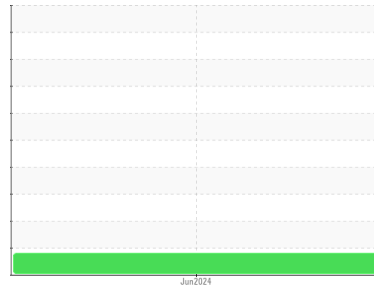




# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area  
**[JCBCP]**  
 Machine Id  
**1862**  
 Component  
**Diesel Engine**  
 Fluid  
**{not provided} (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### ▲ Wear

Cylinder, crank, or cam shaft wear is indicated.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KFS0006051</b>	---	---
Sample Date	Client Info		<b>03 Jun 2024</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---	---
Oil Age	hrs	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
Fuel	WC Method	>5	<b>&lt;1.0</b>	---	---
Water	WC Method	>0.2	<b>NEG</b>	---	---
Glycol	WC Method		<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>▲ 146</b>	---	---
Chromium	ppm	ASTM D5185m >20	<b>1</b>	---	---
Nickel	ppm	ASTM D5185m >4	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >20	<b>7</b>	---	---
Lead	ppm	ASTM D5185m >40	<b>26</b>	---	---
Copper	ppm	ASTM D5185m >330	<b>8</b>	---	---
Tin	ppm	ASTM D5185m >15	<b>2</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>52</b>	---	---
Barium	ppm	ASTM D5185m	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	<b>71</b>	---	---
Manganese	ppm	ASTM D5185m	<b>2</b>	---	---
Magnesium	ppm	ASTM D5185m	<b>1085</b>	---	---
Calcium	ppm	ASTM D5185m	<b>1594</b>	---	---
Phosphorus	ppm	ASTM D5185m	<b>1152</b>	---	---
Zinc	ppm	ASTM D5185m	<b>1528</b>	---	---
Sulfur	ppm	ASTM D5185m	<b>3891</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>11</b>	---	---
Sodium	ppm	ASTM D5185m	<b>3</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>2</b>	---	---

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.2</b>	---	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.7</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.4</b>	---	---

## FLUID DEGRADATION

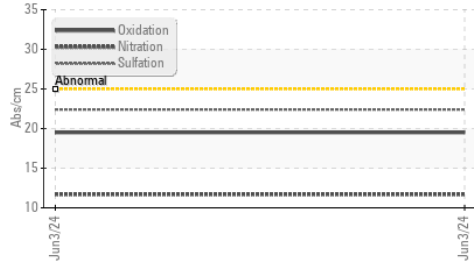
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>19.5</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	<b>9.01</b>	---	---

# OIL ANALYSIS REPORT

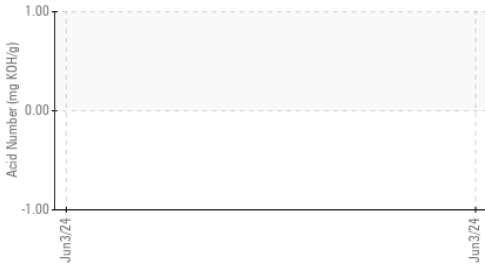
### ▲ Ferrous Alloys



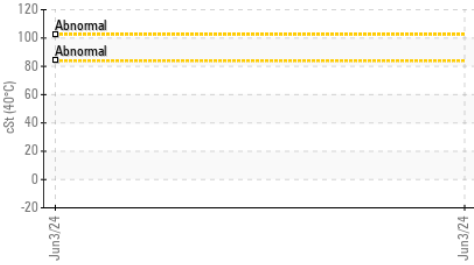
### FT-IR (Direct Trend)



### Acid Number



### Viscosity @ 40°C



### Acid Number

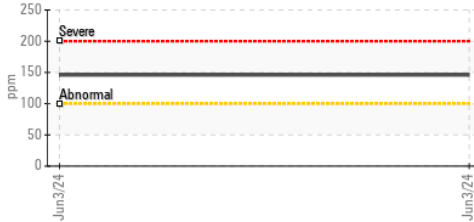


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

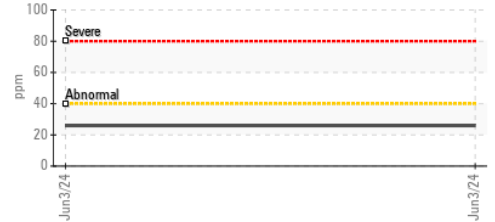
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.5	---	---

### GRAPHS

#### ▲ Iron (ppm)



#### Lead (ppm)



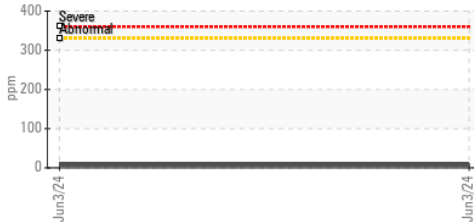
#### Aluminum (ppm)



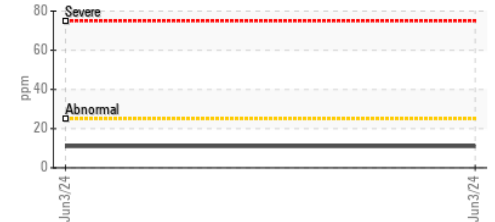
#### Chromium (ppm)



#### Copper (ppm)



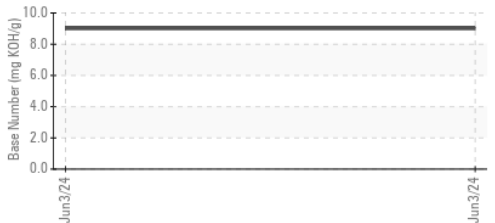
#### Silicon (ppm)



#### Viscosity @ 100°C



#### Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KFS0006051      **Received** : 12 Jun 2024  
**Lab Number** : 06208022      **Tested** : 14 Jun 2024  
**Unique Number** : 11075483      **Diagnosed** : 14 Jun 2024 - Sean Felton  
**Test Package** : MOB 2 ( Additional Tests: KV40, TAN Man )

**HARNES LLC**  
 855 N JAMES CAMPBELL BLVD  
 COLUMBIA, TN  
 US 38401  
 Contact: BEN HARNES  
 ben@slectharness.com  
 T: (615)733-4480  
 F:

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)