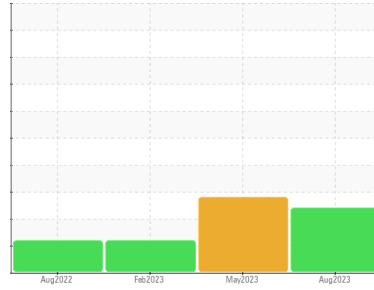




PROBLEM SUMMARY

Sample Rating Trend



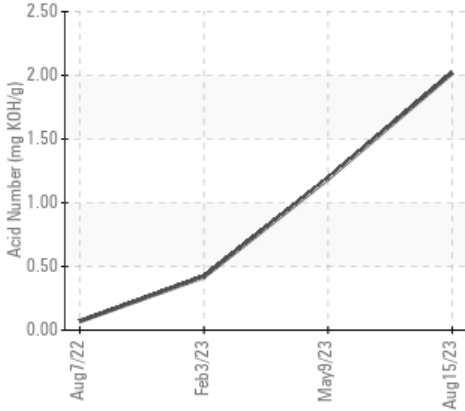
DEGRADATION



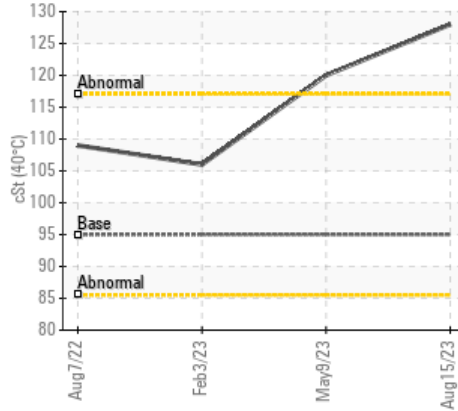
Area
VACUUM PUMP
 Machine Id
B68194 - BATCHING SYSTEM VACUUM MIXER 1
 Component
Vacuum Pump
 Fluid
BUSCH R530S (--- GAL)

COMPONENT CONDITION SUMMARY

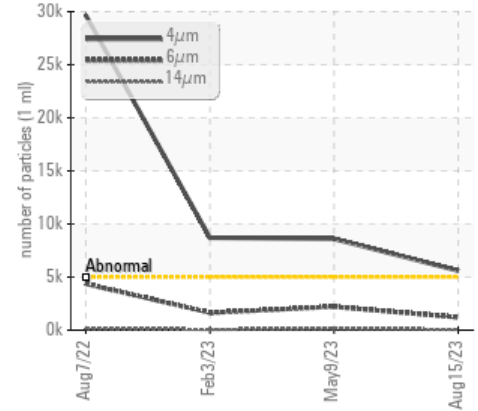
▲ Acid Number



▲ Viscosity @ 40°C



▲ Particle Trend



RECOMMENDATION

The oil is near the end of its useful service life, recommend schedule an oil change. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ATTENTION
Particles >4µm	ASTM D7647	>5000	▲ 5595	▲ 8600	▲ 8701	
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 20/17/13	▲ 20/18/14	▲ 20/18/13	
Acid Number (AN)	mg KOH/g	ASTM D8045	▲ 2.02	▲ 1.19	0.42	
Visc @ 40°C	cSt	ASTM D445	▲ 128	▲ 120	106	

Customer Id: PAPOMA
 Sample No.: WC0838795
 Lab Number: 05926099
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Service/change Fluid	---	---	?	The oil is near the end of it's useful service life, recommend schedule an oil change.

HISTORICAL DIAGNOSIS

09 May 2023 Diag: Jonathan Hester

DEGRADATION



The oil is near the end of it's useful service life, recommend schedule an oil change. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The oil viscosity is higher than normal. The AN level is at the top-end of the recommended limit.

view report



03 Feb 2023 Diag: Jonathan Hester

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



07 Aug 2022 Diag: Doug Bogart

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

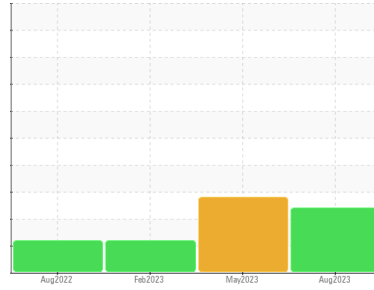
view report





OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Area
VACUUM PUMP
 Machine Id
B68194 - BATCHING SYSTEM VACUUM MIXER 1
 Component
Vacuum Pump
 Fluid
BUSCH R530S (--- GAL)

DIAGNOSIS

▲ Recommendation

The oil is near the end of its useful service life, recommend schedule an oil change. Resample at the next service interval to monitor.

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 oil viscosity is higher than normal. The AN level is at the top-end of the recommended limit.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC0838795	WC0691451	WC0691450
Sample Date	Client Info	15 Aug 2023	09 May 2023	03 Feb 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	Not Changed	Not Changed	Not Changed
Sample Status		ABNORMAL	ABNORMAL	ATTENTION

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	2	<1	1
Chromium	ppm	ASTM D5185m >20	0	0	0
Nickel	ppm	ASTM D5185m >20	0	<1	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >20	0	<1	<1
Lead	ppm	ASTM D5185m >20	0	<1	0
Copper	ppm	ASTM D5185m >20	0	0	0
Tin	ppm	ASTM D5185m >20	0	<1	0
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	3	1	0
Barium	ppm	ASTM D5185m	<1	0	<1
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	0
Magnesium	ppm	ASTM D5185m	<1	2	0
Calcium	ppm	ASTM D5185m	0	0	2
Phosphorus	ppm	ASTM D5185m	3	3	6
Zinc	ppm	ASTM D5185m	0	0	1
Sulfur	ppm	ASTM D5185m	92	49	85

