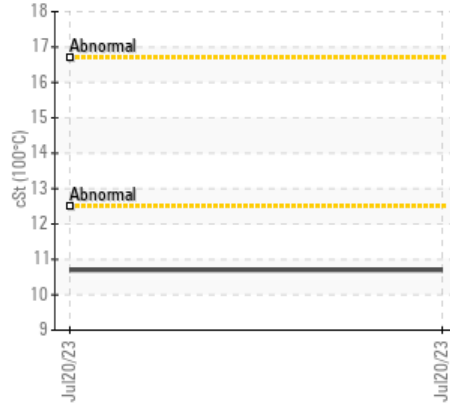


## COMPONENT CONDITION SUMMARY

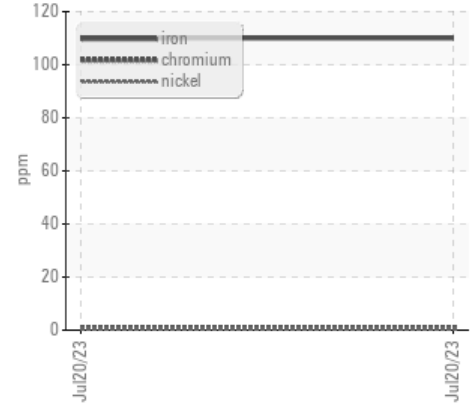
### ▲ Fuel Dilution



### ▲ Viscosity @ 100°C



### ▲ Ferrous Alloys



## RECOMMENDATION

We advise that you check the fuel injection system.  
We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	---	---
Iron	ppm	ASTM D5185m	>100	▲ <b>110</b>	---	---
Fuel	%	ASTM D3524	>5	▲ <b>5.9</b>	---	---
Visc @ 100°C	cSt	ASTM D445		▲ <b>10.7</b>	---	---

Customer Id: OUTPUT  
Sample No.: RP0038302  
Lab Number: 05934962  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

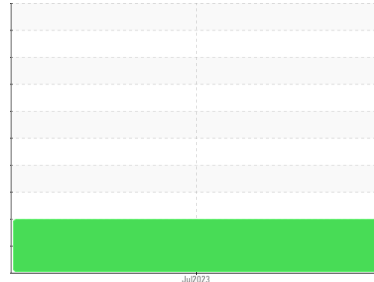
Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Fuel/injector System	---	---	?	We advise that you check the fuel injection system.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**DODGE 2022 DODGE 3500**  
 Component  
**Diesel Engine**  
 Fluid  
**NOT GIVEN (--- QTS)**

**DIAGNOSIS**

- Recommendation**  
 We advise that you check the fuel injection system. We recommend an early resample to monitor this condition.
- Wear**  
 Cylinder, crank, or cam shaft wear is indicated.
- Contamination**  
 There is a moderate amount of fuel present in the oil.
- Fluid Condition**  
 Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

**SAMPLE INFORMATION**

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>RP0038302</b>	---	---
Sample Date	Client Info		<b>20 Jul 2023</b>	---	---
Machine Age	mls Client Info		<b>0</b>	---	---
Oil Age	mls Client Info		<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

**CONTAMINATION**

	method	limit/base	current	history1	history2
Glycol	WC Method		<b>NEG</b>	---	---

**WEAR METALS**

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m	>100	<b>▲ 110</b>	---	---
Chromium	ppm ASTM D5185m	>20	<b>1</b>	---	---
Nickel	ppm ASTM D5185m	>4	<b>&lt;1</b>	---	---
Titanium	ppm ASTM D5185m		<b>0</b>	---	---
Silver	ppm ASTM D5185m	>3	<b>&lt;1</b>	---	---
Aluminum	ppm ASTM D5185m	>20	<b>15</b>	---	---
Lead	ppm ASTM D5185m	>40	<b>0</b>	---	---
Copper	ppm ASTM D5185m	>330	<b>11</b>	---	---
Tin	ppm ASTM D5185m	>15	<b>&lt;1</b>	---	---
Vanadium	ppm ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm ASTM D5185m		<b>0</b>	---	---

**ADDITIVES**

	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m		<b>9</b>	---	---
Barium	ppm ASTM D5185m		<b>2</b>	---	---
Molybdenum	ppm ASTM D5185m		<b>56</b>	---	---
Manganese	ppm ASTM D5185m		<b>2</b>	---	---
Magnesium	ppm ASTM D5185m		<b>858</b>	---	---
Calcium	ppm ASTM D5185m		<b>915</b>	---	---
Phosphorus	ppm ASTM D5185m		<b>932</b>	---	---
Zinc	ppm ASTM D5185m		<b>1120</b>	---	---

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>25	<b>23</b>	---	---
Sodium	ppm ASTM D5185m		<b>&lt;1</b>	---	---
Potassium	ppm ASTM D5185m	>20	<b>53</b>	---	---
Fuel	% ASTM D3524	>5	<b>▲ 5.9</b>	---	---

