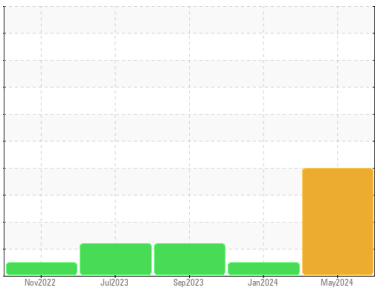
PROBLEM SUMMARY

Sample Rating Trend

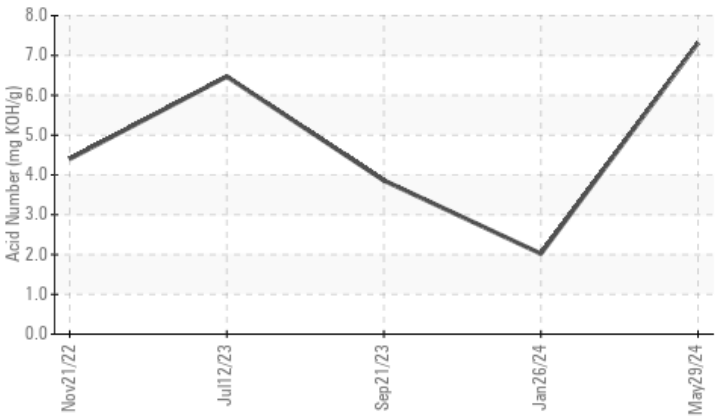


DEGRADATION

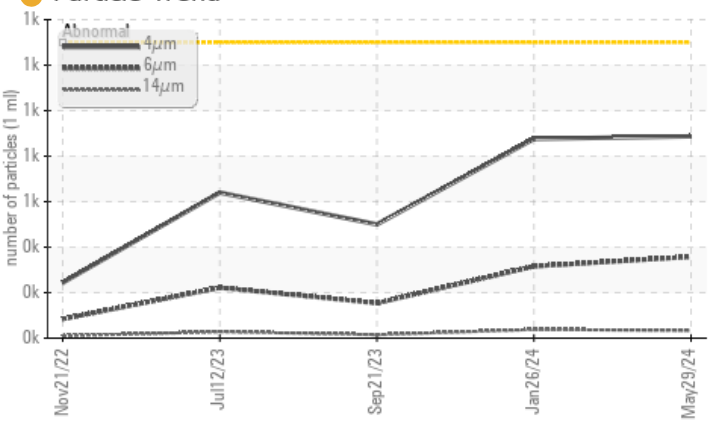
Machine Id
24-029
Component
Hydraulic System
Fluid
BENZ OIL ULTRA GUARD 552 (150 GAL)

COMPONENT CONDITION SUMMARY

Acid Number



Particle Trend



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	NORMAL	ATTENTION
Acid Number (AN)	mg KOH/g	ASTM D8045		▲ **7.314**	2.02	3.86

PrtFilter

Customer Id: DEELIN
Sample No.: PH0000242
Lab Number: 06208707
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

To change component or sample information:
Customer Service +1 1-800-237-1369
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

NORMAL

26 Jan 2024 Diag: Jonathan Hester
Resample at the next service interval to monitor.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 acceptable for this fluid. The condition of the oil is suitable for further service.

view report

DEGRADATION

21 Sep 2023 Diag: Doug Bogart
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.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.

view report

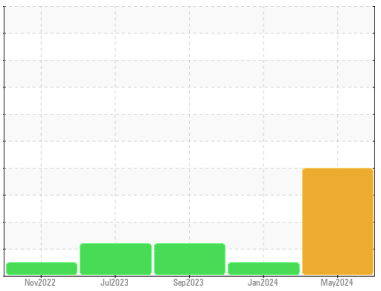
DEGRADATION

12 Jul 2023 Diag: Jonathan Hester
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.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION

Machine Id
24-029
Component
Hydraulic System
Fluid
BENZ OIL ULTRA GUARD 552 (150 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 a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition
The AN level is above the recommended limit.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PH0000242**	PH0000237	PH0000293
Sample Date		Client Info		**29 May 2024**	26 Jan 2024	21 Sep 2023
Machine Age	hrs	Client Info		**0**	14164	0
Oil Age	hrs	Client Info		**16132**	14164	12124
Oil Changed		Client Info		**Filtered**	Not Changd	N/A
Sample Status				**SEVERE**	NORMAL	ATTENTION

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.05	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**5**	5	2
Chromium	ppm	ASTM D5185m	>20	**1**	<1	<1
Nickel	ppm	ASTM D5185m	>20	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**<1**	0	<1
Lead	ppm	ASTM D5185m	>20	**0**	0	0
Copper	ppm	ASTM D5185m	>20	**15**	11	6
Tin	ppm	ASTM D5185m	>20	**0**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

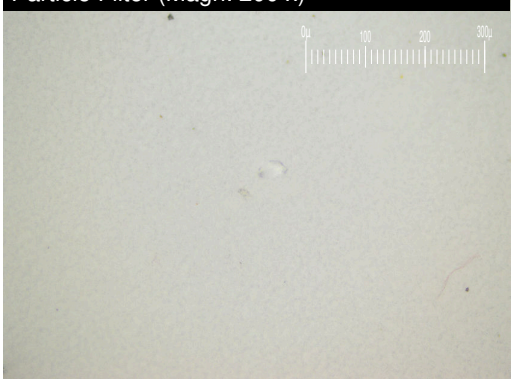
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	0
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	<1	0
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m		**0**	0	1
Calcium	ppm	ASTM D5185m		**0**	<1	3
Phosphorus	ppm	ASTM D5185m		**355**	341	311
Zinc	ppm	ASTM D5185m		**10**	3	4
Sulfur	ppm	ASTM D5185m		**1426**	1307	1174