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	10	7	7
Sodium	ppm	ASTM D5185m	0	2	2
Potassium	ppm	ASTM D5185m >20	<1	<1	0

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 5595	▲ 8600	▲ 8701
Particles >6µm	ASTM D7647 >1300	1210	▲ 2206	▲ 1636
Particles >14µm	ASTM D7647 >160	55	120	56
Particles >21µm	ASTM D7647 >40	11	22	11
Particles >38µm	ASTM D7647 >10	1	3	0
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 20/17/13	▲ 20/18/14	▲ 20/18/13

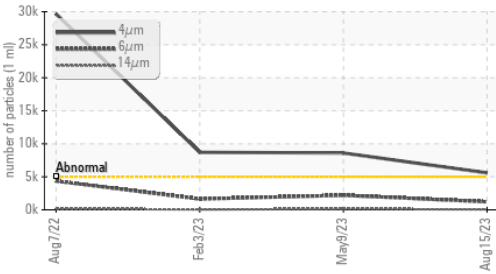
FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	▲ 2.02	▲ 1.19	0.42

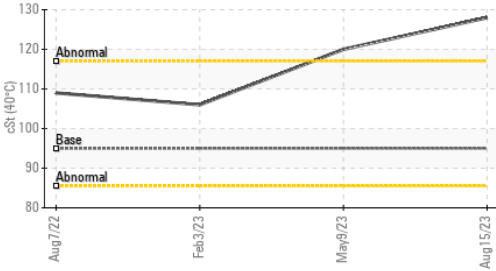


OIL ANALYSIS REPORT

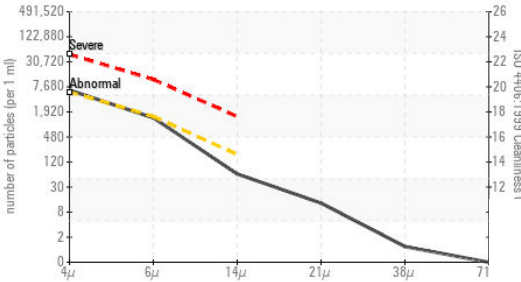
▲ Particle Trend



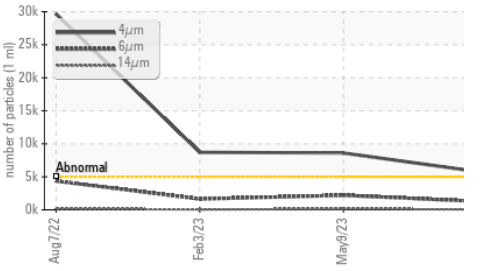
▲ Viscosity @ 40°C



▲ Particle Count



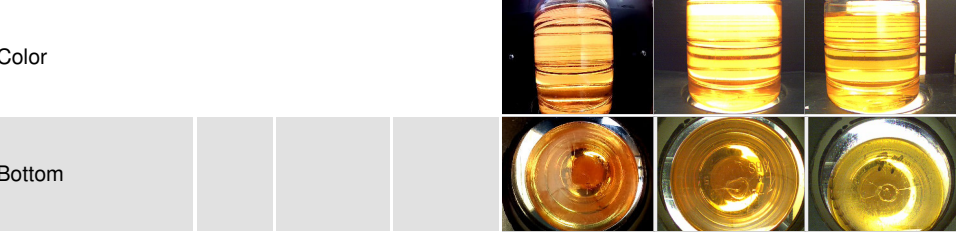
▲ Particle Trend



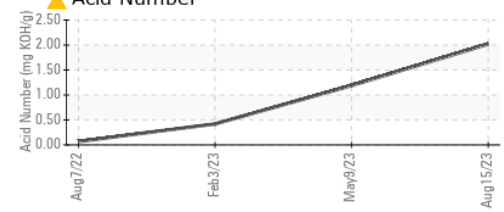
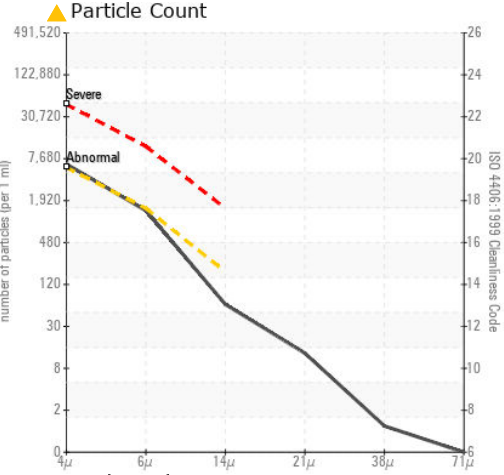
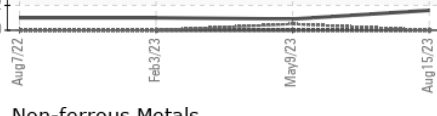
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 95.0	▲ 128	▲ 120	106

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0838795 **Received** : 16 Aug 2023
Lab Number : 05926099 **Diagnosed** : 17 Aug 2023
Unique Number : 10606046 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: PrtCount)

PAPILLION FOODS
 10808 S 132ND ST
 OMAHA, NE
 US 68138
 Contact: NEIL ARIANO
 njariano@hormel.com

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)