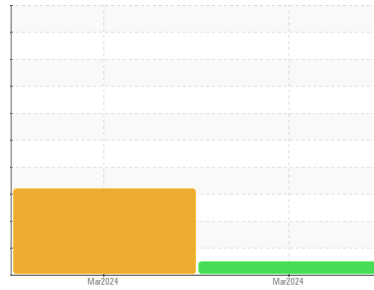




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**[AFTER]**  
 Machine Id  
**TOTE 2 YELLOW**  
 Component  
**Hydraulic System**  
 Fluid  
**USPI FG HYD 46 (--- 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>USP0008046</b>	USP0006016	---
Sample Date	Client Info			<b>21 Mar 2024</b>	17 Mar 2024	---
Machine Age	hrs	Client Info		<b>0</b>	0	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>N/A</b>	N/A	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>4</b>	3	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	---
Calcium	ppm	ASTM D5185m		<b>3</b>	0	---
Phosphorus	ppm	ASTM D5185m	725	<b>438</b>	566	---
Zinc	ppm	ASTM D5185m		<b>0</b>	0	---
Sulfur	ppm	ASTM D5185m	625	<b>436</b>	696	---

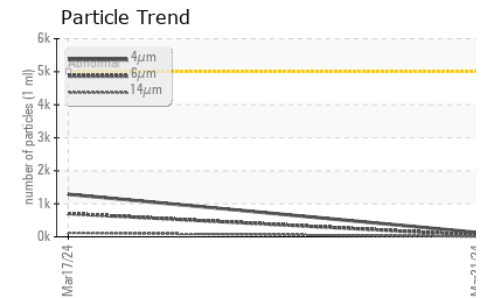
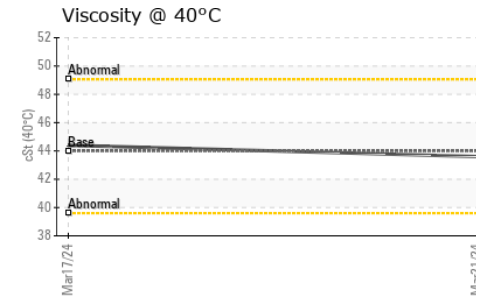
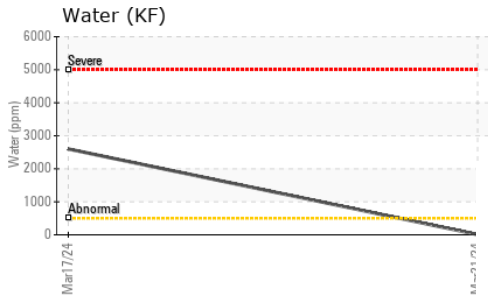
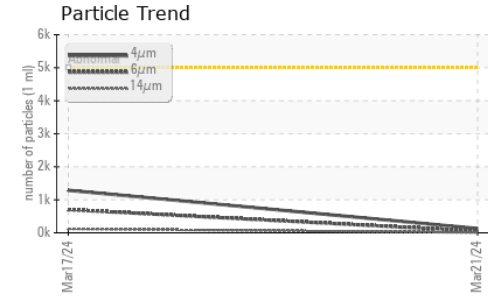
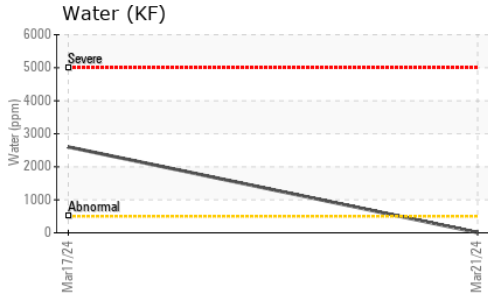
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>1</b>	<1	---
Sodium	ppm	ASTM D5185m		<b>0</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	---
Water	%	ASTM D6304	>0.05	<b>0.001</b>	▲ 0.260	---
ppm Water	ppm	ASTM D6304	>500	<b>8</b>	▲ 2600	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>130</b>	1288	---
Particles >6µm		ASTM D7647	>1300	<b>52</b>	701	---
Particles >14µm		ASTM D7647	>160	<b>6</b>	119	---
Particles >21µm		ASTM D7647	>40	<b>1</b>	40	---
Particles >38µm		ASTM D7647	>10	<b>0</b>	6	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	1	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>14/13/10</b>	17/17/14	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.36	<b>0.18</b>	0.40	---



