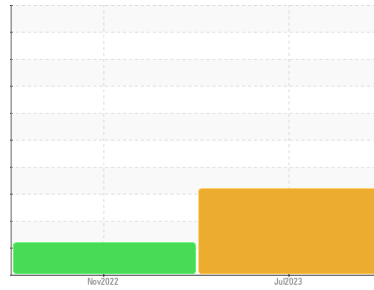




# PROBLEM SUMMARY

Sample Rating Trend



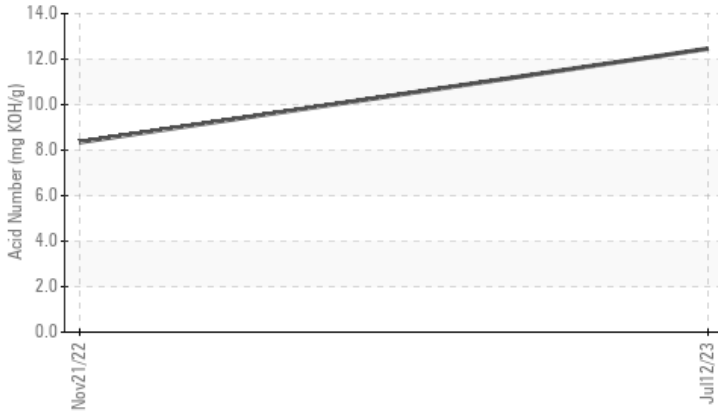
DEGRADATION



Machine Id  
**BIG BLUE HYDRAULIC UNIT**  
 Component  
**Hydraulic System**  
 Fluid  
**BENZ OIL ULTRA GUARD 552 (350 GAL)**

## COMPONENT CONDITION SUMMARY

Acid Number



## RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status	SEVERE	ATTENTION	---
Acid Number (AN) mg KOH/g ASTM D8045	12.46	8.351	---
PrtFilter			no image

Customer Id: DEELIN  
 Sample No.: PH0000212  
 Lab Number: 05934304  
 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.

## HISTORICAL DIAGNOSIS

21 Nov 2022 Diag: Angela Borella

### DEGRADATION



The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. The AN level is above the recommended limit.

view report

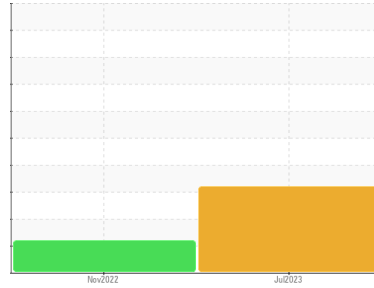




# OIL ANALYSIS REPORT

Sample Rating Trend

DEGRADATION



Machine Id  
**BIG BLUE HYDRAULIC UNIT**  
 Component  
**Hydraulic System**  
 Fluid  
**BENZ OIL ULTRA GUARD 552 (350 GAL)**

## DIAGNOSIS

### Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

The AN level is above the recommended limit.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PH0000212</b>	PH0000219	---
Sample Date	Client Info		<b>12 Jul 2023</b>	21 Nov 2022	---
Machine Age	hrs	Client Info	<b>0</b>	0	---
Oil Age	hrs	Client Info	<b>11092</b>	16960	---
Oil Changed	Client Info		<b>Filtered</b>	Filtered	---
Sample Status			<b>SEVERE</b>	ATTENTION	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>8</b>	6	---
Chromium	ppm	ASTM D5185m >20	<b>2</b>	1	---
Nickel	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m	<b>0</b>	0	---
Silver	ppm	ASTM D5185m	<b>1</b>	0	---
Aluminum	ppm	ASTM D5185m >20	<b>0</b>	<1	---
Lead	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m >20	<b>7</b>	2	---
Tin	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	<b>1</b>	3	---
Calcium	ppm	ASTM D5185m	<b>2</b>	6	---
Phosphorus	ppm	ASTM D5185m	<b>289</b>	294	---
Zinc	ppm	ASTM D5185m	<b>11</b>	8	---
Sulfur	ppm	ASTM D5185m	<b>969</b>	1436	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>3</b>	2	---
Sodium	ppm	ASTM D5185m	<b>3</b>	3	---
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	---

