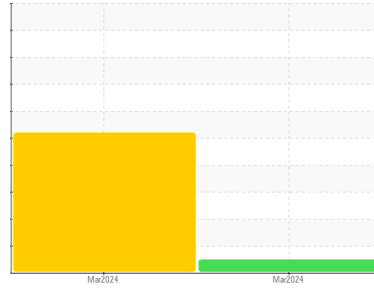




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
[AFTER]
 Machine Id
TOTE 4 BLACK
 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		USP0008047	USP0006015	---
Sample Date	Client Info		22 Mar 2024	17 Mar 2024	---
Machine Age	hrs	Client Info	0	0	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			NORMAL	ABNORMAL	---

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	0	0	---
Manganese	ppm	ASTM D5185m	0	<1	---
Magnesium	ppm	ASTM D5185m	<1	0	---
Calcium	ppm	ASTM D5185m	3	0	---
Phosphorus	ppm	ASTM D5185m 725	452	555	---
Zinc	ppm	ASTM D5185m	0	0	---
Sulfur	ppm	ASTM D5185m 625	456	696	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	1	1	---
Sodium	ppm	ASTM D5185m	0	2	---
Potassium	ppm	ASTM D5185m >20	<1	0	---
Water	%	ASTM D6304 >0.05	0.001	▲ 0.197	---
ppm Water	ppm	ASTM D6304 >500	12	▲ 1970	---

FLUID CLEANLINESS

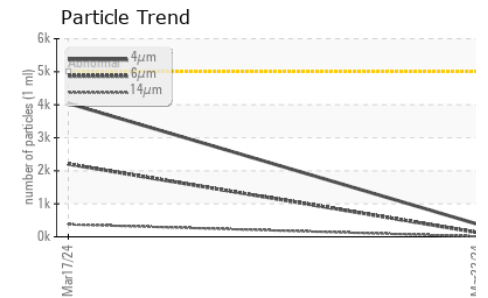
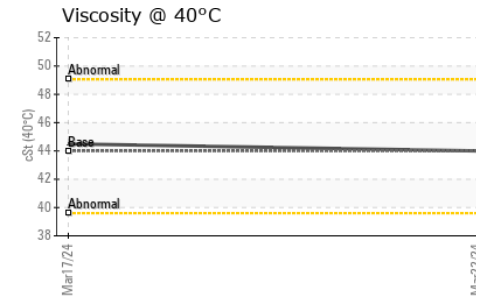
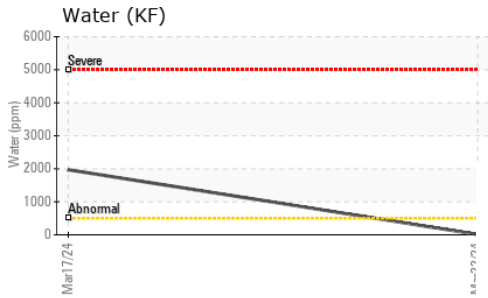
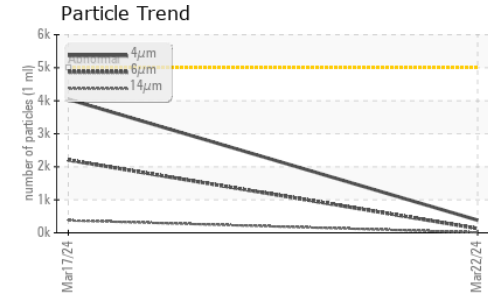
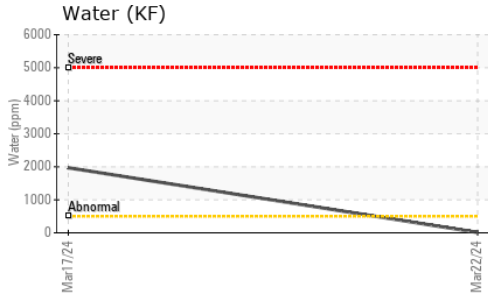
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	382	4045	---
Particles >6µm	ASTM D7647	>1300	131	▲ 2204	---
Particles >14µm	ASTM D7647	>160	12	▲ 375	---
Particles >21µm	ASTM D7647	>40	4	▲ 126	---
Particles >38µm	ASTM D7647	>10	1	▲ 20	---
Particles >71µm	ASTM D7647	>3	0	2	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	16/14/11	▲ 19/18/16	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.36	0.22	0.30	---



