



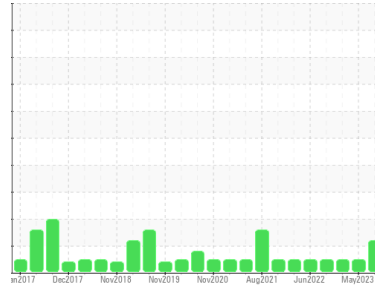
PROBLEM SUMMARY

Sample Rating Trend

ISO

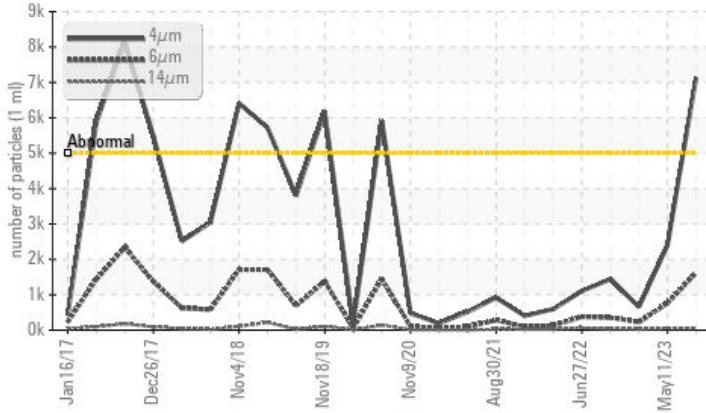


Machine Id
BUSCH MULTIVAC-3 BUSCH 5B (S/N 2512909)
Component
Pump
Fluid
USPI VAC 100 (--- GAL)



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	NORMAL	NORMAL
Particles >4µm	ASTM D7647	>5000	▲ 7124	2402	659
Particles >6µm	ASTM D7647	>1300	▲ 1617	766	224
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 20/18/13	18/17/13	17/15/12

Customer Id: IBPDAK01
Sample No.: USPM29245
Lab Number: 05928268
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

11 May 2023 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



26 Jan 2023 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



03 Oct 2022 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

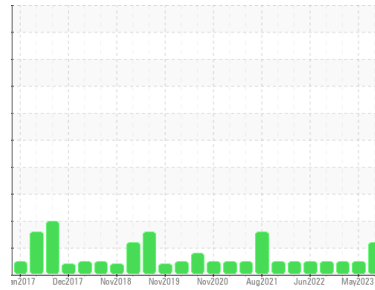
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
BUSCH MULTIVAC-3 BUSCH 5B (S/N 2512909)

Component
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 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	USPM29245	USPM28897	USPM26235
Sample Date	Client Info	19 Aug 2023	11 May 2023	26 Jan 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ATTENTION	NORMAL	NORMAL

WEAR METALS

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

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	0	0	0
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	0
Magnesium	ppm	ASTM D5185m 0	<1	10	0
Calcium	ppm	ASTM D5185m 0	<1	0	1
Phosphorus	ppm	ASTM D5185m 1800	1393	1549	1444
Zinc	ppm	ASTM D5185m 0	1	14	3
Sulfur	ppm	ASTM D5185m 0	0	0	12

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >60	2	2	1
Sodium	ppm	ASTM D5185m	0	1	0
Potassium	ppm	ASTM D5185m >20	0	5	0
Water	%	ASTM D6304	0.054	0.056	0.029
ppm Water	ppm	ASTM D6304 >.1	545.6	563.0	294.9

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 7124	2402	659
Particles >6µm	ASTM D7647 >1300	▲ 1617	766	224
Particles >14µm	ASTM D7647 >160	53	52	23
Particles >21µm	ASTM D7647 >40	15	9	5
Particles >38µm	ASTM D7647 >10	1	1	0
Particles >71µm	ASTM D7647 >3	0	1	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 20/18/13	18/17/13	17/15/12

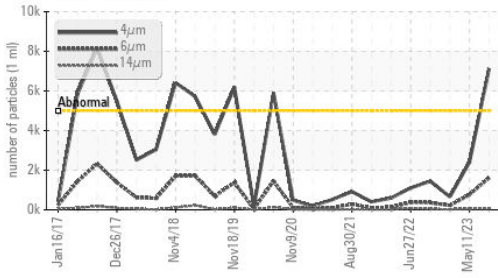
FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	0.18	0.16	0.14

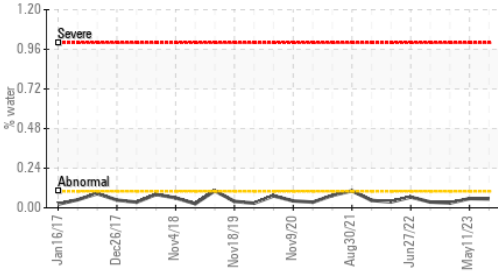


OIL ANALYSIS REPORT

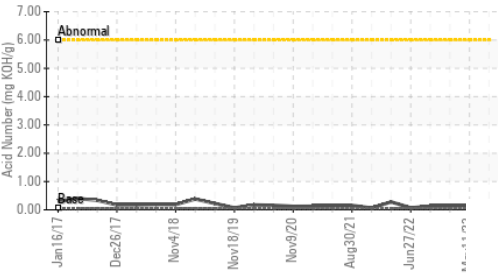
▲ Particle Trend



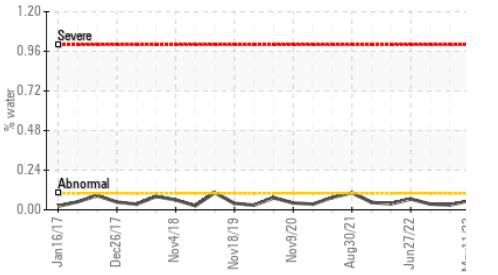
Water



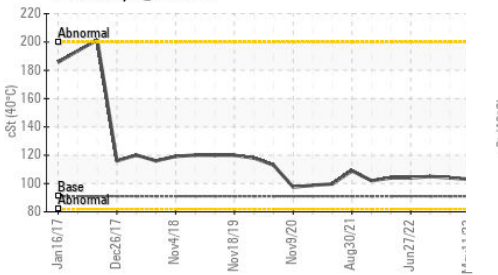
Acid Number



Water



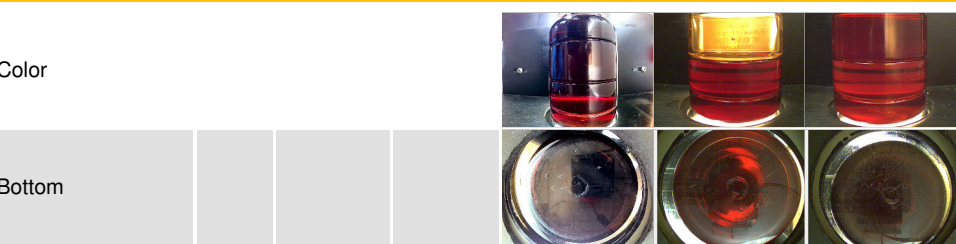
Viscosity @ 40°C



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

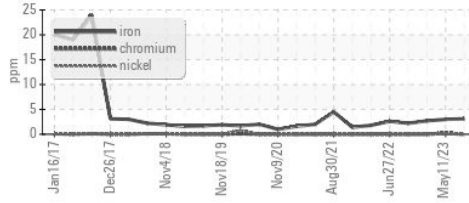
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 91	105	103	104

SAMPLE IMAGES

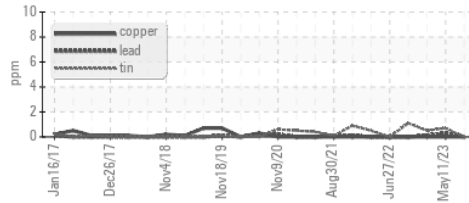


GRAPHS

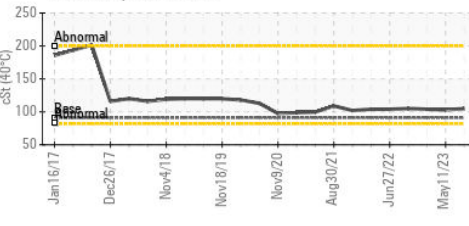
Ferrous Alloys



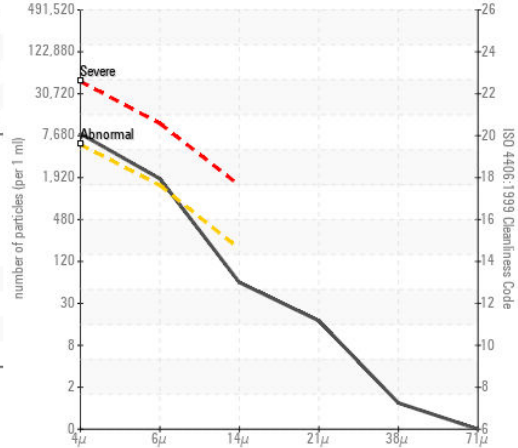
Non-ferrous Metals



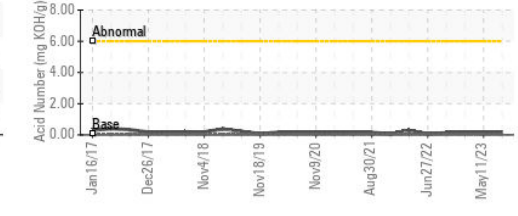
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : USPM29245
 Lab Number : 05928268
 Unique Number : 10608215
 Test Package : IND 2

TYSON-DAKOTA CITY-USP
 P.O. BOX 515
 DAKOTA CITY, NE
 US 68731
 Contact: RICHARD KOCH

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)

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