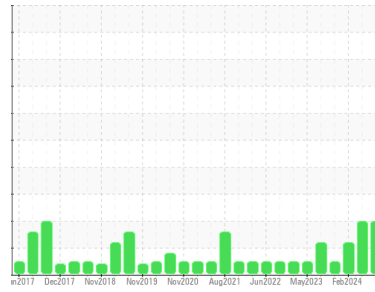




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**BUSCH MULTIVAC-3 BUSCH 5B**  
 Component  
**Pump**  
 Fluid  
**USPI VAC 100 (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of particulates 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	<b>USPM37606</b>	USP0006783	USPM30268
Sample Date	Client Info	<b>09 Jun 2024</b>	15 Apr 2024	28 Feb 2024
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >90	<b>17</b>	8	7
Chromium	ppm	ASTM D5185m >5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >7	<b>0</b>	<b>▲ 24</b>	<1
Lead	ppm	ASTM D5185m >12	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >30	<b>0</b>	1	0
Tin	ppm	ASTM D5185m >9	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	<b>0</b>	<1	0
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Calcium	ppm	ASTM D5185m 0	<b>0</b>	4	0
Phosphorus	ppm	ASTM D5185m 1800	<b>1364</b>	1144	1332
Zinc	ppm	ASTM D5185m 0	<b>0</b>	0	4
Sulfur	ppm	ASTM D5185m 0	<b>0</b>	62	0

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >60	<b>2</b>	15	1
Sodium	ppm	ASTM D5185m	<b>7</b>	3	3
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	5	0
Water	%	ASTM D6304 >.1	<b>0.052</b>	0.056	0.030
ppm Water	ppm	ASTM D6304 >1000	<b>522</b>	566	302

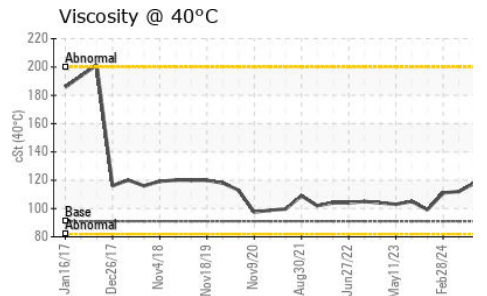
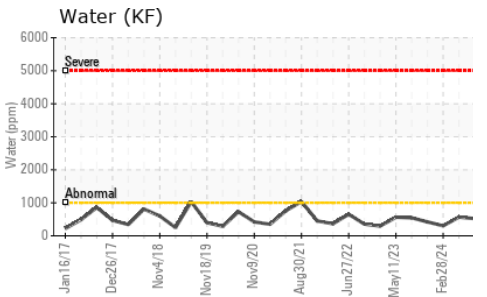
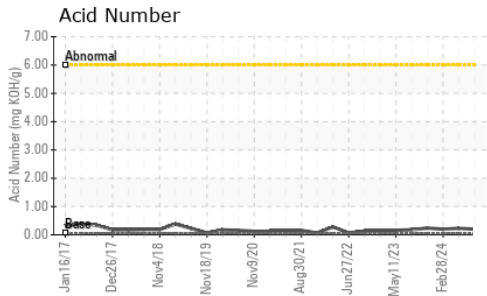
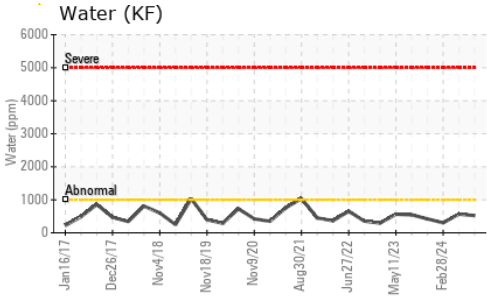
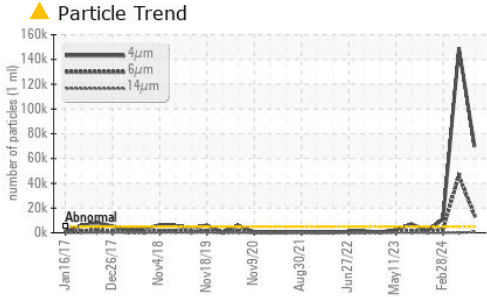
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>▲ 69549</b>	▲ 149257	▲ 11019
Particles >6µm	ASTM D7647 >1300	<b>▲ 14085</b>	▲ 46092	▲ 2660
Particles >14µm	ASTM D7647 >160	<b>▲ 595</b>	112	66
Particles >21µm	ASTM D7647 >40	<b>▲ 123</b>	22	9
Particles >38µm	ASTM D7647 >10	<b>3</b>	1	0
Particles >71µm	ASTM D7647 >3	<b>1</b>	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>▲ 23/21/16</b>	▲ 24/23/14	▲ 21/19/13

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	<b>0.20</b>	0.23	0.20

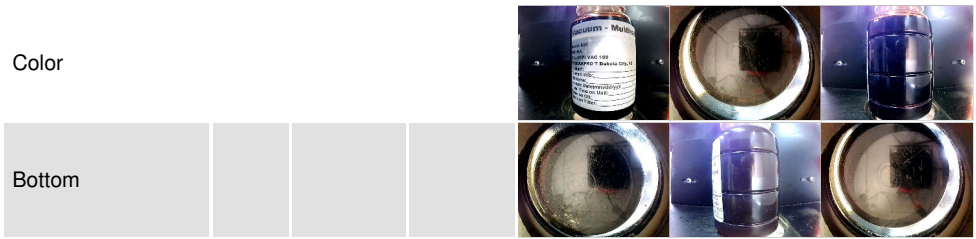
# OIL ANALYSIS REPORT



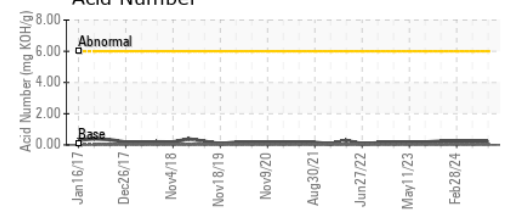
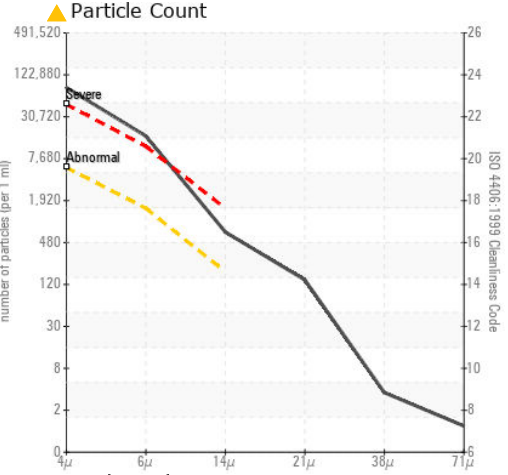
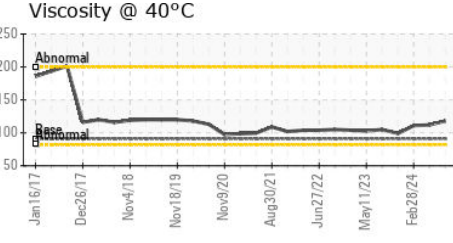
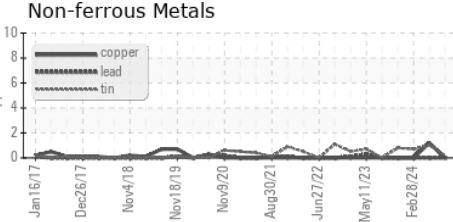
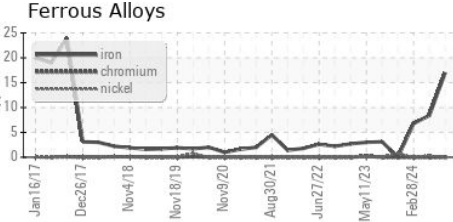
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 91	118	112	111

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USPM37606 **Received** : 10 Jun 2024  
**Lab Number** : 06205492 **Tested** : 12 Jun 2024  
**Unique Number** : 11072953 **Diagnosed** : 12 Jun 2024 - Doug Bogart  
**Test Package** : IND 2

**TYSON-DAKOTA CITY-PRO**  
 P.O. BOX 515  
 DAKOTA CITY, NE  
 US 68731  
 Contact: Service Manager

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)