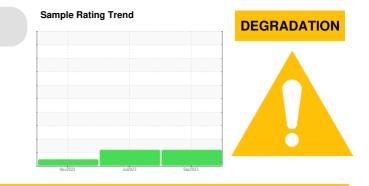
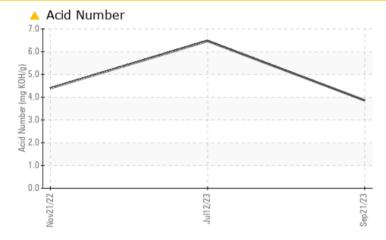
# **PROBLEM SUMMARY**



#### Machine Id **24-029** Component **Hydraulic System** Fluid **BENZ OIL ULTRA GUARD 552 (150 GAL)**

# COMPONENT CONDITION SUMMARY



#### RECOMMENDATION

We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. Please submit a sample of the new (unused) oil to establish a baseline.

PROBLEMATIC TEST RESULTS							
Sample Status			ATTENTION	ATTENTION	NORMAL		
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>A</b> 3.86	<b>6</b> .47	4.40		
PrtFilter							

Customer Id: DEELIN Sample No.: PH0000293 Lab Number: 05962213 Test Package: PLANT



To manage this report scan the QR code

*To discuss the diagnosis or test data:* Doug Bogart +1 (800)237-1369 x4016 <u>dougb@wearcheckusa.com</u>

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

RECOMMENDE	RECOMMENDED ACTIONS					
Action	Status	Date	Done By	Description		
Change Fluid			?	We recommend that you drain the oil and perform a filter service on this component if not already done.		
Change Filter			?	We recommend that you drain the oil and perform a filter service on this component if not already done.		
Resample			?	We recommend an early resample to monitor this condition. Please submit a sample of the new (unused) oil to establish a baseline.		

## **HISTORICAL DIAGNOSIS**



# 12 Jul 2023 Diag: Jonathan Hester

DEGRADATION

The oil is near the end of it's useful service life, recommend schedule an oil change. We recommend an early resample to monitor this condition.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is above the recommended limit.



## 21 Nov 2022 Diag: Angela Borella



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 acceptable for this fluid. The condition of the oil is acceptable for the time in service.







# **OIL ANALYSIS REPORT**

#### Sample Rating Trend



Component Hydraulic System Fluid BENZ OIL ULTRA GUARD 552 (150 GAL)

#### DIAGNOSIS

Machine Id 24-029

#### A Recommendation

We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. Please submit a sample of the new (unused) oil to establish a baseline.

#### Wear

All component wear rates are normal.

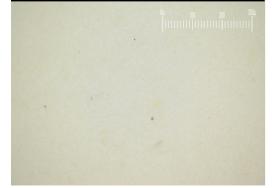
#### Contamination

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.

## Particle Filter (Magn: 200 x)



		No	/2022	Jul2023 Sep21	123	
SAMPLE INFORM	<b>MATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		PH0000293	PH0000213	PH0000217
Sample Date		Client Info		21 Sep 2023	12 Jul 2023	21 Nov 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		12124	11092	15610
Oil Changed		Client Info		N/A	Filtered	Filtered
Sample Status				ATTENTION	ATTENTION	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	2	6	3
Chromium	ppm	ASTM D5185m	>20	<1	2	1
Nickel	ppm	ASTM D5185m	>20	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	1	0
Aluminum	ppm	ASTM D5185m	>20	<1	0	<1
Lead	ppm	ASTM D5185m	>20	0	<1	0
Copper	ppm	ASTM D5185m	>20	6	8	3
Tin	ppm	ASTM D5185m	>20	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		1	2	3
Calcium	ppm	ASTM D5185m		3	2	2
Phosphorus	ppm	ASTM D5185m		311	336	335
Zinc	ppm	ASTM D5185m		4	11	6
Sulfur	ppm	ASTM D5185m		1174	960	1339
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	2	3	2
Sodium	ppm	ASTM D5185m		1	<1	1
Potassium	ppm	ASTM D5185m	>20	<1	2	2
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>1300	500	640	244
Particles >6µm		ASTM D7647	>320	154	222	84
Particles >14µm		ASTM D7647	>80	15	28	10
Particles >21µm		ASTM D7647	>20	5	9	3
Particles >38µm		ASTM D7647	>4	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>17/15/13	16/14/11	16/15/12	15/14/10
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<mark>▲</mark> 3.86	6.47	4.40

Viscosity @ 40°C

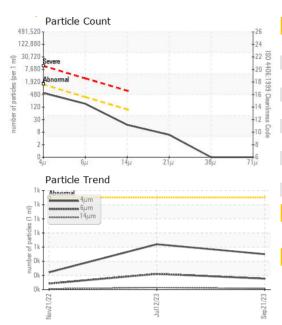
68

66 Abnorma

56 54 52

/22

# **OIL ANALYSIS REPORT**



		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		62.65	65.9	62.9
SAMPLE IMAGES	6	method	limit/base	current	history1	history2
Color						<u>J</u>

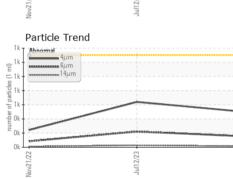
Bottom



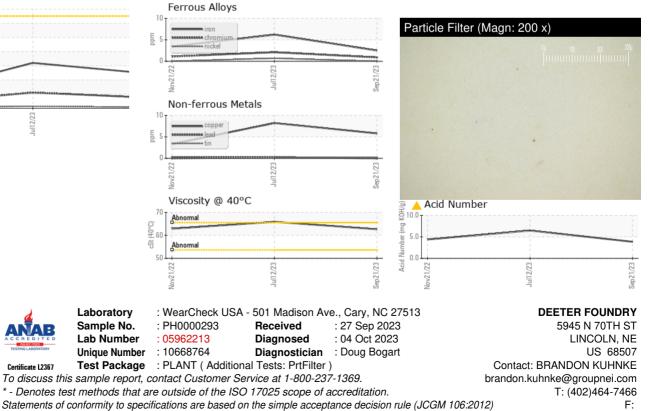


Sep21/23 -





# GRAPHS





Certificate L2367

Contact/Location: BRANDON KUHNKE - DEELIN