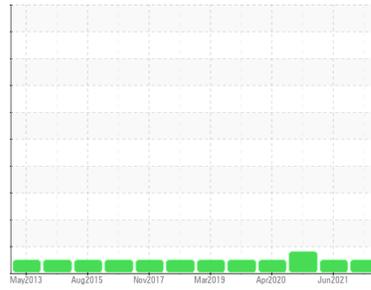




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

[21-3685]

Machine Id

**BOSCH PUMP SEAL AIR HYDRAULICS RTO (S/N 2886)**

Component

**Hydraulic System**

Fluid

**ATF (60 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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 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>WC0408712</b>	WC0528870	WC0408702
Sample Date	Client Info		<b>17 Feb 2022</b>	11 Jun 2021	29 Oct 2020
Machine Age	mths	Client Info	<b>177</b>	168	0
Oil Age	mths	Client Info	<b>177</b>	168	160
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status			<b>NORMAL</b>	NORMAL	ATTENTION

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.05	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>4</b>	4	4
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >20	<b>5</b>	4	4
Tin	ppm	ASTM D5185m >20	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>46</b>	50	49
Barium	ppm	ASTM D5185m	<b>31</b>	32	21
Molybdenum	ppm	ASTM D5185m	<b>1</b>	1	1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>15</b>	14	16
Calcium	ppm	ASTM D5185m	<b>146</b>	131	128
Phosphorus	ppm	ASTM D5185m	<b>373</b>	322	342
Zinc	ppm	ASTM D5185m	<b>175</b>	173	173
Sulfur	ppm	ASTM D5185m	<b>2414</b>	2057	2213

## CONTAMINANTS

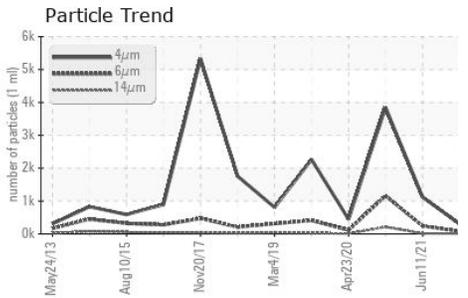
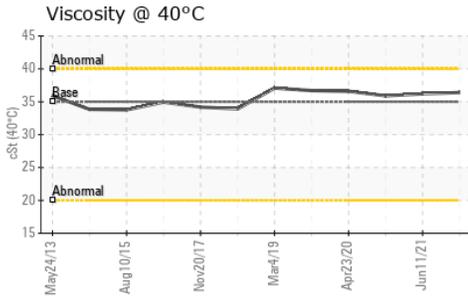
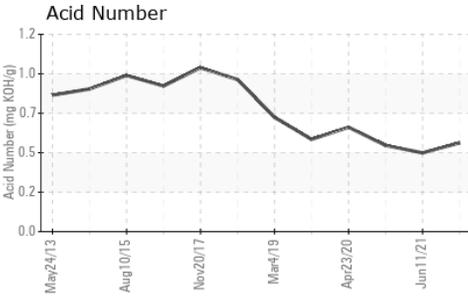
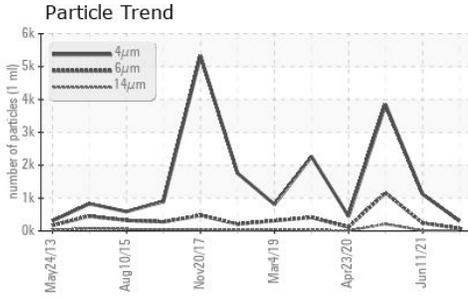
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>1</b>	<1	1
Sodium	ppm	ASTM D5185m	<b>6</b>	5	6
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	0

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>304</b>	1121	3845
Particles >6µm	ASTM D7647	>1300	<b>76</b>	242	1159
Particles >14µm	ASTM D7647	>160	<b>10</b>	14	210
Particles >21µm	ASTM D7647	>40	<b>3</b>	3	82
Particles >38µm	ASTM D7647	>10	<b>0</b>	0	5
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/14	<b>15/13/10</b>	17/15/11	19/17/15



# OIL ANALYSIS REPORT

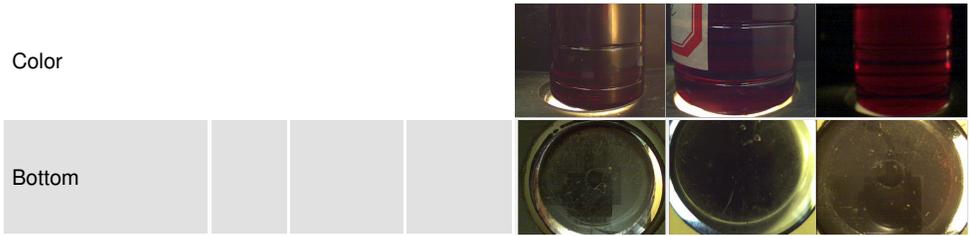


FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.54</b>	0.479	0.524

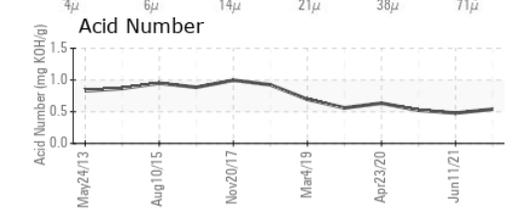
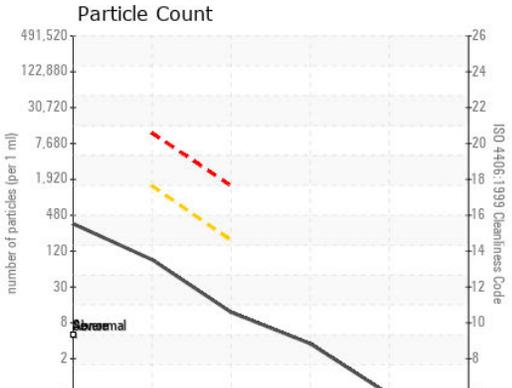
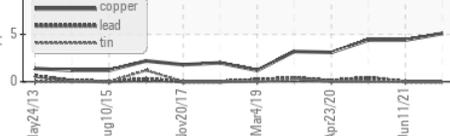
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	<b>36.4</b>	36.2	35.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0408712  
 Lab Number : 05476998  
 Unique Number : 9866212  
 Test Package : IND 2  
 Received : 24 Feb 2022  
 Tested : 25 Feb 2022  
 Diagnosed : 25 Feb 2022 - Don Baldrige

**VEOLIA NORTH AMERICA**  
 190 M STREET EXTENSION  
 AGAWAM, MA  
 US 01001

Contact: Paul Orzechowski  
 paul.orzechowski@veolia.com

T: (413)575-3782

F: (413)732-7071

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)