



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

Machine Id  
**WIRTGEN WR250 11WR0248**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0211776</b>	JR0179291	---
Sample Date		Client Info		<b>12 Jun 2024</b>	19 Apr 2024	---
Machine Age	hrs	Client Info		<b>225</b>	100	---
Oil Age	hrs	Client Info		<b>0</b>	100	---
Filter Age	hrs	Client Info		<b>0</b>	100	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

### WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<b>27</b>	12	---
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	0	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	4	---
Lead	ppm	ASTM D5185m	>40	<b>2</b>	<1	---
Copper	ppm	ASTM D5185m	>330	<b>7</b>	13	---
Tin	ppm	ASTM D5185m	>15	<b>1</b>	0	---
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

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

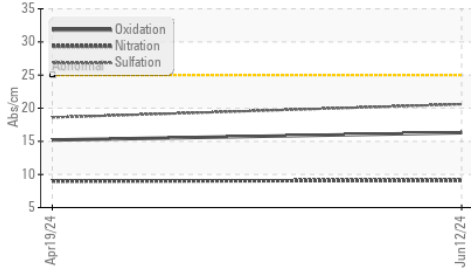
Silicon	ppm	ASTM D5185m	>25	<b>15</b>	11	---
Potassium	ppm	ASTM D5185m	>20	<b>10</b>	8	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.1</b>	9.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.6</b>	18.6	---
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

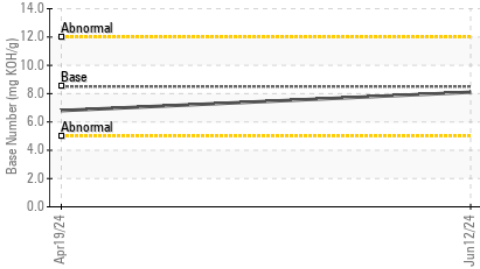
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>158	<b>1</b>	3	---
Boron	ppm	ASTM D5185m	250	<b>157</b>	55	---
Barium	ppm	ASTM D5185m	10	<b>1</b>	0	---
Molybdenum	ppm	ASTM D5185m	100	<b>186</b>	71	---
Manganese	ppm	ASTM D5185m		<b>1</b>	1	---
Magnesium	ppm	ASTM D5185m	450	<b>512</b>	45	---
Calcium	ppm	ASTM D5185m	3000	<b>1664</b>	2157	---
Phosphorus	ppm	ASTM D5185m	1150	<b>917</b>	943	---
Zinc	ppm	ASTM D5185m	1350	<b>1086</b>	1056	---
Sulfur	ppm	ASTM D5185m	4250	<b>3467</b>	4174	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.3</b>	15.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.1</b>	6.8	---
Visc @ 100°C	cSt	ASTM D445	14.4	<b>12.8</b>	13.1	---

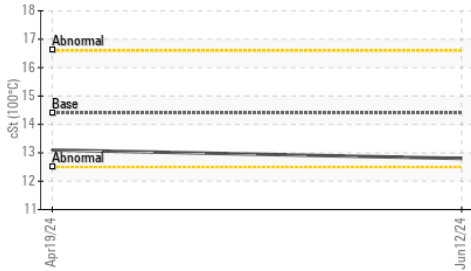
FT-IR (Direct Trend)



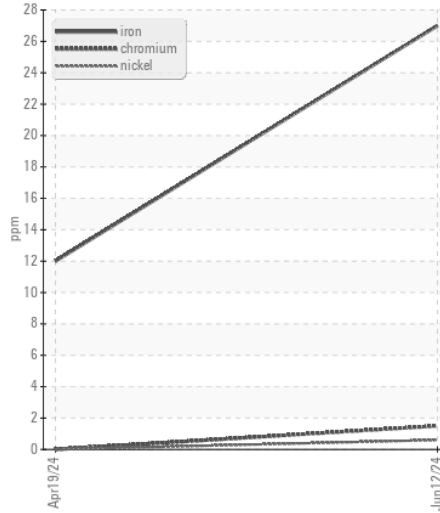
Base Number



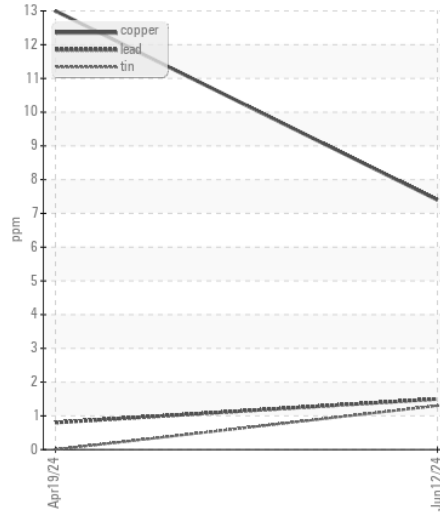
Viscosity @ 100°C



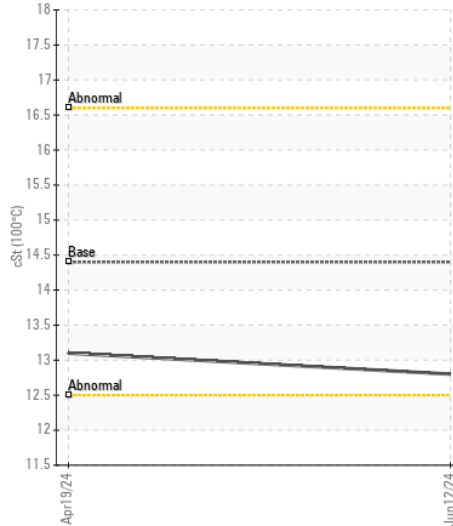
Ferrous Alloys



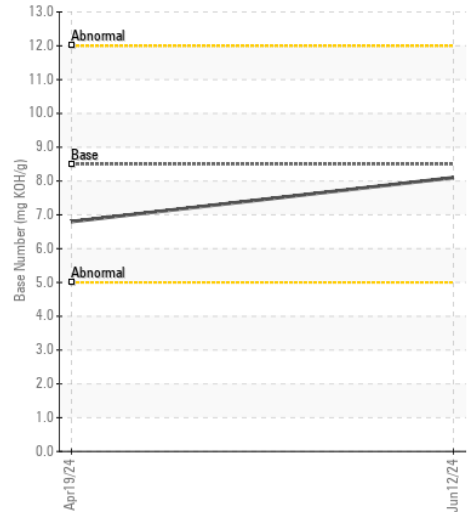
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : JR0211776

Lab Number : 06213087

Unique Number : 11085951

Test Package : CONST ( Additional Tests: TBN )

Received : 18 Jun 2024

Tested : 19 Jun 2024

Diagnosed : 19 Jun 2024 - Wes Davis

JRE - ASHLAND

11047 LEADBETTER RD

ASHLAND, VA

US 23005

Contact: DAVID ZIEG

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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)