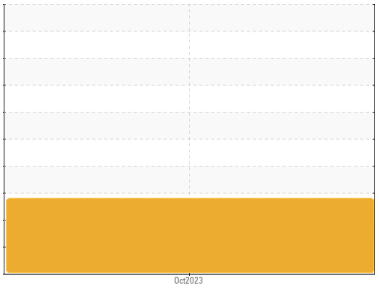
PROBLEM SUMMARY

Sample Rating Trend

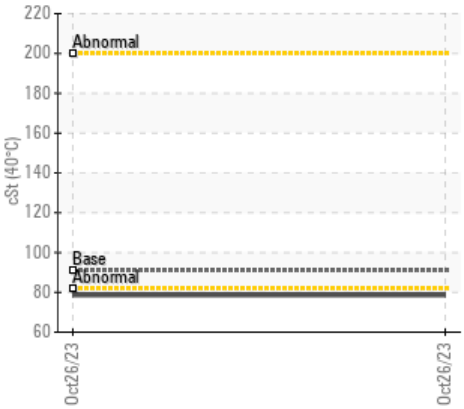


VISCOSITY

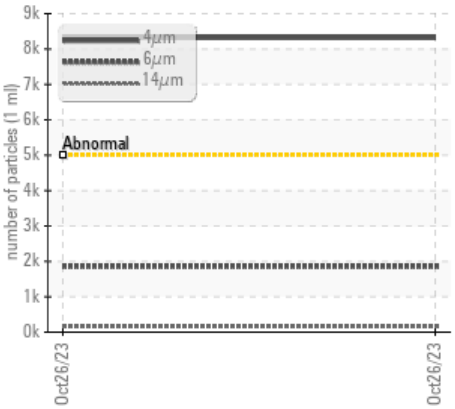
Machine Id
BUSCH CV 4.4 (S/N C2791)
Component
Vacuum Pump
Fluid
USPI VAC 100 (--- GAL)

COMPONENT CONDITION SUMMARY

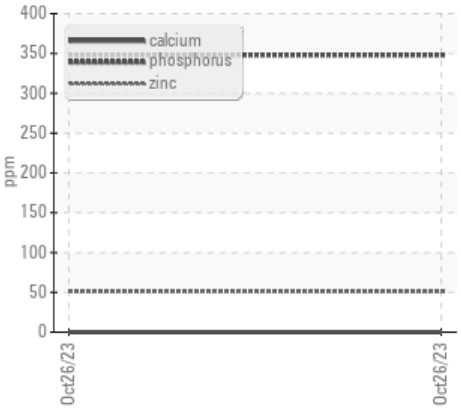
▲ Viscosity @ 40°C



▲ Particle Trend



▲ Additives



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ATTENTION**	---	---
Phosphorus	ppm	ASTM D5185m	1800	▲ **348**	---	---
Zinc	ppm	ASTM D5185m	0	▲ **51**	---	---
Sulfur	ppm	ASTM D5185m	0	▲ **945**	---	---
Particles >4µm		ASTM D7647	>5000	▲ **8318**	---	---
Particles >6µm		ASTM D7647	>1300	▲ **1856**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/18/14**	---	---
Visc @ 40°C	cSt	ASTM D445	91	▲ **78.6**	---	---

Customer Id: CAVHER
Sample No.: USPM31168
Lab Number: 05999050
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

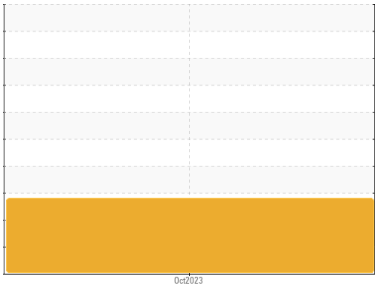
RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY

Machine Id
BUSCH CV 4.4 (S/N C2791)
Component
Vacuum Pump
Fluid
USPI VAC 100 (--- GAL)

