



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

Machine Id  
**WIRTGEN WR250 11WR-0050**  
 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>JR0224392</b>	JR0200173	JR0166019
Sample Date		Client Info		<b>09 Jul 2024</b>	06 Feb 2024	20 Jul 2023
Machine Age	hrs	Client Info		<b>1455</b>	1294	1058
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>21</b>	36	51
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	5	6
Lead	ppm	ASTM D5185m	>40	<b>0</b>	1	2
Copper	ppm	ASTM D5185m	>330	<b>4</b>	8	11
Tin	ppm	ASTM D5185m	>15	<b>0</b>	1	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

There is no indication of any contamination in the oil.

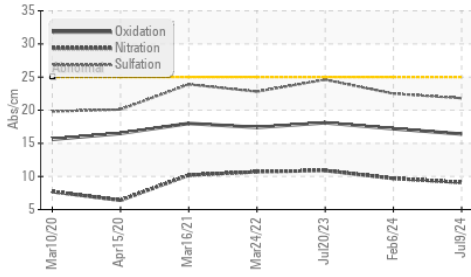
Silicon	ppm	ASTM D5185m	>25	<b>7</b>	8	10
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	5	10
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.6	1.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.1</b>	9.7	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.8</b>	22.5	24.6
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

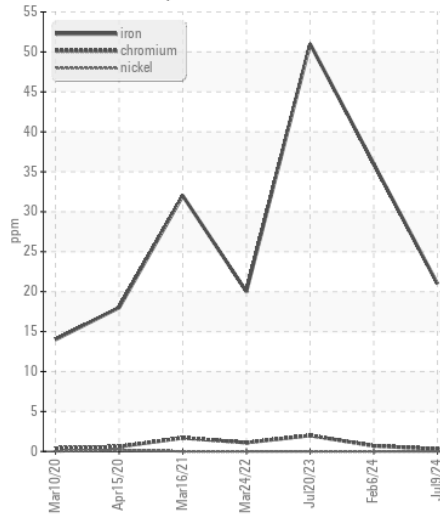
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>158	<b>4</b>	4	3
Boron	ppm	ASTM D5185m	250	<b>191</b>	166	124
Barium	ppm	ASTM D5185m	10	<b>&lt;1</b>	0	<1
Molybdenum	ppm	ASTM D5185m	100	<b>229</b>	218	230
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	450	<b>753</b>	885	1013
Calcium	ppm	ASTM D5185m	3000	<b>1543</b>	1266	1562
Phosphorus	ppm	ASTM D5185m	1150	<b>939</b>	977	1076
Zinc	ppm	ASTM D5185m	1350	<b>1046</b>	1151	1297
Sulfur	ppm	ASTM D5185m	4250	<b>3387</b>	3097	4098
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.4</b>	17.2	18.1
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.6</b>	8.1	8.0
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.1</b>	13.5	13.4

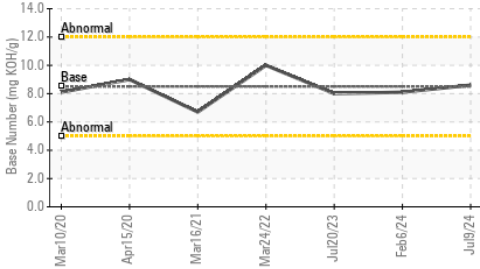
**FT-IR (Direct Trend)**



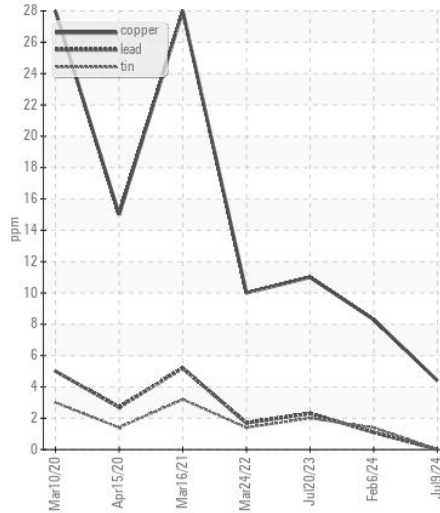
**Ferrous Alloys**



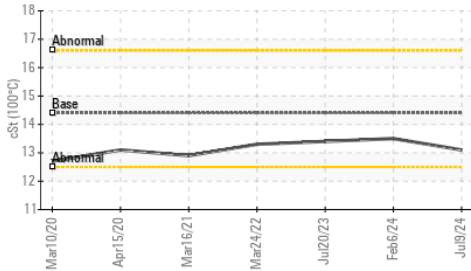
**Base Number**



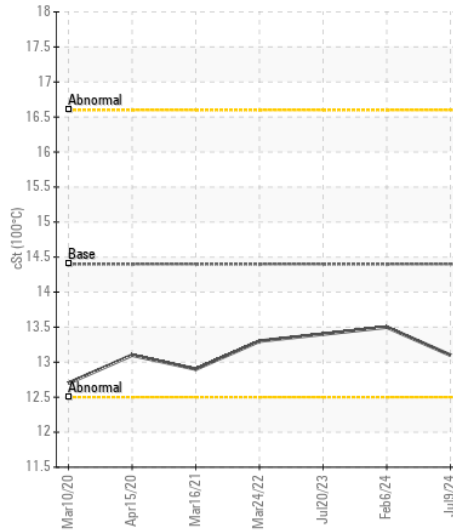
**Non-ferrous Metals**



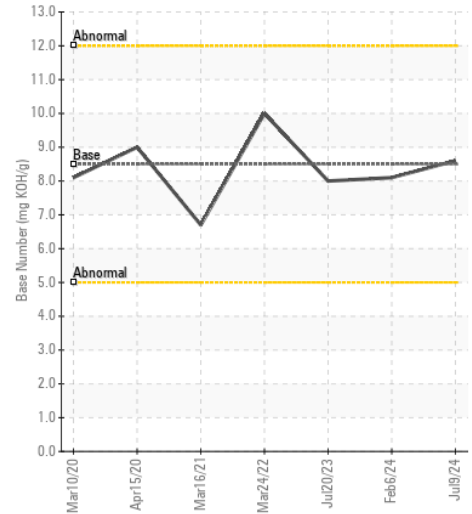
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

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

**Sample No.** : JR0224392

**Lab Number** : 06234153

**Unique Number** : 11122987

**Test Package** : CONST ( Additional Tests: TBN )

**Received** : 11 Jul 2024

**Tested** : 12 Jul 2024

**Diagnosed** : 12 Jul 2024 - Wes Davis

**JRE - ASHLAND**

11047 LEADBETTER RD

ASHLAND, VA

US 23005

Contact: DAVID ZIEG

dzieg@jamesriverequipment.com

T: (804)798-6001

F: (804)798-0292

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)