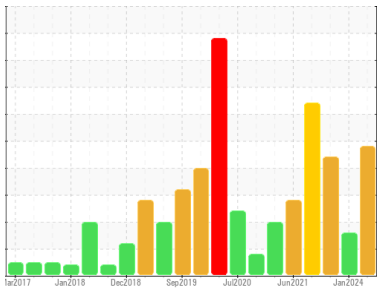
PROBLEM SUMMARY

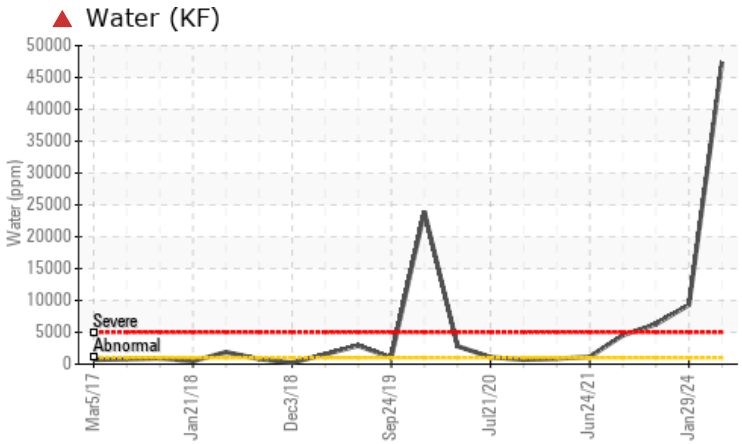
Sample Rating Trend



WATER

Machine Id
BUSCH 8600 VA S1 (S/N 400501-1)
Component
Pump
Fluid
USPI VAC 100 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>.1	▲ **4.74**	▲ 0.930	▲ 0.626
ppm Water	ppm	ASTM D6304	>1000	▲ **47400**	▲ 9302	▲ 6260
Silt	scalar	*Visual	NONE	▲ **MODER**	NONE	NONE
Emulsified Water	scalar	*Visual	>.1	▲ **0.2%**	NEG	▲ 0.2%

Customer Id: IBPEMP01
Sample No.: USPM37781
Lab Number: 06214053
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@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
Water Drain-off	---	---	?	We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

WATER

29 Jan 2024 Diag: Doug Bogart
We advise an early resample to confirm this situation. Insufficient sample was received to conduct all the routine laboratory tests.All component wear rates are normal. There is a high concentration of water present in the oil. The condition of the oils additive package appears suitable for further service.

view report

WATER

06 Sep 2022 Diag: Doug Bogart
We advise that you follow the water drain-off procedure for this component and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles and water present in this sample.All component wear rates are normal. Appearance is hazy. High concentration of visible dirt/debris present in the oil. There is a moderate concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid.

view report

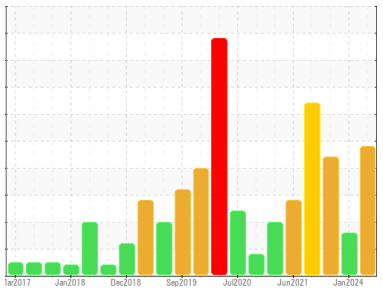
WATER

11 Nov 2021 Diag: Doug Bogart
We advise that you follow the water drain-off procedure for this component and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of particulates present in the oil. There is a moderate concentration of water present in the oil. Free water present. 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



WATER

Machine Id
BUSCH 8600 VA S1 (S/N 400501-1)
Component
Pump
Fluid
USPI VAC 100 (--- GAL)

DIAGNOSIS

Recommendation
We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear
All component wear rates are normal.

Contamination
Appearance is unacceptable. There is a high concentration of water present in the oil. There is a moderate amount of visible silt present in the sample.

Fluid Condition
The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USPM37781**	USPM30860	USPR000718
Sample Date		Client Info		**01 Jun 2024**	29 Jan 2024	06 Sep 2022
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**SEVERE**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	**7**	<1	3
Chromium	ppm	ASTM D5185m	>5	**0**	<1	0
Nickel	ppm	ASTM D5185m	>5	**1**	0	0
Titanium	ppm	ASTM D5185m	>3	**0**	<1	0
Silver	ppm	ASTM D5185m	>3	**<1**	0	<1
Aluminum	ppm	ASTM D5185m	>7	**2**	2	1
Lead	ppm	ASTM D5185m	>12	**<1**	0	<1
Copper	ppm	ASTM D5185m	>30	**<1**	<1	<1
Tin	ppm	ASTM D5185m	>9	**3**	<1	<1
Antimony	ppm	ASTM D5185m		**---**	---	---
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	0	<1

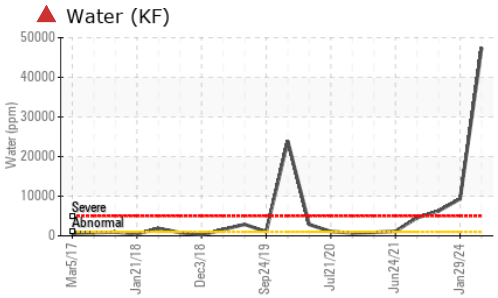
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**7**	0	1
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	0	**0**	<1	0
Manganese	ppm	ASTM D5185m		**<1**	0	<1
Magnesium	ppm	ASTM D5185m	0	**3**	0	<1
Calcium	ppm	ASTM D5185m	0	**6**	<1	2
Phosphorus	ppm	ASTM D5185m	1800	**1619**	1391	1540
Zinc	ppm	ASTM D5185m	0	**6**	0	<1
Sulfur	ppm	ASTM D5185m	0	**63**	0	31

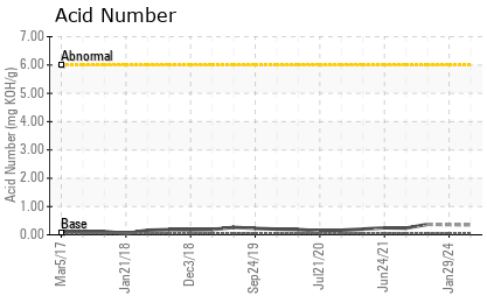
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	**3**	1	2
Sodium	ppm	ASTM D5185m		**26**	0	0
Potassium	ppm	ASTM D5185m	>20	**5**	1	1
Water	%	ASTM D6304	>.1	▲ **4.74**	▲ 0.930	▲ 0.626
ppm Water	ppm	ASTM D6304	>1000	▲ **47400**	▲ 9302	▲ 6260

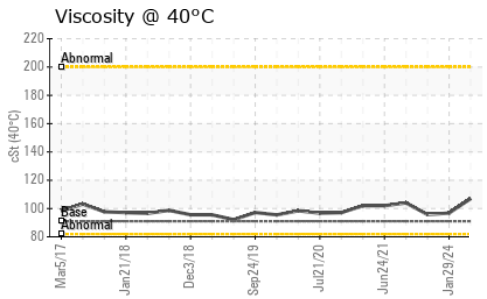
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**---**	---	---
Particles >6µm		ASTM D7647	>1300	**---**	---	---
Particles >14µm		ASTM D7647	>160	**---**	---	---
Particles >21µm		ASTM D7647	>40	**---**	---	---
Particles >38µm		ASTM D7647	>10	**---**	---	---
Particles >71µm		ASTM D7647	>3	**---**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**---**	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	**0.35**	---	0.37

OIL ANALYSIS REPORT





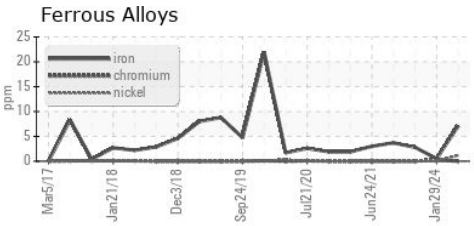


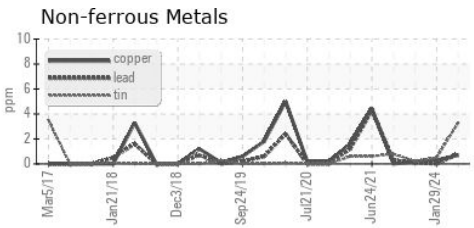
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	▲ **MODER**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	▲ HEAVY
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	● **HAZY**	NORML	● HAZY
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>.1	▲ **0.2%**	NEG	▲ 0.2%
Free Water	scalar	*Visual		**NEG**	NEG	▲ 1.0

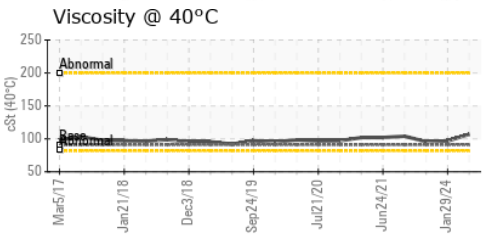
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	91	**107**	96.8	95.7

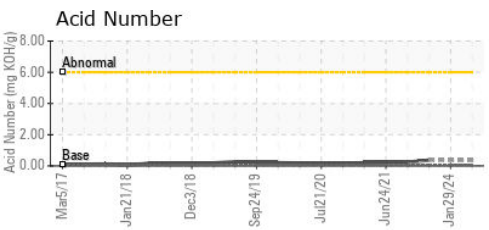
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS









Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM37781
Lab Number : 06214053
Unique Number : 11086917
Test Package : IND 2

Received : 18 Jun 2024
Tested : 21 Jun 2024
Diagnosed : 21 Jun 2024 - Doug Bogart

TYSON-Emporia-USP
2101 West Sixth
Emporia, KS
US 66801
Contact: SERVICE MANAGER
T: (620)343-3640
F: (620)340-1253

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)