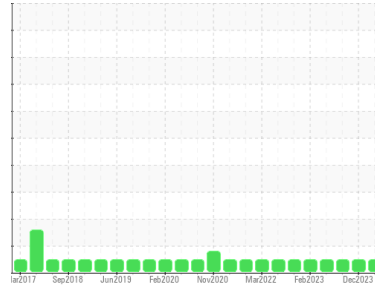




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**VACUUM 5A (S/N FM362017)**

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 component. The amount and size of particulates present in the system is 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>USPM36517</b>	USPM31566	USPM29689
Sample Date	Client Info			<b>25 Mar 2024</b>	18 Dec 2023	12 Sep 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>10</b>	23	24
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	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>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m	>12	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>30	<b>0</b>	0	0
Tin	ppm	ASTM D5185m	>9	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	<1

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>	0	<1
Magnesium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Phosphorus	ppm	ASTM D5185m	1800	<b>995</b>	998	1071
Zinc	ppm	ASTM D5185m	0	<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m	0	<b>0</b>	0	0

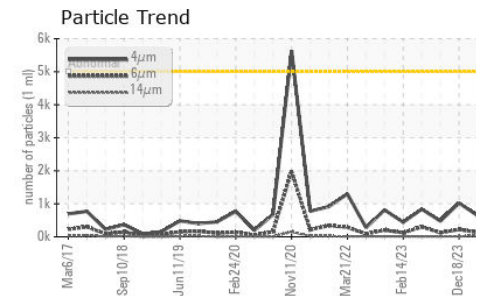
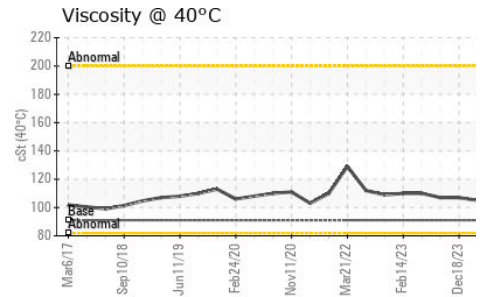
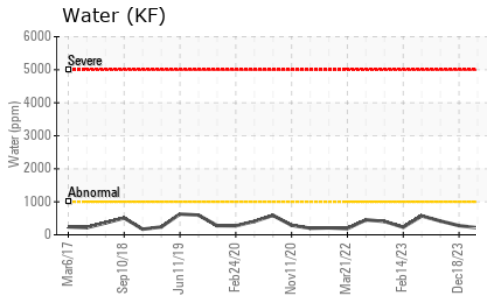
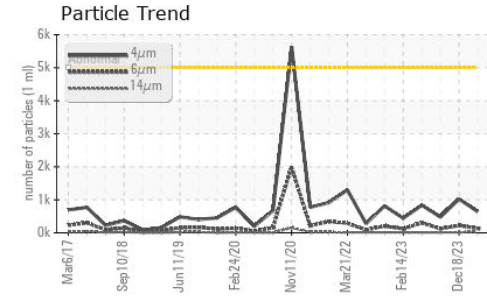
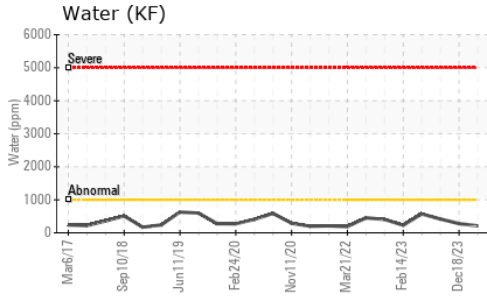
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	<b>&lt;1</b>	2	2
Sodium	ppm	ASTM D5185m		<b>3</b>	5	3
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	3
Water	%	ASTM D6304	>.1	<b>0.021</b>	0.027	0.041
ppm Water	ppm	ASTM D6304	>1000	<b>212</b>	278	417.3

