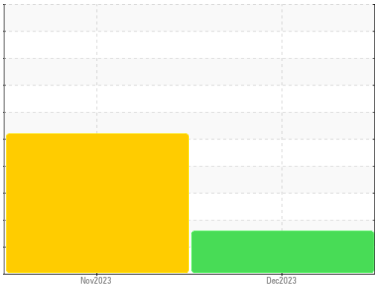
PROBLEM SUMMARY

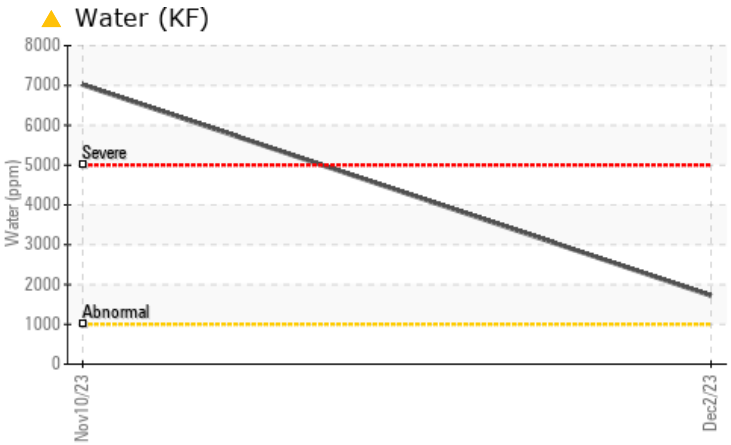
Sample Rating Trend



WATER

Machine Id
S MARLEN LEYBOLD SV200 (S/N U141100116)
Component
Vacuum Pump
Fluid
USPI VAC 100 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you follow the water drain-off procedure for this component. Resample at the next service interval to monitor. There is too much water present in this sample to perform a particle count.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	---
Water	%	ASTM D6304	>.1	▲ **0.172**	▲ 0.712	---
ppm Water	ppm	ASTM D6304	>1000	▲ **1720**	▲ 7017	---
Emulsified Water	scalar	*Visual	>.1	▲ **10.0%**	▲ 0.2%	---

Customer Id: TYSKAN
Sample No.: USPM31969
Lab Number: 06028705
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.

HISTORICAL DIAGNOSIS

10 Nov 2023 Diag: Doug Bogart

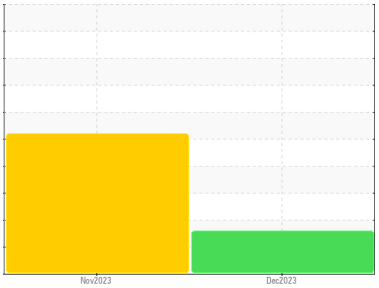
WATER

We advise that you perform a filter service, 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 silt (particulates < 14 microns in size) present in the oil. Appearance is hazy. There is a moderate concentration of water present in the oil. The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirmed. The AN level is acceptable for this fluid.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
S MARLEN LEYBOLD SV200 (S/N U141100116)
Component
Vacuum Pump
Fluid
USPI VAC 100 (--- GAL)

DIAGNOSIS

Recommendation
We advise that you follow the water drain-off procedure for this component. Resample at the next service interval to monitor. There is too much water present in this sample to perform a particle count.

Wear
All component wear rates are normal.

Contamination
There is a light concentration of water present in the oil. Excessive free water present.

Fluid Condition
The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USPM31969**	USPM31288	---
Sample Date		Client Info		**02 Dec 2023**	10 Nov 2023	---
Machine Age	hrs	Client Info		**0**	0	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	N/A	---
Sample Status				**ABNORMAL**	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**0**	7	---
Chromium	ppm	ASTM D5185m	>20	**0**	0	---
Nickel	ppm	ASTM D5185m	>20	**0**	0	---
Titanium	ppm	ASTM D5185m		**0**	0	---
Silver	ppm	ASTM D5185m		**0**	0	---
Aluminum	ppm	ASTM D5185m	>20	**2**	8	---
Lead	ppm	ASTM D5185m	>20	**0**	0	---
Copper	ppm	ASTM D5185m	>20	**<1**	<1	---
Tin	ppm	ASTM D5185m	>20	**<1**	0	---
Vanadium	ppm	ASTM D5185m		**0**	<1	---
Cadmium	ppm	ASTM D5185m		**0**	0	---