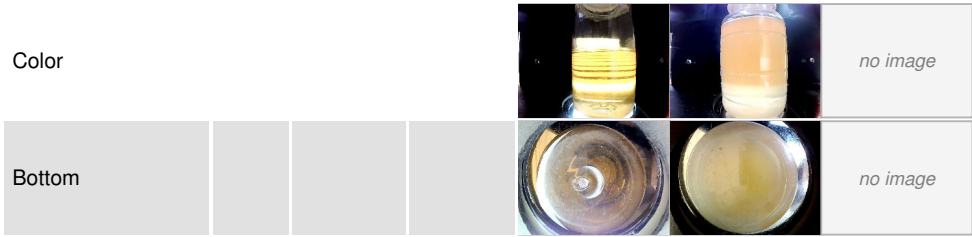
# OIL ANALYSIS REPORT



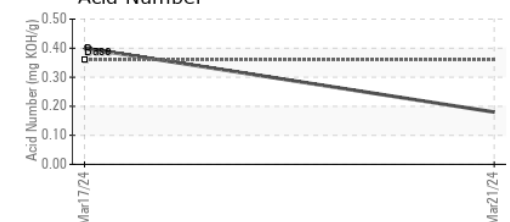
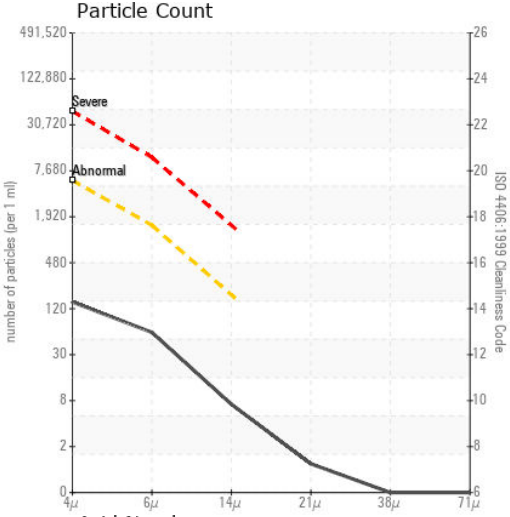
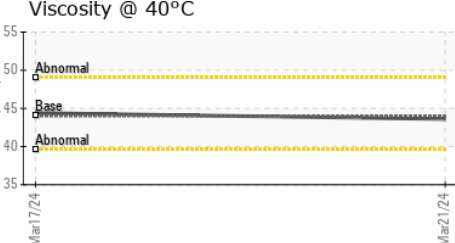
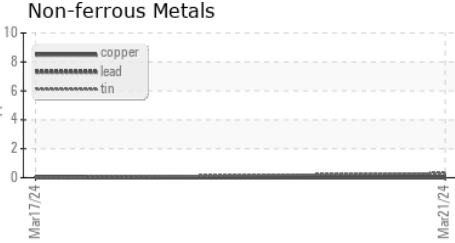
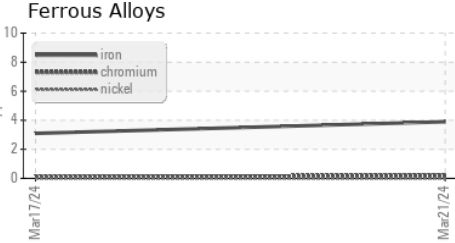
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	0.2%
Free Water	scalar	*Visual		NEG	>10%

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	44	43.6	44.4

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0008046  
**Lab Number** : 06138547  
**Unique Number** : 10963355  
**Test Package** : IND 2  
**Received** : 04 Apr 2024  
**Tested** : 05 Apr 2024  
**Diagnosed** : 05 Apr 2024 - Doug Bogart

**CARGILL FORT MORGAN**  
 1505 E BURLINGTON AVE  
 FORT MORGAN, CO  
 US 80701  
 Contact: JOE ROSENFIELD

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)