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>644</b>	1021	476
Particles >6µm		ASTM D7647	>1300	<b>134</b>	223	127
Particles >14µm		ASTM D7647	>160	<b>26</b>	14	10
Particles >21µm		ASTM D7647	>40	<b>6</b>	3	2
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>17/14/12</b>	17/15/11	16/14/10

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	<b>0.27</b>	0.29	0.34



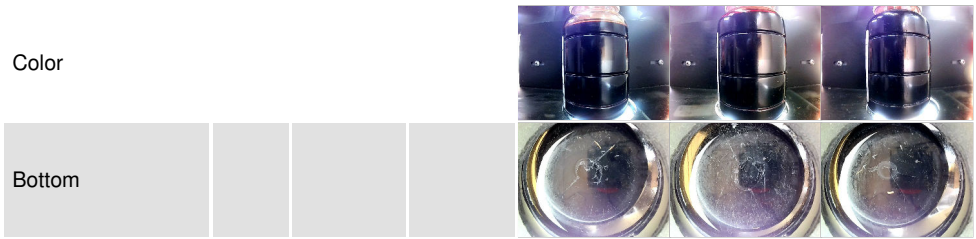
# OIL ANALYSIS REPORT



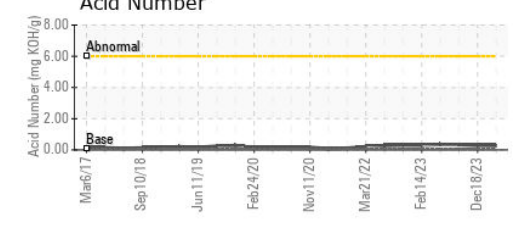
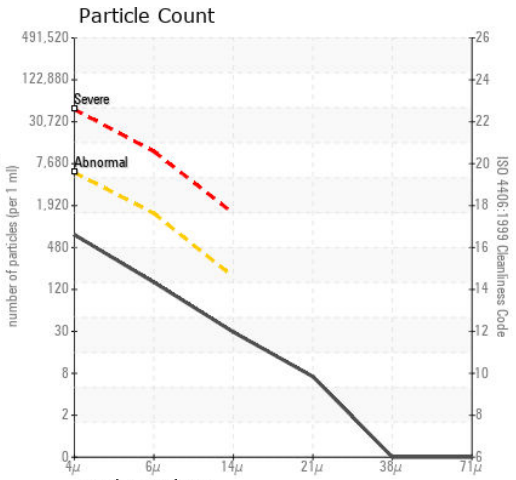
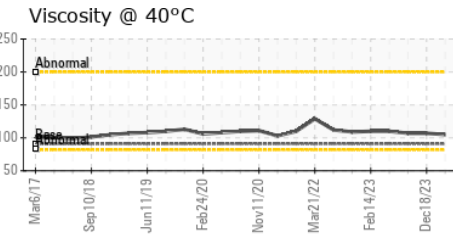
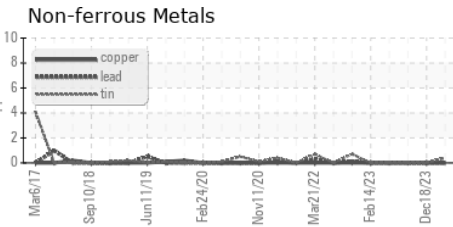
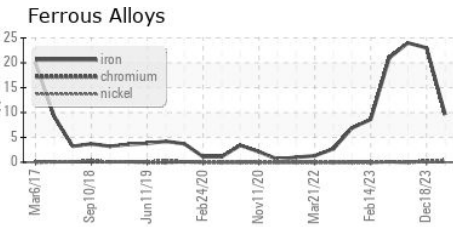
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 91	105	107	107

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USPM36517  
**Lab Number** : 06133385  
**Unique Number** : 10952850  
**Test Package** : IND 2  
**Received** : 29 Mar 2024  
**Tested** : 01 Apr 2024  
**Diagnosed** : 01 Apr 2024 - Doug Bogart

**CARGILL MEAT**  
 DODGE CITY, KS  
 US  
 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)