DIAGNOSIS

Recommendation
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 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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USPM31168**	---	---
Sample Date		Client Info		**26 Oct 2023**	---	---
Machine Age	hrs	Client Info		**0**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**ATTENTION**	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**3**	---	---
Chromium	ppm	ASTM D5185m	>20	**0**	---	---
Nickel	ppm	ASTM D5185m	>20	**0**	---	---
Titanium	ppm	ASTM D5185m		**0**	---	---
Silver	ppm	ASTM D5185m		**0**	---	---
Aluminum	ppm	ASTM D5185m	>20	**0**	---	---
Lead	ppm	ASTM D5185m	>20	**0**	---	---
Copper	ppm	ASTM D5185m	>20	**5**	---	---
Tin	ppm	ASTM D5185m	>20	**0**	---	---
Vanadium	ppm	ASTM D5185m		**0**	---	---
Cadmium	ppm	ASTM D5185m		**0**	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**0**	---	---
Barium	ppm	ASTM D5185m	0	**0**	---	---
Molybdenum	ppm	ASTM D5185m	0	**0**	---	---
Manganese	ppm	ASTM D5185m		**0**	---	---
Magnesium	ppm	ASTM D5185m	0	**0**	---	---
Calcium	ppm	ASTM D5185m	0	**0**	---	---
Phosphorus	ppm	ASTM D5185m	1800	▲ **348**	---	---
Zinc	ppm	ASTM D5185m	0	▲ **51**	---	---
Sulfur	ppm	ASTM D5185m	0	▲ **945**	---	---

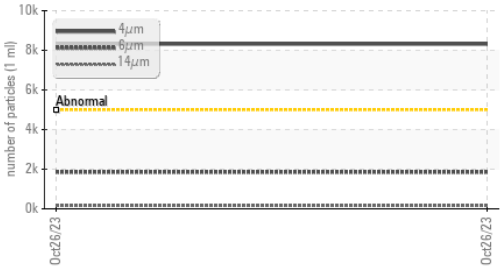
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**2**	---	---
Sodium	ppm	ASTM D5185m		**<1**	---	---
Potassium	ppm	ASTM D5185m	>20	**0**	---	---
Water	%	ASTM D6304	>.1	**0.003**	---	---
ppm Water	ppm	ASTM D6304	>1000	**33.2**	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **8318**	---	---
Particles >6µm		ASTM D7647	>1300	▲ **1856**	---	---
Particles >14µm		ASTM D7647	>160	**156**	---	---
Particles >21µm		ASTM D7647	>40	**36**	---	---
Particles >38µm		ASTM D7647	>10	**1**	---	---
Particles >71µm		ASTM D7647	>3	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/18/14**	---	---

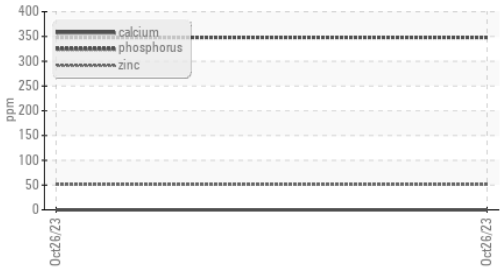
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	**0.22**	---	---

OIL ANALYSIS REPORT

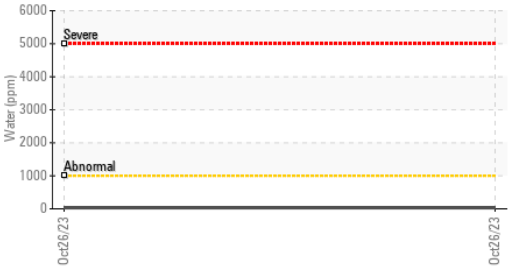
Particle Trend



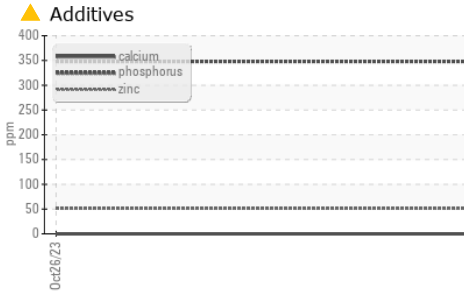
Additives



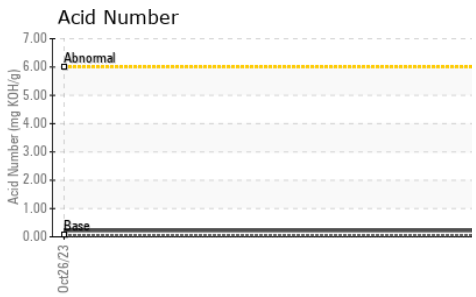
Water (KF)



Additives



Acid Number



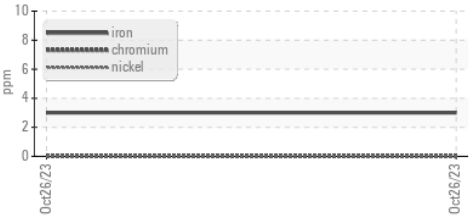
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**LIGHT**	---	---
Sand/Dirt	scalar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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	91	▲ **78.6**	---	---

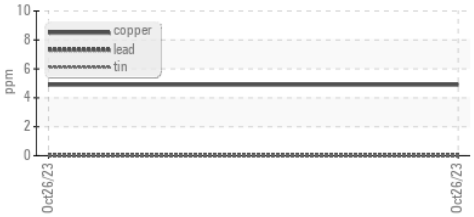
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

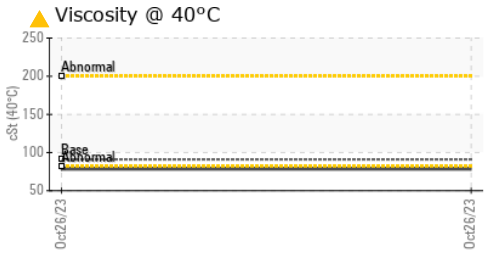
Ferrous Alloys



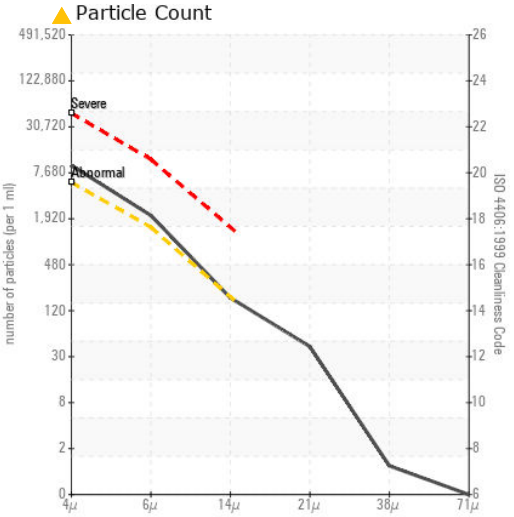
Non-ferrous Metals



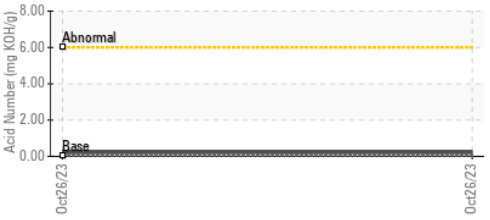
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM31168
Lab Number : 05999050
Unique Number : 10727410
Test Package : IND 2

Received : 06 Nov 2023
Diagnosed : 08 Nov 2023
Diagnostician : Doug Bogart

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)

CAVINESS BEEF PACKERS LTD
PO BOX 790
HEREFORD, TX
US 79045
Contact: HARRY RADLOFF

T: (806)357-2443
F: (806)357-2468