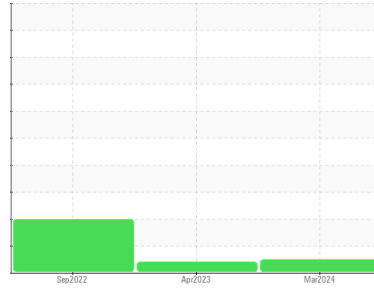




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**DVT 1 (S/N MCCT01381)**  
 Component  
**Hydraulic System**  
 Fluid  
 {not provided} (--- GAL)

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.  
 Please specify the brand and viscosity of the oil on your next sample.

### 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>USP0008171</b>	USP201481	USP242706
Sample Date	Client Info			<b>23 Mar 2024</b>	21 Apr 2023	20 Sep 2022
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>	ABNORMAL	ABNORMAL

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

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	2	0
Calcium	ppm	ASTM D5185m		<b>3</b>	<1	0
Phosphorus	ppm	ASTM D5185m		<b>128</b>	68	95
Zinc	ppm	ASTM D5185m		<b>&lt;1</b>	5	0
Sulfur	ppm	ASTM D5185m		<b>0</b>	77	57

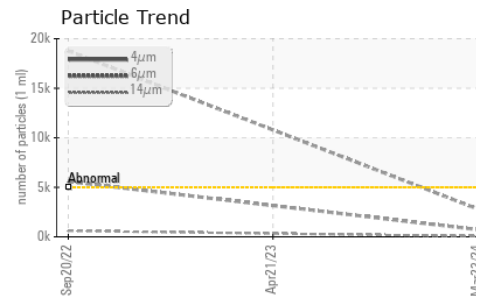
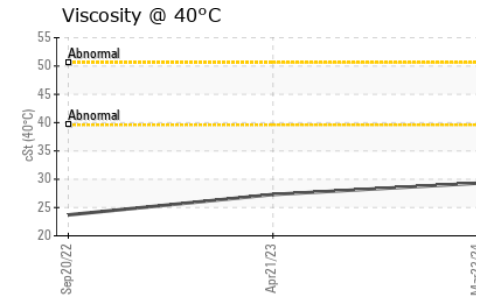
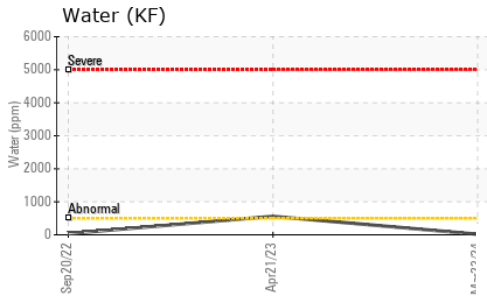
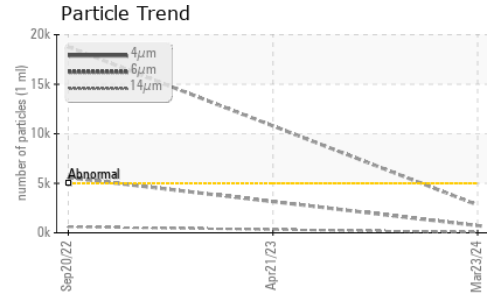
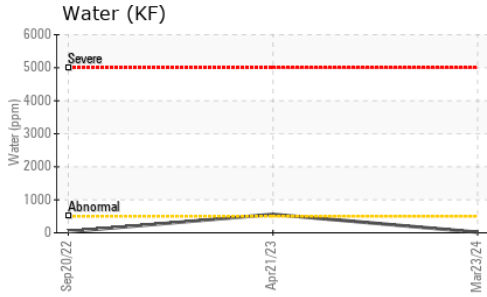
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Sodium	ppm	ASTM D5185m		<b>0</b>	4	0
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	0
Water	%	ASTM D6304	>0.05	<b>0.002</b>	0.056	0.003
ppm Water	ppm	ASTM D6304	>500	<b>18</b>	560	36.1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>2812</b>	---	▲ 18770
Particles >6µm		ASTM D7647	>1300	<b>725</b>	---	▲ 5583
Particles >14µm		ASTM D7647	>160	<b>58</b>	---	▲ 602
Particles >21µm		ASTM D7647	>40	<b>15</b>	---	▲ 207
Particles >38µm		ASTM D7647	>10	<b>1</b>	---	8
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>19/17/13</b>	---	▲ 21/20/16

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.43</b>	0.27	0.32



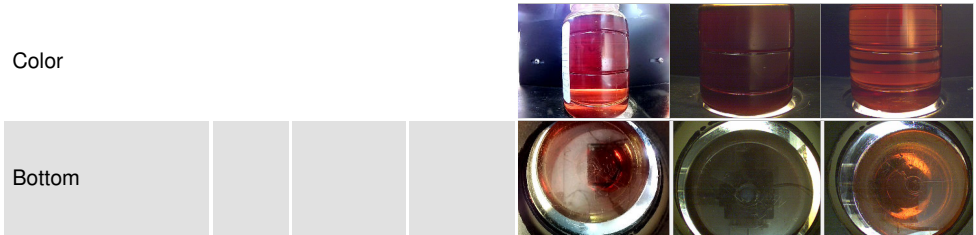
# OIL ANALYSIS REPORT



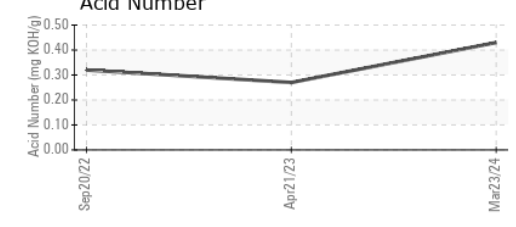
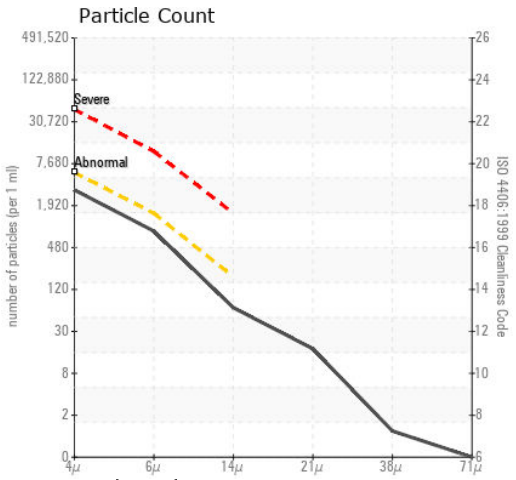
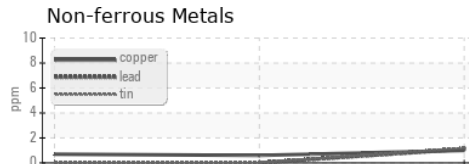
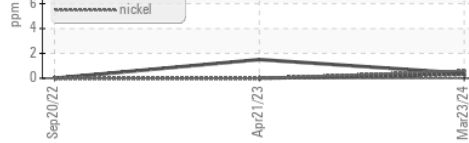
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	29.3	27.3	23.7

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP008171  
**Lab Number** : 06135704  
**Unique Number** : 10955169  
**Test Package** : IND 2  
**Received** : 01 Apr 2024  
**Tested** : 03 Apr 2024  
**Diagnosed** : 03 Apr 2024 - Doug Bogart

**HILMAR CHEESE**  
 DALHART, TX  
 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)