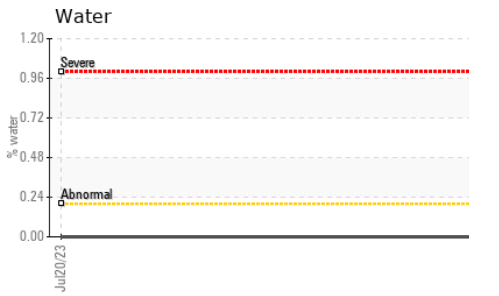
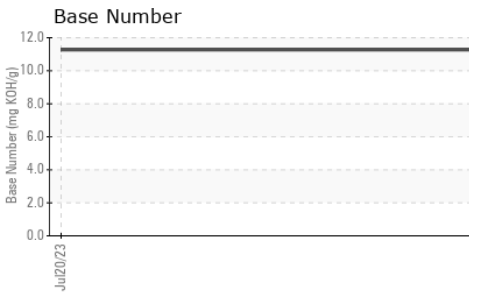
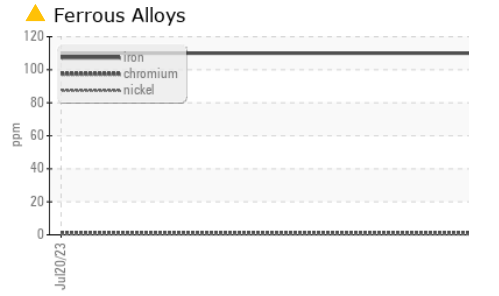
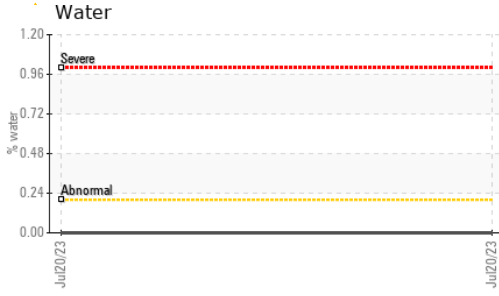
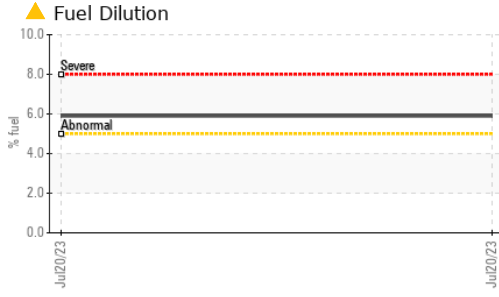
**INFRA-RED**

	method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	>3	<b>0.3</b>	---	---
Nitration	Abs/cm *ASTM D7624	>20	<b>8.7</b>	---	---
Sulfation	Abs/.1mm *ASTM D7415	>30	<b>18.5</b>	---	---

**FLUID DEGRADATION**

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	<b>15.2</b>	---	---
Base Number (BN)	mg KOH/g ASTM D2896		<b>11.27</b>	---	---

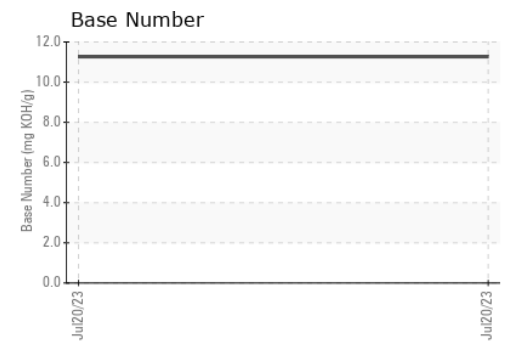
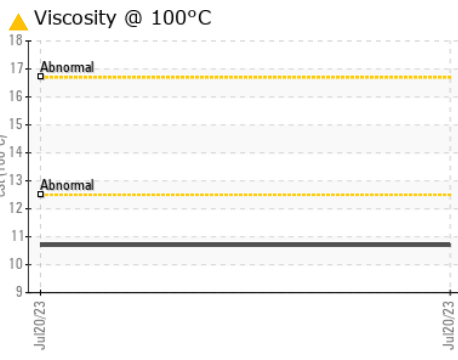
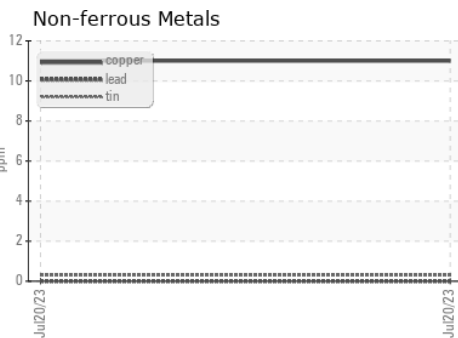
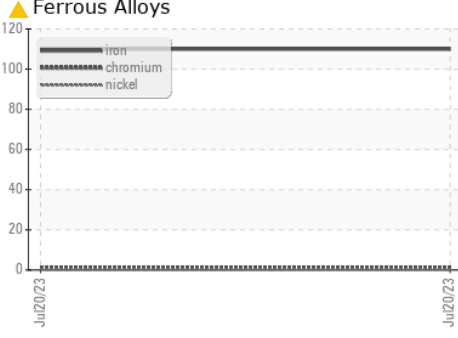
# OIL ANALYSIS REPORT



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	▲ 10.7	---	---

**GRAPHS**



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0038302 **Received** : 25 Aug 2023  
**Lab Number** : 05934962 **Diagnosed** : 29 Aug 2023  
**Unique Number** : 10620233 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: FT-IR, FuelDilution, KV100, PercentFuel, TBN ) **Contact:** Service Manager

**OUTLAW PERFORMANCE**  
 1830 HWY 271 N  
 PITTSBURG, TX  
 US 75686

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)