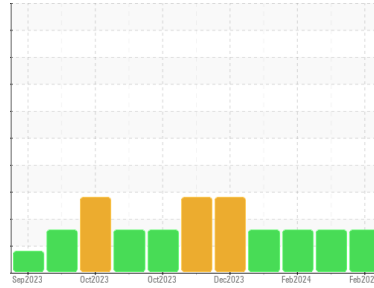




# OIL ANALYSIS REPORT

Sample Rating Trend



**DIRT**



Machine Id  
**SL4-2 ASSET 9705 (S/N C1444000126)**

Component  
**Vacuum Pump**

Fluid  
**USPI 1580-125 (11 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Elemental level of silicon (Si) above normal. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

An increase in the viscosity is noted. Confirmed. 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>USPM30186</b>	USPM30071	USPM30971
Sample Date	Client Info	<b>22 Feb 2024</b>	13 Feb 2024	05 Feb 2024
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>303</b>	200	113
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	MARGINAL	MARGINAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	<b>0</b>	2	0
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	1	2
Lead	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >20	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>0</b>	2	0
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	<b>3</b>	<1	0
Calcium	ppm	ASTM D5185m	<b>4</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>1517</b>	1745	1877
Zinc	ppm	ASTM D5185m	<b>4</b>	0	0
Sulfur	ppm	ASTM D5185m	<b>1040</b>	1226	1170

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>▲ 39</b>	▲ 25	▲ 31
Sodium	ppm	ASTM D5185m	<b>0</b>	2	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	1	<1
Water	%	ASTM D6304 >2.0	<b>0.209</b>	0.390	0.126
ppm Water	ppm	ASTM D6304 >20000	<b>2096</b>	3906	1269

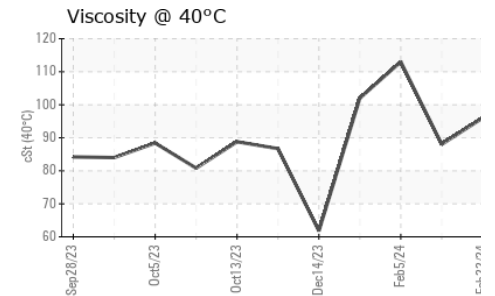
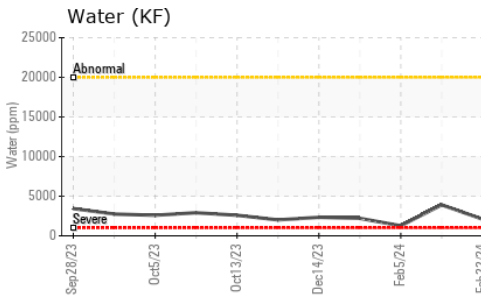
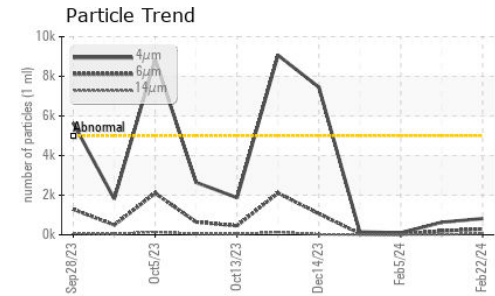
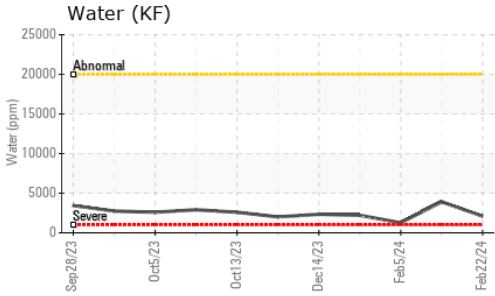
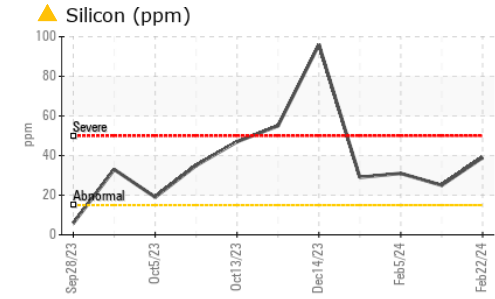
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>819</b>	631	101
Particles >6µm	ASTM D7647 >1300	<b>290</b>	193	34
Particles >14µm	ASTM D7647 >160	<b>48</b>	14	8
Particles >21µm	ASTM D7647 >40	<b>14</b>	4	3
Particles >38µm	ASTM D7647 >10	<b>1</b>	1	1
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>17/15/13</b>	16/15/11	14/12/10

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>1.28</b>	0.94	0.798

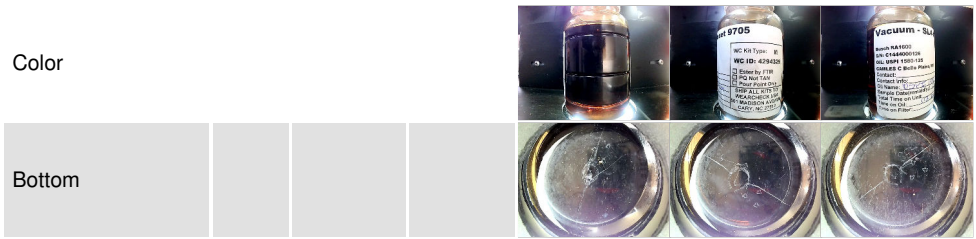
# OIL ANALYSIS REPORT



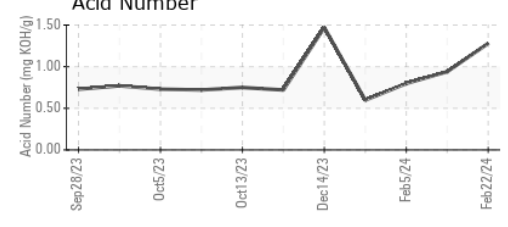
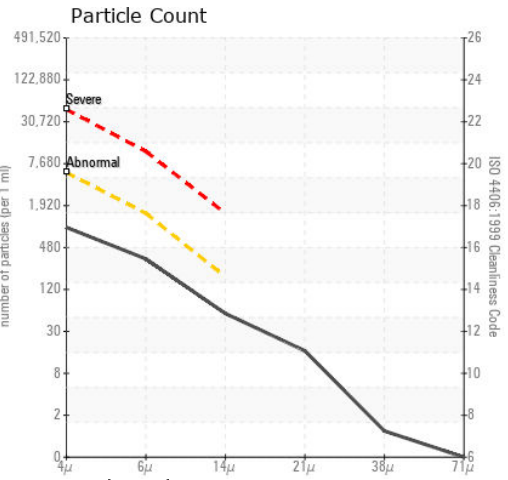
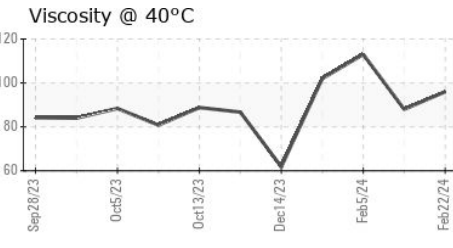
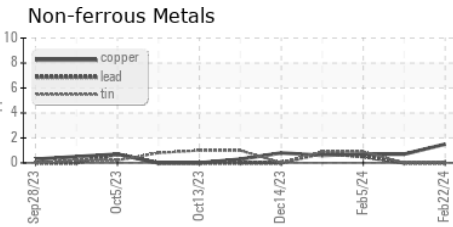
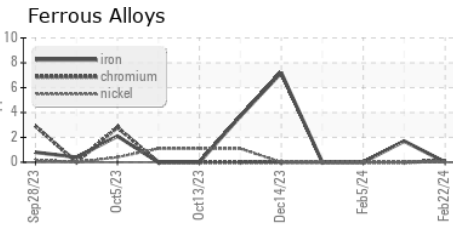
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>2.0	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	96.0	88.0	113

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USPM30186  
**Lab Number** : 06101654  
**Unique Number** : 10899884  
**Test Package** : IND 2  
**Received** : 27 Feb 2024  
**Tested** : 28 Feb 2024  
**Diagnosed** : 28 Feb 2024 - Doug Bogart

**CAMBRIA**  
 31496 CAMBRIA AVE  
 LE SUEUR, MN  
 US 56058  
 Contact: Service Manager

Certificate L2367  
 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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