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**2**	2	2
Sodium	ppm	ASTM D5185m		**2**	<1	1
Potassium	ppm	ASTM D5185m	>20	**0**	0	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>1300	**887**	876	500
Particles >6µm		ASTM D7647	>320	**358**	316	154
Particles >14µm		ASTM D7647	>80	**34**	38	15
Particles >21µm		ASTM D7647	>20	**8**	10	5
Particles >38µm		ASTM D7647	>4	**0**	0	0
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>17/15/13	**17/16/12**	17/15/12	16/14/11

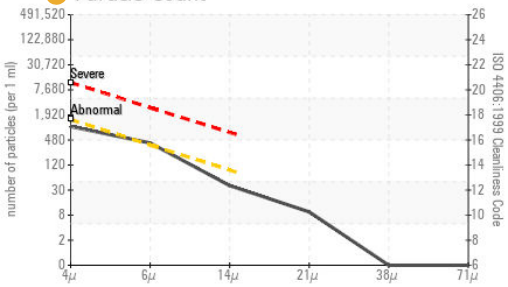
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**7.314**	2.02	3.86

Particle Filter (Magn: 200 x)

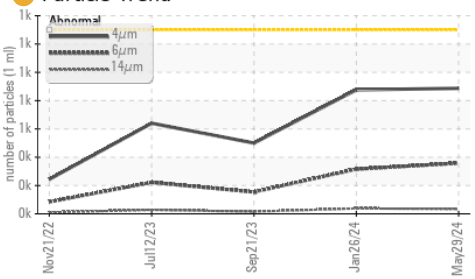


OIL ANALYSIS REPORT

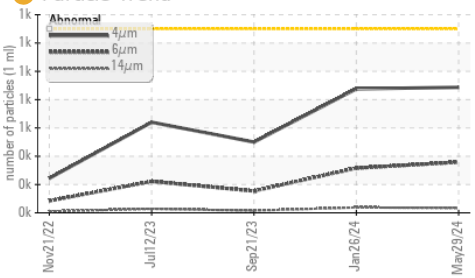
Particle Count



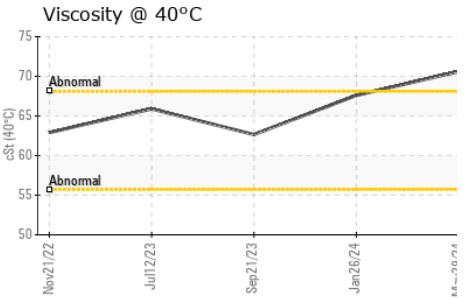
Particle Trend



Particle Trend



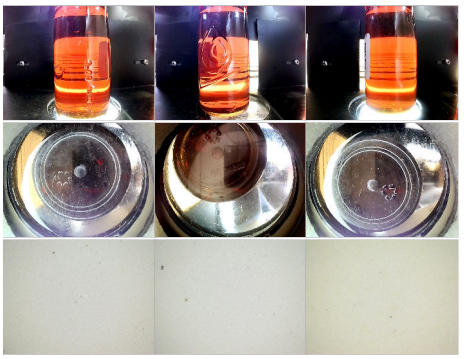
Viscosity @ 40°C



VISUAL		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

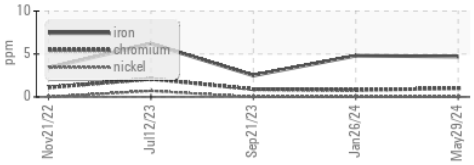
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**70.6**	67.6	62.65

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter					

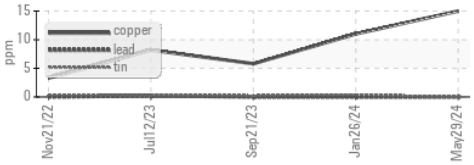


GRAPHS

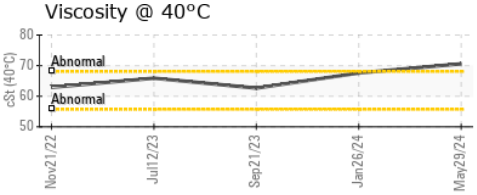
Ferrous Alloys



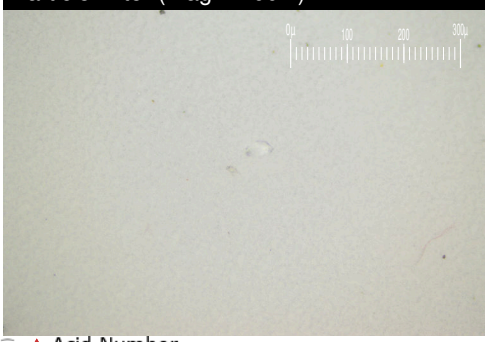
Non-ferrous Metals



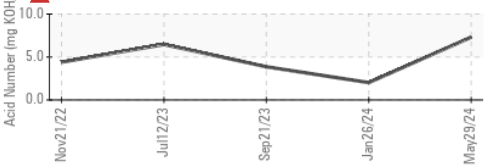
Viscosity @ 40°C



Particle Filter (Magn: 200 x)



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PH0000242 **Received** : 13 Jun 2024
Lab Number : 06208707 **Tested** : 19 Jun 2024
Unique Number : 11076168 **Diagnosed** : 19 Jun 2024 - Jonathan Hester
Test Package : PLANT (Additional Tests: PrtFilter)

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)

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LINCOLN, NE
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Contact: BRANDON KUHNKE
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T: (402)464-7466
F:

Report Id: DEELIN [WUSCAR] 06208707 (Generated: 06/22/2024 21:51:48) Rev: 1
Contact/Location: BRANDON KUHNKE - DEELIN