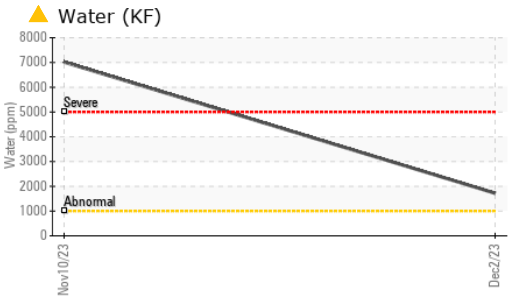
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**0**	0	---
Barium	ppm	ASTM D5185m	0	**0**	0	---
Molybdenum	ppm	ASTM D5185m	0	**0**	0	---
Manganese	ppm	ASTM D5185m		**<1**	<1	---
Magnesium	ppm	ASTM D5185m	0	**0**	0	---
Calcium	ppm	ASTM D5185m	0	**<1**	<1	---
Phosphorus	ppm	ASTM D5185m	1800	**675**	▲ 65	---
Zinc	ppm	ASTM D5185m	0	**0**	▲ 48	---
Sulfur	ppm	ASTM D5185m	0	**305**	▲ 1336	---

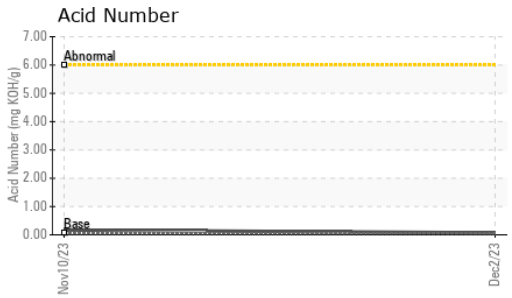
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**7**	3	---
Sodium	ppm	ASTM D5185m		**1**	<1	---
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	---
Water	%	ASTM D6304	>.1	▲ **0.172**	▲ 0.712	---
ppm Water	ppm	ASTM D6304	>1000	▲ **1720**	▲ 7017	---

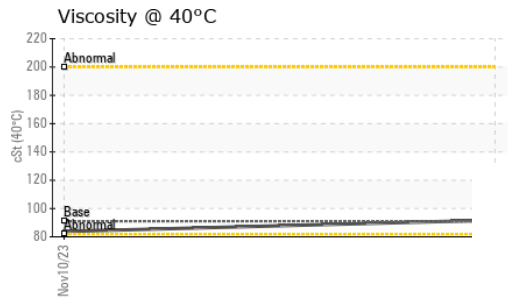
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	**---**	▲ 36865	---
Particles >6µm	ASTM D7647	>1300	**---**	▲ 6395	---
Particles >14µm	ASTM D7647	>160	**---**	93	---
Particles >21µm	ASTM D7647	>40	**---**	11	---
Particles >38µm	ASTM D7647	>10	**---**	4	---
Particles >71µm	ASTM D7647	>3	**---**	1	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	**---**	▲ 22/20/14	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	**0.07**	0.17	---

OIL ANALYSIS REPORT

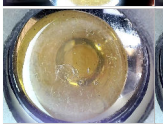
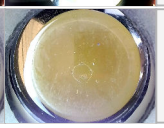




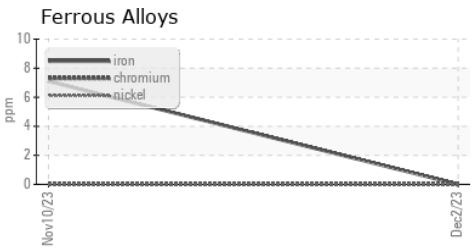


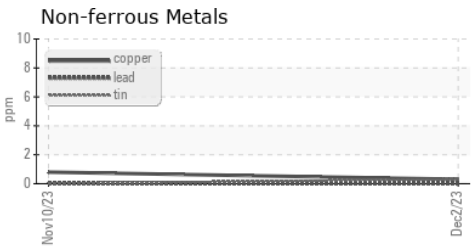
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	▲ HAZY	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>.1	▲ **10.0%**	▲ 0.2%	---
Free Water	scalar	*Visual		**NEG**	NEG	---

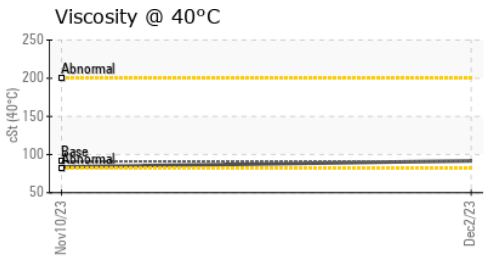
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	91	**91.8**	▲ 83.8	---

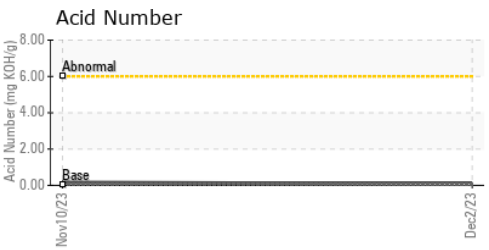
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS









Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM31969
Lab Number : 06028705
Unique Number : 10778496
Test Package : IND 2

Recieved : 07 Dec 2023
Diagnosed : 19 Dec 2023
Diagnostician : Doug Bogart

TYSON - HILLSHIRE BRANDS
4612 SPEAKER RD
KANSAS CITY, KS
US 66105
Contact: WILLIAM KENNEDY

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)

T:
F: