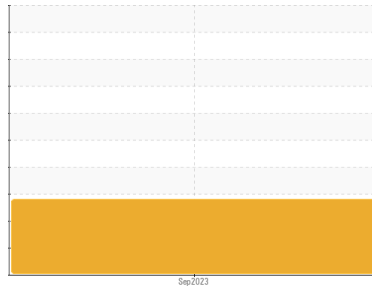




# OIL ANALYSIS REPORT

## Sample Rating Trend



**WEAR**



Machine Id  
**DZ-9**  
 Component  
**Hydraulic System**  
 Fluid  
**{not provided} (--- GAL)**

### DIAGNOSIS

#### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

#### Wear

The iron level is abnormal. All other component wear rates are normal.

#### Contamination

There is a high amount of particulates present in the oil.

#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>KFS0003932</b>	---	---
Sample Date	Client Info			<b>25 Sep 2023</b>	---	---
Machine Age	hrs	Client Info		<b>4792</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>Not Chngd</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	<b>NEG</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>▲ 42</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m	>75	<b>3</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

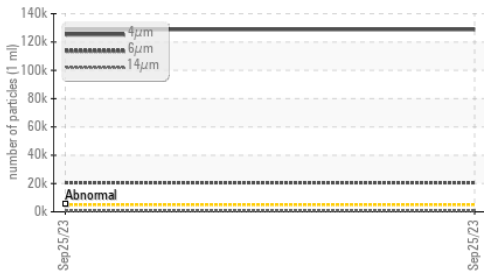
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>42</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>25</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>65</b>	---	---
Calcium	ppm	ASTM D5185m		<b>2484</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>960</b>	---	---
Zinc	ppm	ASTM D5185m		<b>1124</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>4288</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<b>7</b>	---	---
Sodium	ppm	ASTM D5185m		<b>4</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	---	---

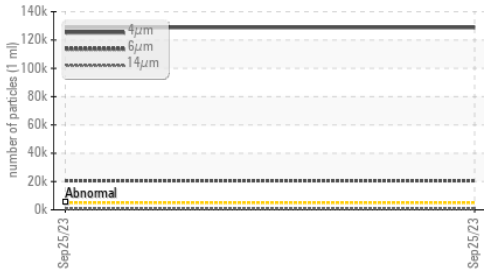
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>▲ 128835</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 20586</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>▲ 691</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>▲ 203</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>8</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 24/22/17</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.40</b>	---	---

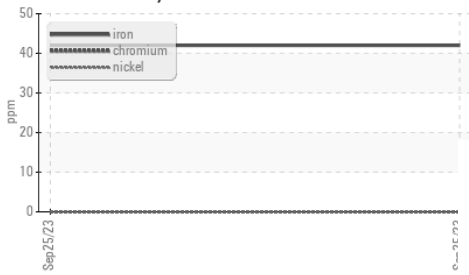
### ▲ Particle Trend



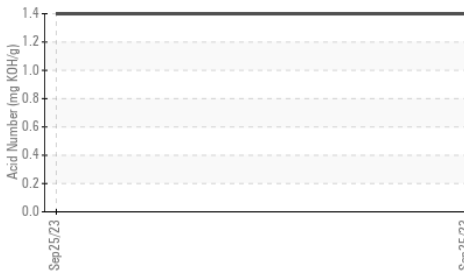
### ▲ Particle Trend



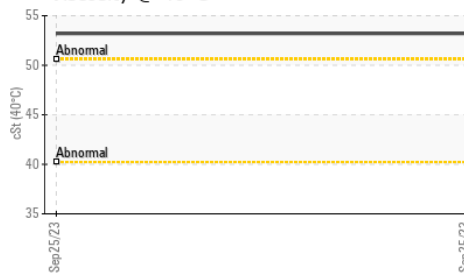
### ▲ Ferrous Alloys



### Acid Number



### Viscosity @ 40°C



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	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	53.2	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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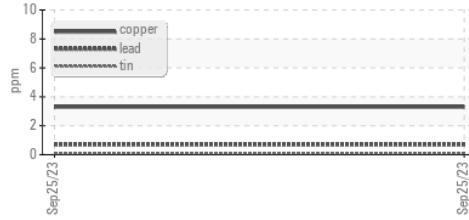
Color				no image	no image
Bottom				no image	no image

### GRAPHS

#### ▲ Ferrous Alloys



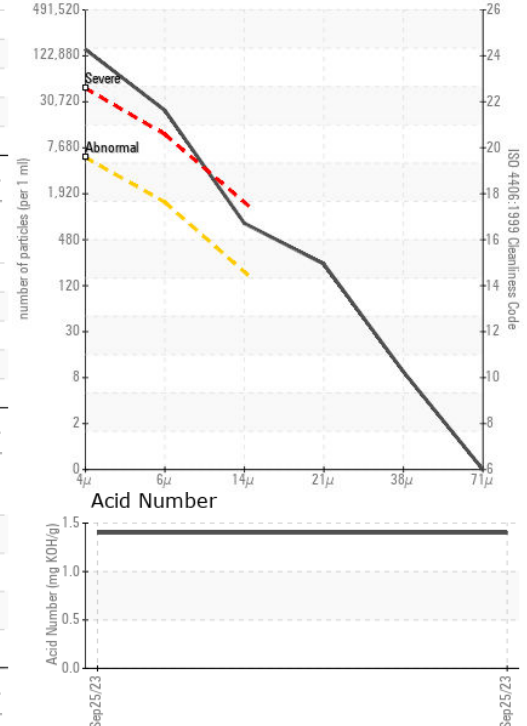
#### Non-ferrous Metals



#### Viscosity @ 40°C



#### ▲ Particle Count



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KFS0003932      **Received** : 29 Sep 2023  
**Lab Number** : 05965341      **Tested** : 02 Oct 2023  
**Unique Number** : 10671892      **Diagnosed** : 02 Oct 2023 - Don Baldrige  
**Test Package** : MOB 2

**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)