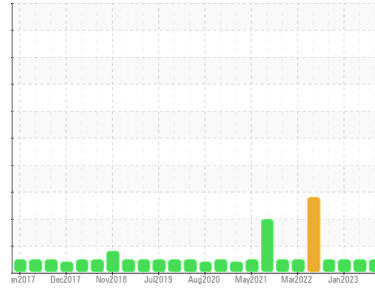




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**BUSCH VM9 / VP-1 (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 no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### 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>USPM29253</b>	USPM28932	USPM26270
Sample Date	Client Info	<b>19 Aug 2023</b>	11 May 2023	26 Jan 2023
Machine Age	hrs Client Info	<b>0</b>	0	0
Oil Age	hrs Client Info	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >90	<b>0</b>	2	4
Chromium	ppm ASTM D5185m >5	<b>0</b>	0	0
Nickel	ppm ASTM D5185m >5	<b>0</b>	0	0
Titanium	ppm ASTM D5185m >3	<b>0</b>	<1	0
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >7	<b>0</b>	<1	<1
Lead	ppm ASTM D5185m >12	<b>0</b>	0	<1
Copper	ppm ASTM D5185m >30	<b>0</b>	0	0
Tin	ppm ASTM D5185m >9	<b>0</b>	<1	<1
Vanadium	ppm ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>0</b>	0	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>	10	0
Calcium	ppm ASTM D5185m 0	<b>0</b>	0	<1
Phosphorus	ppm ASTM D5185m 1800	<b>785</b>	891	952
Zinc	ppm ASTM D5185m 0	<b>0</b>	12	6
Sulfur	ppm ASTM D5185m 0	<b>17</b>	0	53

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >60	<b>3</b>	2	2
Sodium	ppm ASTM D5185m	<b>0</b>	<1	2
Potassium	ppm ASTM D5185m >20	<b>&lt;1</b>	5	0
Water	% ASTM D6304	<b>0.046</b>	0.040	0.021
ppm Water	ppm ASTM D6304 >.1	<b>467.2</b>	402.2	212.0

## FLUID CLEANLINESS

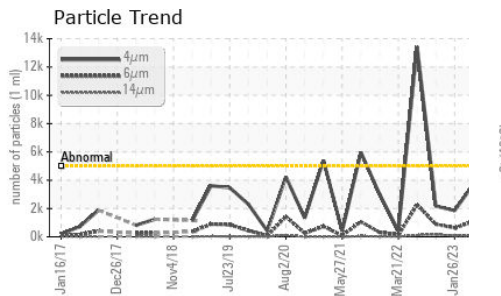
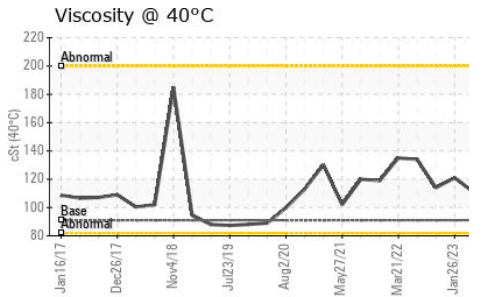
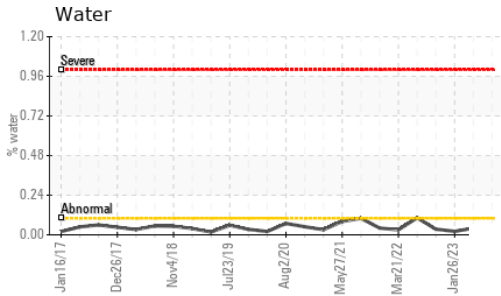
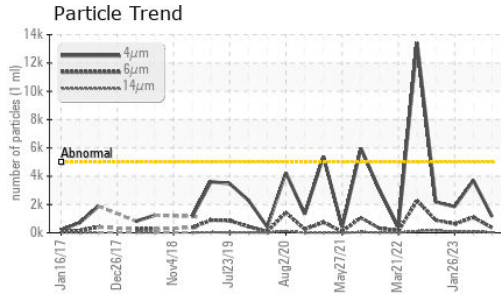
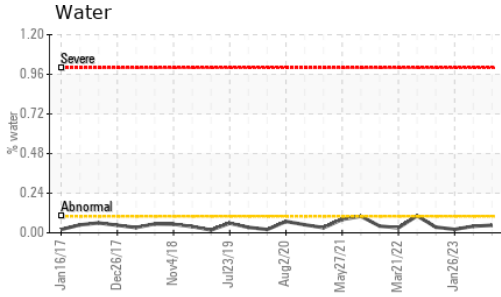
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>1151</b>	3702	1852
Particles >6µm	ASTM D7647 >1300	<b>360</b>	1086	632
Particles >14µm	ASTM D7647 >160	<b>37</b>	65	78
Particles >21µm	ASTM D7647 >40	<b>13</b>	11	15
Particles >38µm	ASTM D7647 >10	<b>2</b>	2	1
Particles >71µm	ASTM D7647 >3	<b>0</b>	1	1
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>17/16/12</b>	19/17/13	18/16/13

