



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**FORD 552-12**  
 Component  
**Diesel Engine**  
 Fluid  
**DURALENE Dura-Max 15W40 (13 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DC0033064</b>	DC0020741	---
Sample Date		Client Info		<b>19 Apr 2024</b>	09 May 2022	---
Machine Age	mls	Client Info		<b>187197</b>	182191	---
Oil Age	mls	Client Info		<b>5000</b>	182191	---
Filter Age	mls	Client Info		<b>5000</b>	5000	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>57</b>	31	---
Chromium	ppm	ASTM D5185m	>20	<b>4</b>	4	---
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>1</b>	0	---
Aluminum	ppm	ASTM D5185m	>25	<b>6</b>	13	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>330	<b>3</b>	2	---
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

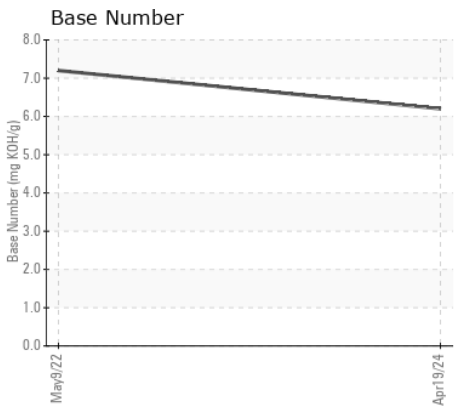
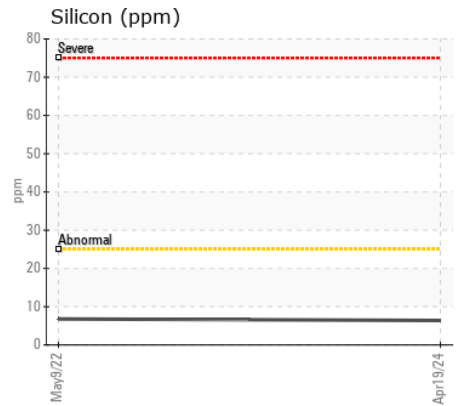
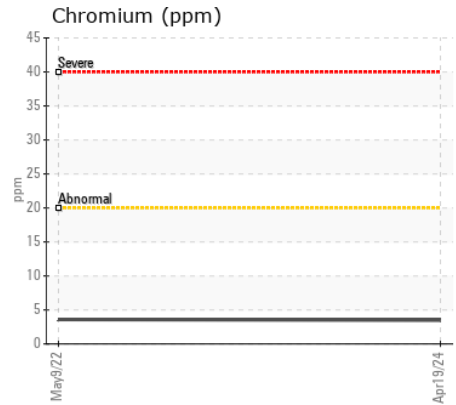
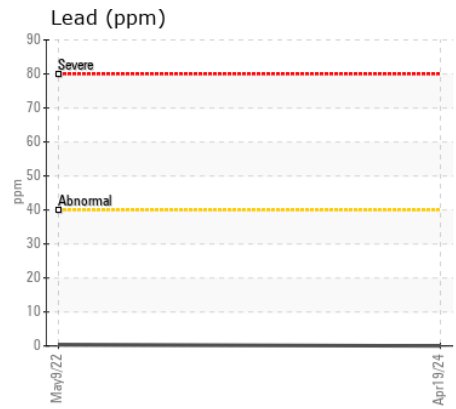
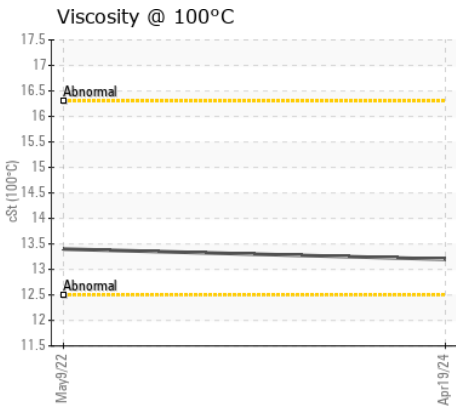
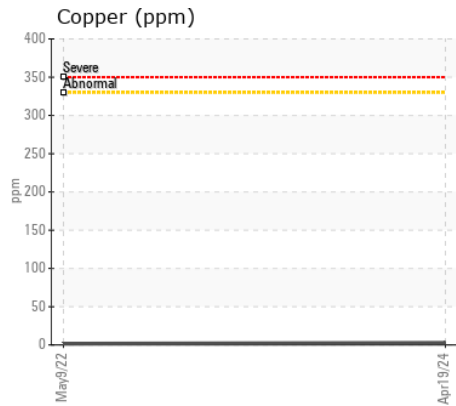
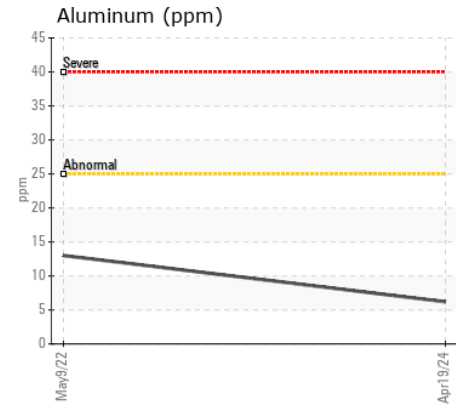
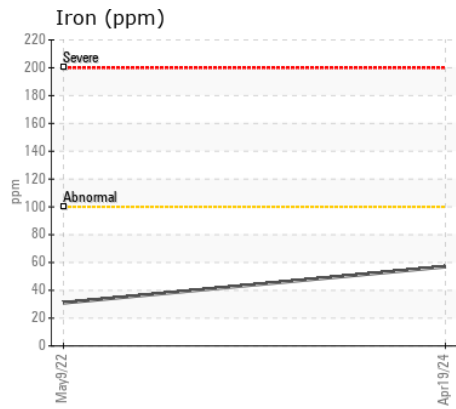
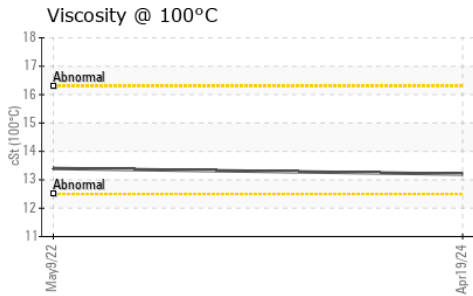
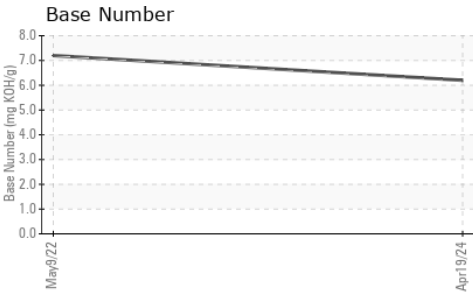
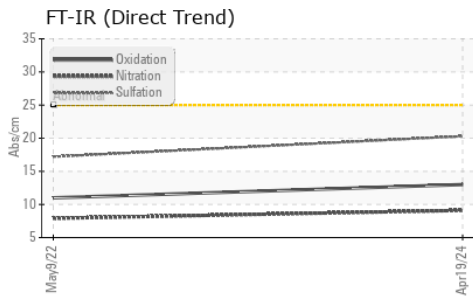
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	7	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.1</b>	7.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.3</b>	17.2	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

## 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.

Sodium	ppm	ASTM D5185m		<b>2</b>	2	---
Boron	ppm	ASTM D5185m		<b>6</b>	18	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>4</b>	7	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>52</b>	73	---
Calcium	ppm	ASTM D5185m		<b>2503</b>	2197	---
Phosphorus	ppm	ASTM D5185m		<b>943</b>	851	---
Zinc	ppm	ASTM D5185m		<b>1121</b>	1048	---
Sulfur	ppm	ASTM D5185m		<b>3416</b>	3556	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.0</b>	11.0	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.2</b>	7.2	---
Visc @ 100°C	cSt	ASTM D445		<b>13.2</b>	13.4	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : DC0033064

**Lab Number** : 06224160

**Unique Number** : 11102357

**Test Package** : MOB 1 ( Additional Tests: TBN )

**Received** : 28 Jun 2024

**Tested** : 01 Jul 2024

**Diagnosed** : 01 Jul 2024 - Wes Davis

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)

**NEW DIRECTION UTILITIES**

21616 KELSO DR

HAGERSTOWN, MD

US 21742

Contact: GARY BLOYER

gary@newdirectionutilities.com

T: (301)714-0083

F: