



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

Machine Id  
**K0150054**  
 Component  
**Diesel Engine**  
 Fluid  
**{not provided} (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0209464</b>	---	---
Sample Date		Client Info		<b>10 Apr 2024</b>	---	---
Machine Age	hrs	Client Info		<b>2450</b>	---	---
Oil Age	hrs	Client Info		<b>2450</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>11</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	---	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	---	---
Lead	ppm	ASTM D5185m	>40	<b>5</b>	---	---
Copper	ppm	ASTM D5185m	>330	<b>12</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

### CONTAMINATION

There is no indication of any contamination in the oil.

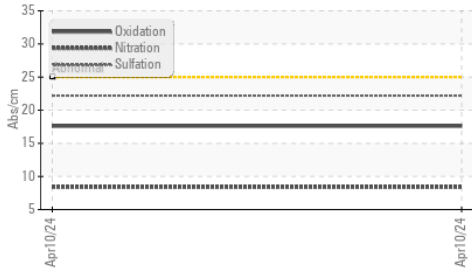
Silicon	ppm	ASTM D5185m	>25	<b>10</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.4</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.2</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	---	---

### FLUID CONDITION

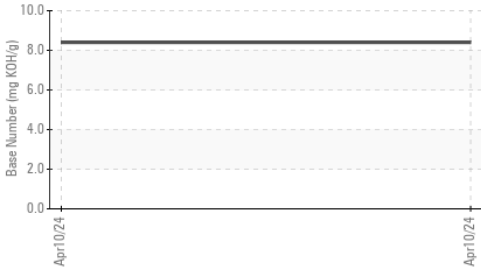
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>3</b>	---	---
Boron	ppm	ASTM D5185m		<b>210</b>	---	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>233</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>774</b>	---	---
Calcium	ppm	ASTM D5185m		<b>1558</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>876</b>	---	---
Zinc	ppm	ASTM D5185m		<b>1047</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>3506</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.6</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.4</b>	---	---
Visc @ 100°C	cSt	ASTM D445		<b>13.8</b>	---	---

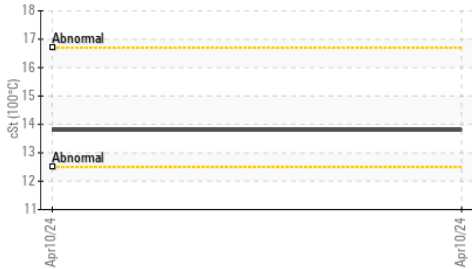
FT-IR (Direct Trend)



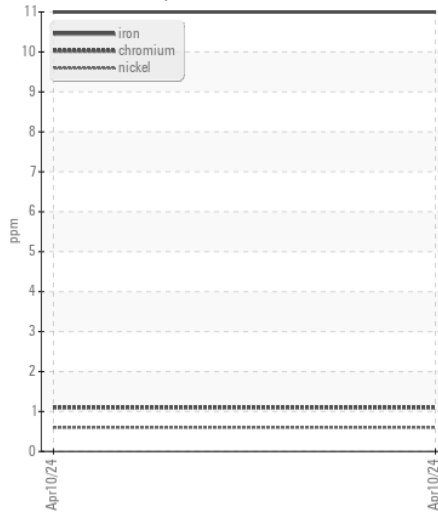
Base Number



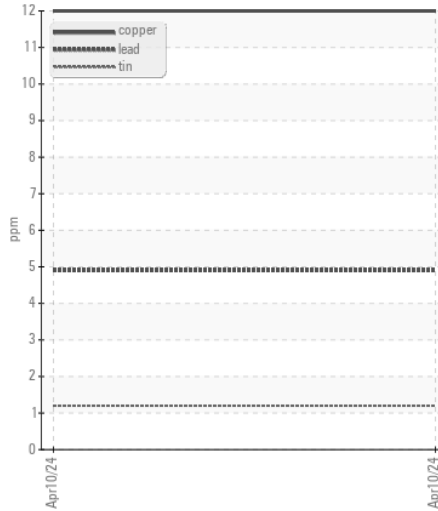
Viscosity @ 100°C



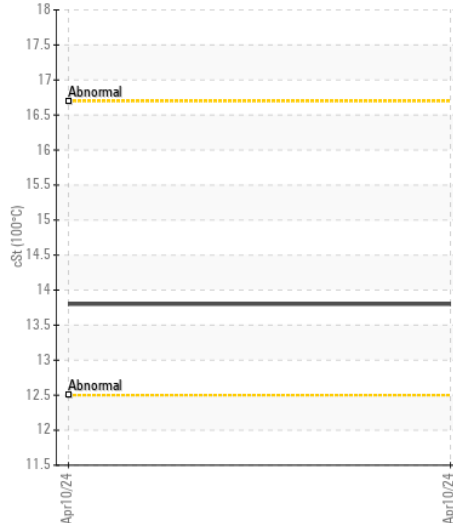
Ferrous Alloys



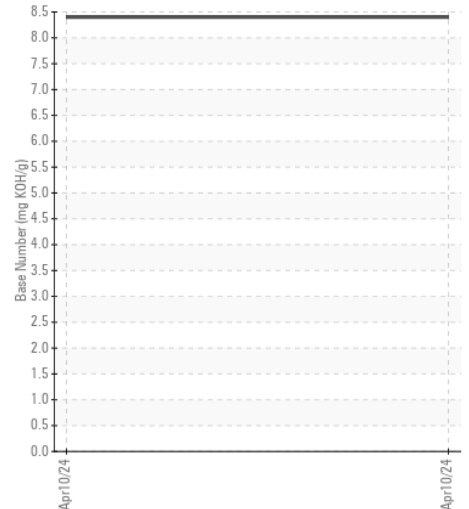
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : JR0209464

Lab Number : 06145554

Unique Number : 10970362

Test Package : CONST ( Additional Tests: TBN )

Received : 11 Apr 2024

Tested : 12 Apr 2024

Diagnosed : 14 Apr 2024 - Don Baldrige

JRE - GARNER

4161 AUBURN CHURCH RD

GARNER, NC

US 27529

Contact: RALEIGH SHOP

sean.betts@jamesriverequipment.com; catherine.anastasio@wearcheck.com

T: (919)614-2260

F: (919)779-5432

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)