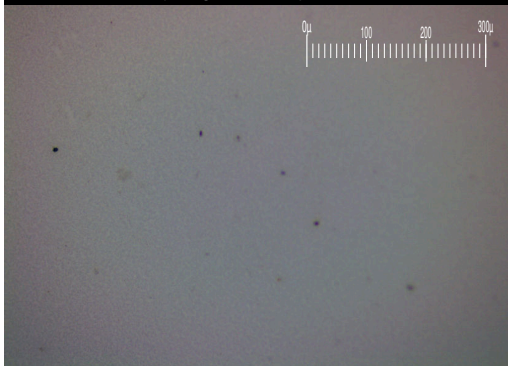
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>1300	<b>495</b>	119	---
Particles >6µm	ASTM D7647	>320	<b>154</b>	44	---
Particles >14µm	ASTM D7647	>80	<b>23</b>	12	---
Particles >21µm	ASTM D7647	>20	<b>7</b>	7	---
Particles >38µm	ASTM D7647	>4	<b>0</b>	1	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	1	---
Oil Cleanliness	ISO 4406 (c)	>17/15/13	<b>16/14/12</b>	14/13/11	---

## FLUID DEGRADATION

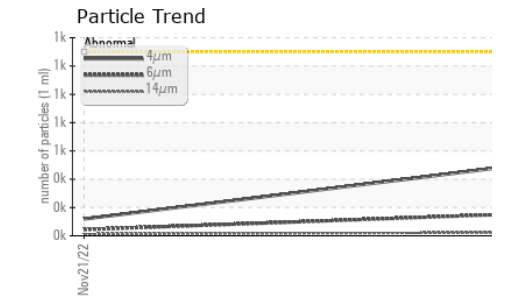
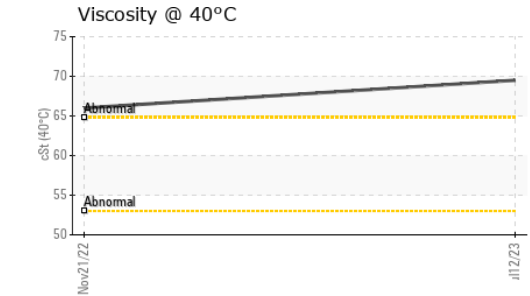
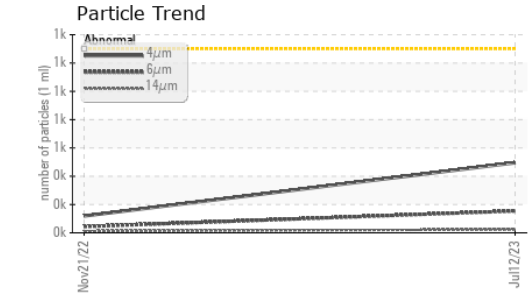
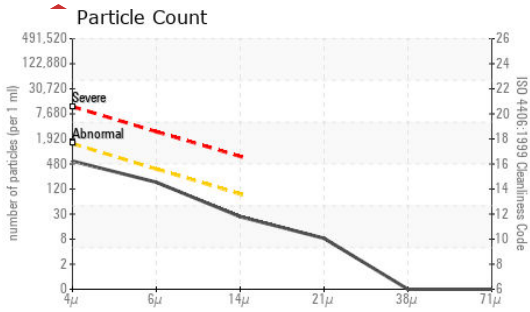
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>12.46</b>	8.351	---

Particle Filter (Magn: 200 x)





# OIL ANALYSIS REPORT



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PH0000212 **Received** : 24 Aug 2023  
**Lab Number** : 05934304 **Diagnosed** : 28 Aug 2023  
**Unique Number** : 10619575 **Diagnostician** : Jonathan Hester  
**Test Package** : PLANT ( Additional Tests: PrtFilter )

Certificate L2367  
 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)

**DEETER FOUNDRY**  
 5945 N 70TH ST  
 LINCOLN, NE  
 US 68507  
 Contact: BRANDON KUHNKE  
 brandon.kuhnke@groupnei.com  
 T: (402)464-7466  
 F:

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	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	69.5	66.0	---

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

## GRAPHS

