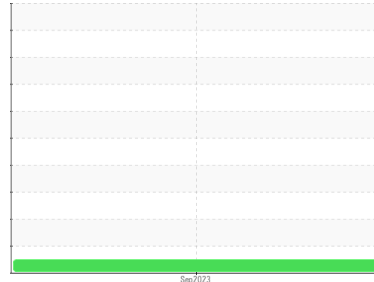


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
ROTO UNWIND
Component
Gearbox
Fluid
CHEVRON MEROPA 220 (3 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.

Fluid Condition
The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		TO60001359	---	---
Sample Date	Client Info		20 Sep 2023	---	---
Machine Age	yrs	Client Info	30	---	---
Oil Age	yrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			NORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		67	---	---
Iron	ppm	ASTM D5185m >200	108	---	---
Chromium	ppm	ASTM D5185m >10	<1	---	---
Nickel	ppm	ASTM D5185m >10	<1	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m >25	<1	---	---
Lead	ppm	ASTM D5185m >50	8	---	---
Copper	ppm	ASTM D5185m >200	132	---	---
Tin	ppm	ASTM D5185m >10	6	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 40	7	---	---
Barium	ppm	ASTM D5185m	2	---	---
Molybdenum	ppm	ASTM D5185m	<1	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m	<1	---	---
Calcium	ppm	ASTM D5185m	69	---	---
Phosphorus	ppm	ASTM D5185m 270	197	---	---
Zinc	ppm	ASTM D5185m	21	---	---
Sulfur	ppm	ASTM D5185m 8600	12344	---	---

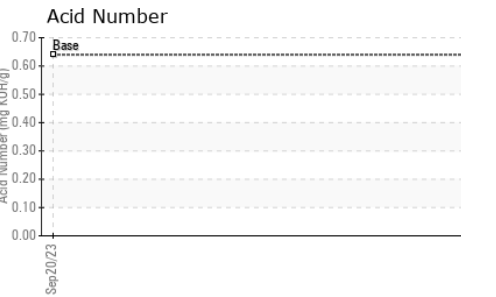
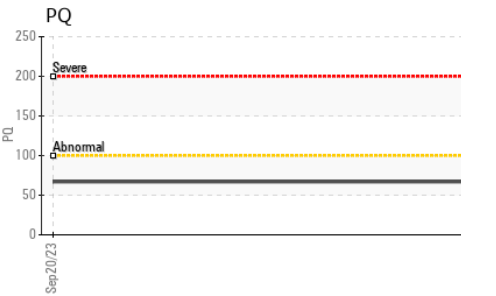
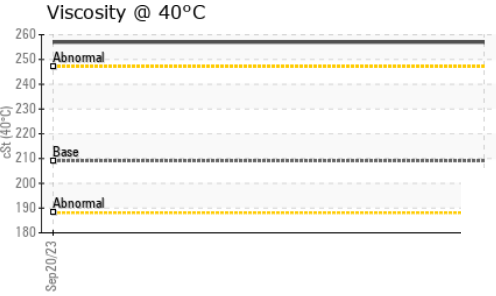
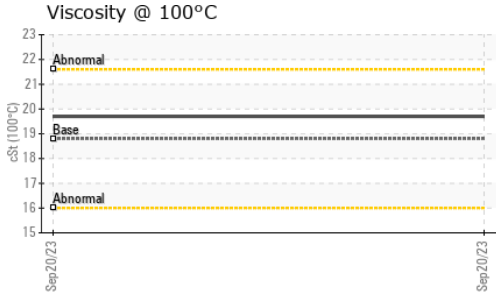
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	2	---	---
Sodium	ppm	ASTM D5185m	0	---	---
Potassium	ppm	ASTM D5185m >20	0	---	---

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 >0.2	NEG	---	---
Free Water	scalar	*Visual	NEG	---	---