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 0.05	<b>0.18</b>	0.17	0.21



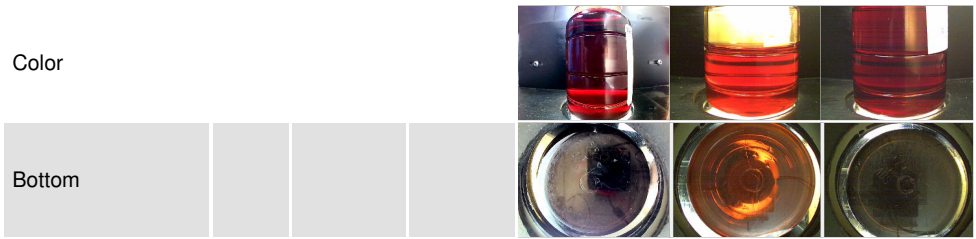
# OIL ANALYSIS REPORT



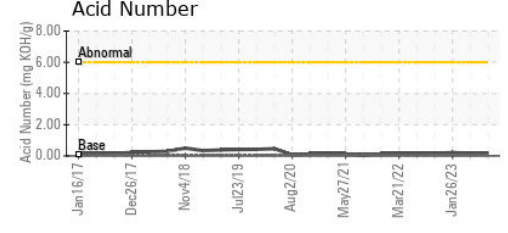
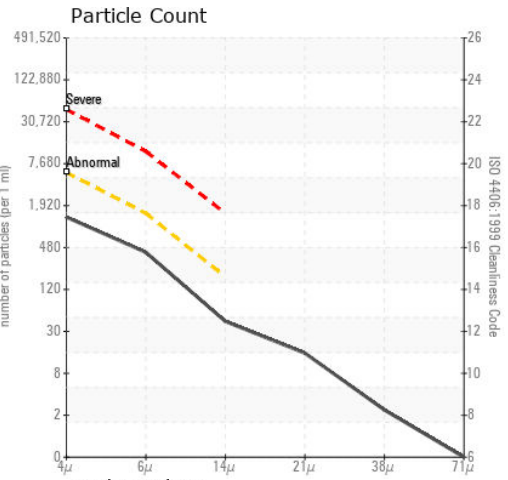
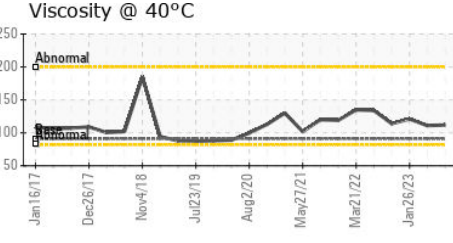
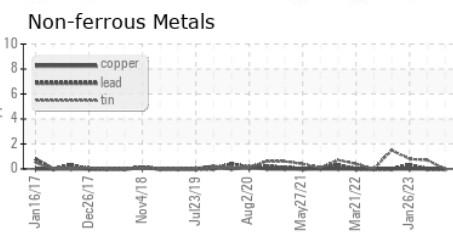
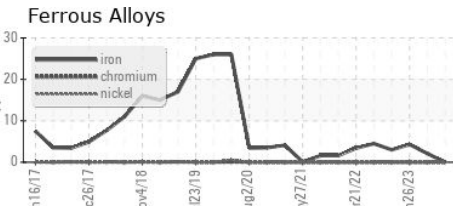
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 91	<b>112</b>	111	121

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USPM29253  
**Lab Number** : 05928263  
**Unique Number** : 10608210  
**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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