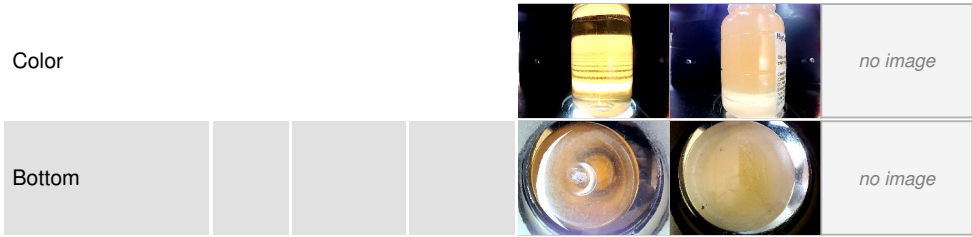
OIL ANALYSIS REPORT



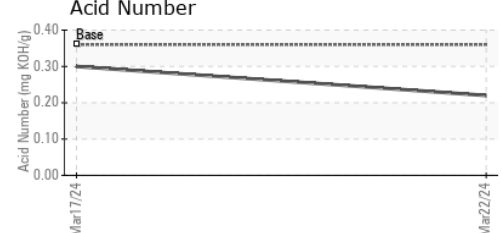
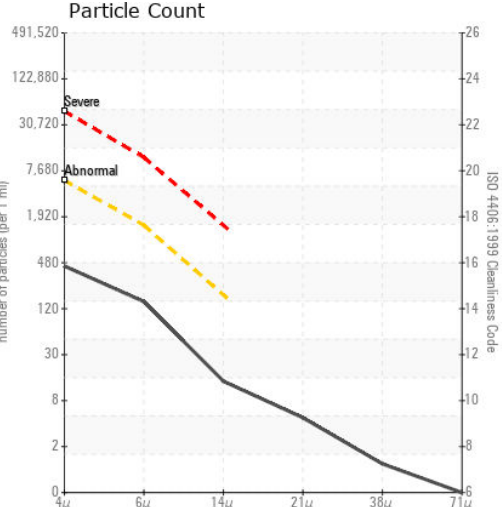
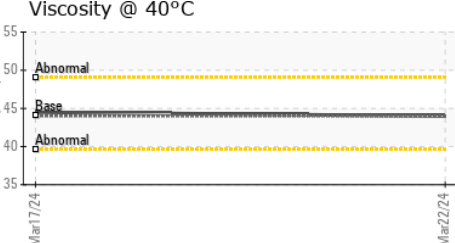
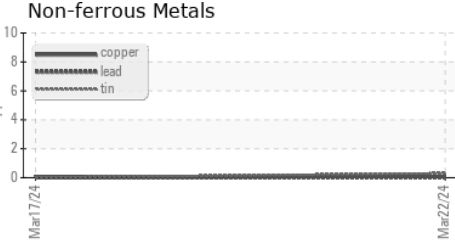
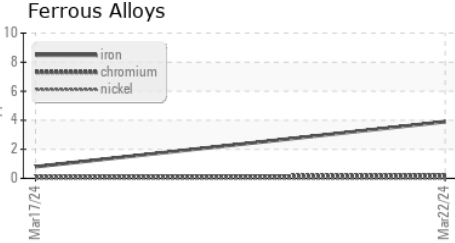
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	44.0	44.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0008047
Lab Number : 06138546
Unique Number : 10963354
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)