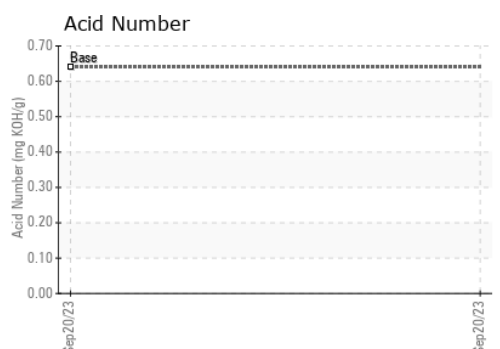
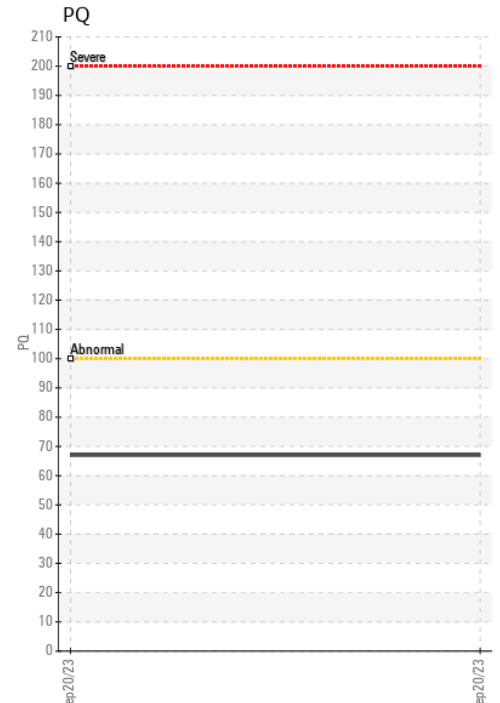
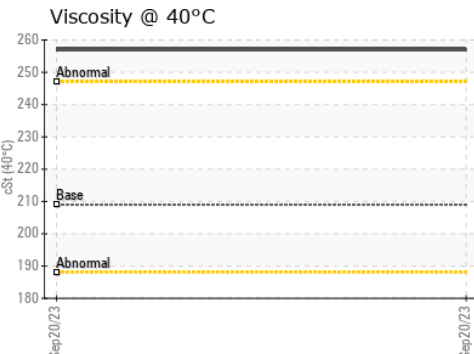
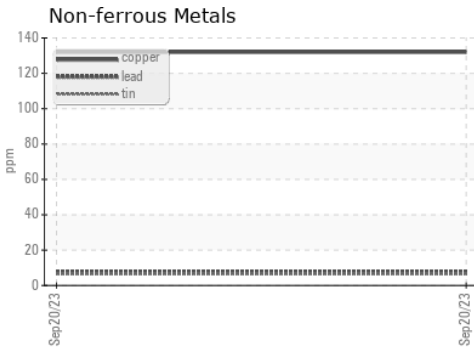
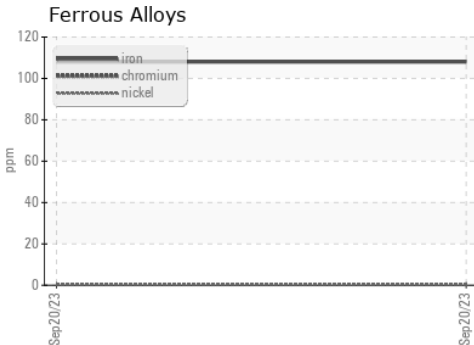
OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 209	257	---	---
Visc @ 100°C	cSt	ASTM D445 18.8	19.7	---	---
Viscosity Index (VI)	Scale	ASTM D2270 100	87	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO60001359 **Received** : 28 Sep 2023
Lab Number : 05963789 **Diagnosed** : 01 Oct 2023
Unique Number : 10670340 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KV100, PQ, VI)

3M BROWNWOOD
 4501 US 377 SOUTH
 BROWNWOOD, TX
 US 76801
 Contact: RICKY GOTCHER
 rgotcherjr@mmm.com

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)

T:
F: