

PROBLEM SUMMARY

Sample Rating Trend

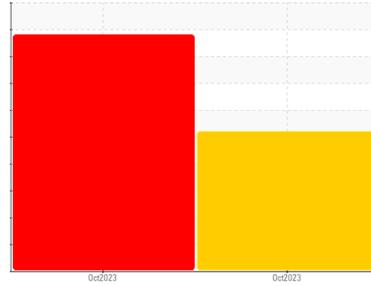
WATER



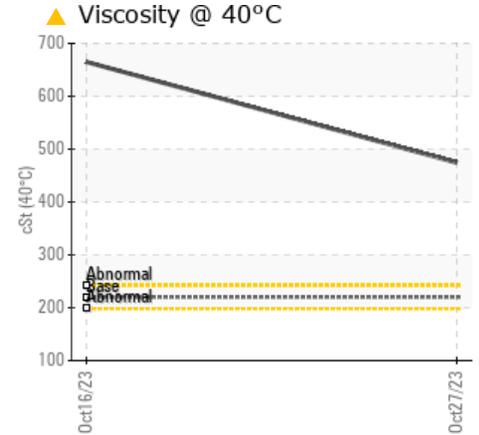
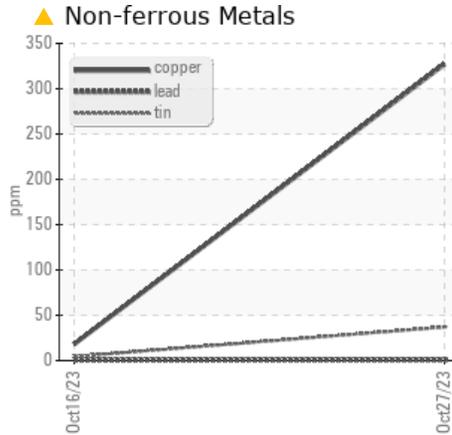
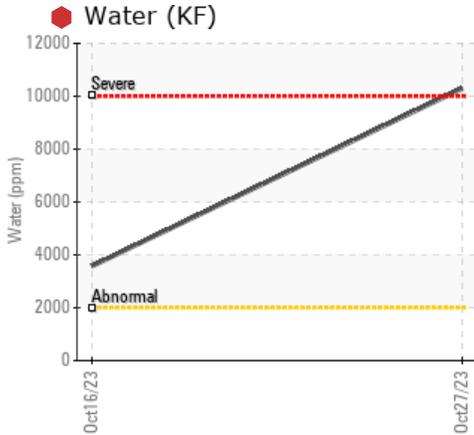
Machine Id
DURCO M-800

Component
Gearbox

Fluid
ROYAL PURPLE SYNFILM GT 220 (--- LTR)



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	---
Copper	ppm	ASTM D5185m	>200	▲ 327	18	---
Tin	ppm	ASTM D5185m	>25	▲ 37	4	---
Water	%	ASTM D6304	>0.2	● 1.029	▲ 0.356	---
ppm Water	ppm	ASTM D6304	>2000	● 10293.9	▲ 3569.3	---
Visc @ 40°C	cSt	ASTM D445	220	▲ 474.5	▲ 665	---

Customer Id: PERMARRP
Sample No.: RP0038293
Lab Number: 05995695
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

16 Oct 2023 Diag: Jonathan Hester

WEAR



We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Appearance is milky. There is a moderate concentration of water present in the oil. The oil viscosity is higher than normal. Confirm oil type. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

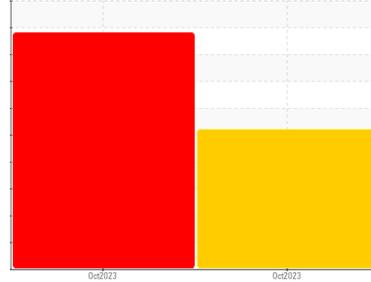
view report



OIL ANALYSIS REPORT

Sample Rating Trend

WATER



Machine Id
DURCO M-800

Component
Gearbox

Fluid
ROYAL PURPLE SYNFILM GT 220 (--- LTR)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

Bearing and/or bushing wear is indicated.

Contamination

There is a high concentration of water present in the oil.

Fluid Condition

Viscosity of sample indicates oil is within ISO 460 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		RP0038293	RP0038279	---
Sample Date	Client Info		27 Oct 2023	16 Oct 2023	---
Machine Age	mths	Client Info	0	0	---
Oil Age	mths	Client Info	0	0	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			SEVERE	SEVERE	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	41	568
Chromium	ppm	ASTM D5185m	>15	<1	5
Nickel	ppm	ASTM D5185m	>15	8	4
Titanium	ppm	ASTM D5185m		<1	0
Silver	ppm	ASTM D5185m		0	<1
Aluminum	ppm	ASTM D5185m	>25	4	1
Lead	ppm	ASTM D5185m	>100	<1	<1
Copper	ppm	ASTM D5185m	>200	327	18
Tin	ppm	ASTM D5185m	>25	37	4
Vanadium	ppm	ASTM D5185m		<1	0
Cadmium	ppm	ASTM D5185m		<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		5	0
Barium	ppm	ASTM D5185m		7	2
Molybdenum	ppm	ASTM D5185m		<1	0
Manganese	ppm	ASTM D5185m		<1	8
Magnesium	ppm	ASTM D5185m		3	5
Calcium	ppm	ASTM D5185m		39	4
Phosphorus	ppm	ASTM D5185m		498	463
Zinc	ppm	ASTM D5185m		0	0

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	7	8
Sodium	ppm	ASTM D5185m		17	3
Potassium	ppm	ASTM D5185m	>20	2	1
Water	%	ASTM D6304	>0.2	1.029	0.356
ppm Water	ppm	ASTM D6304	>2000	10293.9	3569.3

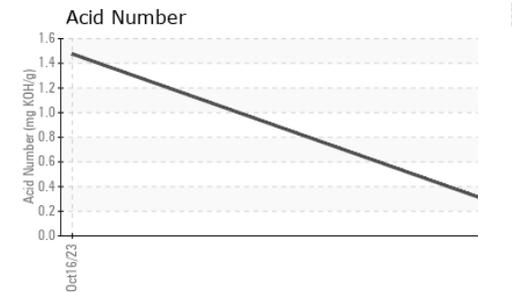
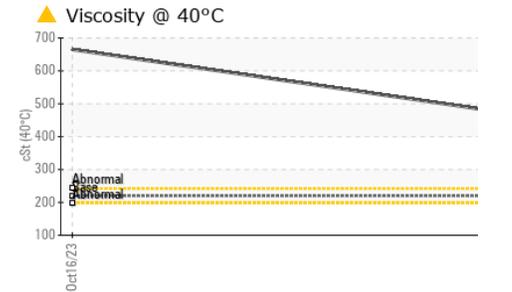
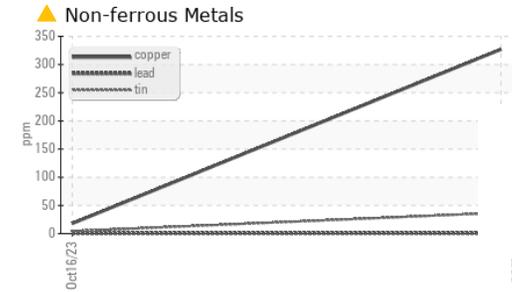
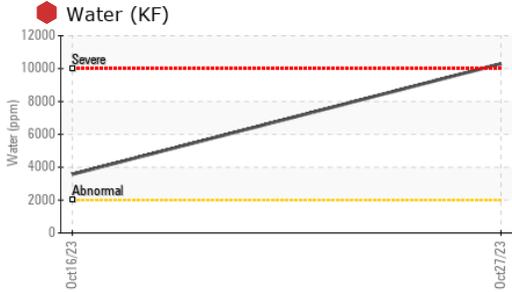
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.25	1.476

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	MODER
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	MILKY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

OIL ANALYSIS REPORT



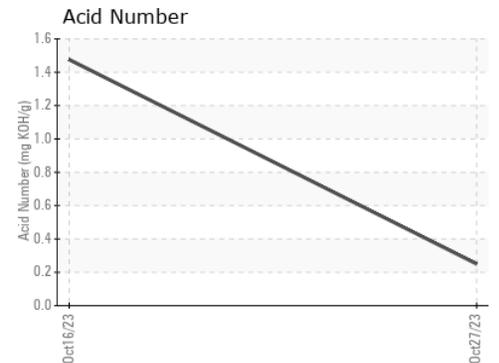
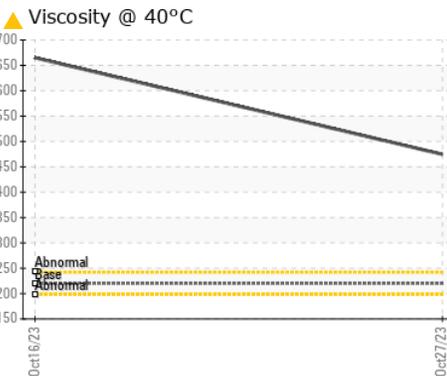
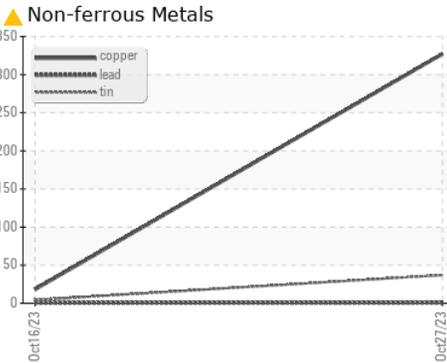
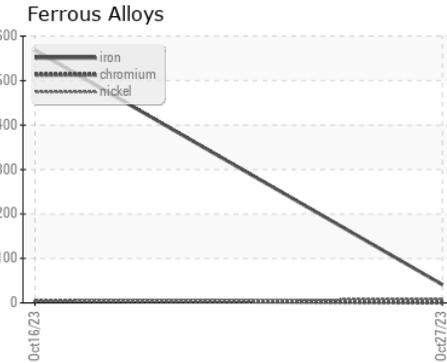
FLUID PROPERTIES

method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445 220	▲ 474.5	▲ 665	---

SAMPLE IMAGES

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0038293 **Received** : 01 Nov 2023
Lab Number : 05995695 **Diagnosed** : 07 Nov 2023
Unique Number : 10724055 **Diagnostician** : Jonathan Hester
Test Package : IND 2

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)

PERGAN MARSHALL
 710 BUSSEY RD
 MARSHALL, TX
 US 75670

Contact: James Holliday
 j.holliday@pergan-na.com

T:
 F: