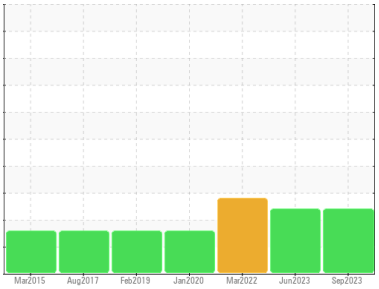
OIL DIAGNOSTICS

PROBLEM SUMMARY

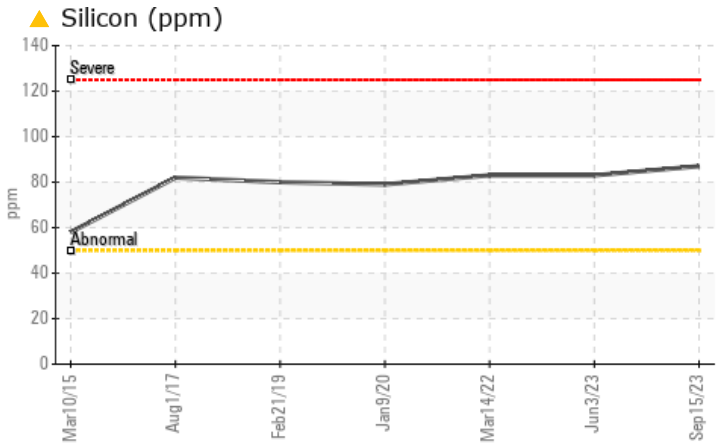
Sample Rating Trend

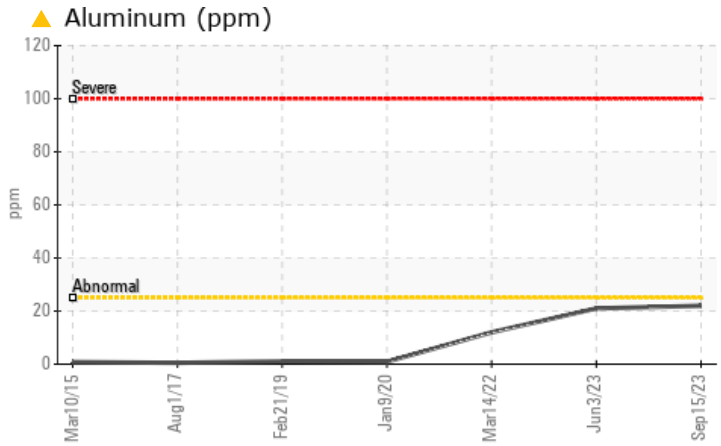


DIRT

Area
LINE 8 [907958883]
Machine Id
[LINE 8] LINE 8 WRAPPER 15 LINE 8 WRAPPER 15
Component
Gearbox
Fluid
GEAR OIL LS 80W90 (--- QTS)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Aluminum	ppm	ASTM D5185m	>25	▲ **22**	▲ 21	▲ 12
Silicon	ppm	ASTM D5185m	>50	▲ **87**	▲ 83	▲ 83

Customer Id: HERHER
Sample No.: PCA0103719
Lab Number: 05966472
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

03 Jun 2023 Diag: Don Baldridge

DIRT

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

---

14 Mar 2022 Diag: Don Baldridge

DIRT

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

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09 Jan 2020 Diag: Don Baldridge

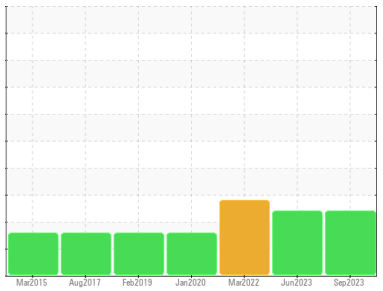
DIRT

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. Elemental level of silicon (Si) above normal. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



DIRT

Area
LINE 8 [907958883]
Machine Id
[LINE 8] LINE 8 WRAPPER 15 LINE 8 WRAPPER 15
Component
Gearbox
Fluid
GEAR OIL LS 80W90 (--- QTS)

DIAGNOSIS

Recommendation
We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

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		**PCA0103719**	PCA0078608	PCA0037042
Sample Date		Client Info		**15 Sep 2023**	03 Jun 2023	14 Mar 2022
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**19**	12	7
Iron	ppm	ASTM D5185m	>200	**4**	3	3
Chromium	ppm	ASTM D5185m	>15	**0**	0	0
Nickel	ppm	ASTM D5185m	>15	**0**	<1	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	<1	0
Aluminum	ppm	ASTM D5185m	>25	▲ **22**	▲ 21	▲ 12
Lead	ppm	ASTM D5185m	>100	**0**	0	0
Copper	ppm	ASTM D5185m	>200	**0**	<1	0
Tin	ppm	ASTM D5185m	>25	**0**	<1	<1
Antimony	ppm	ASTM D5185m	>5	**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	150	**0**	0	0
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	0	<1
Magnesium	ppm	ASTM D5185m	10	**0**	<1	0
Calcium	ppm	ASTM D5185m	70	**172**	131	143
Phosphorus	ppm	ASTM D5185m	2000	**455**	408	426
Zinc	ppm	ASTM D5185m	50	**31**	26	26
Sulfur	ppm	ASTM D5185m	20000	**547**	503	650

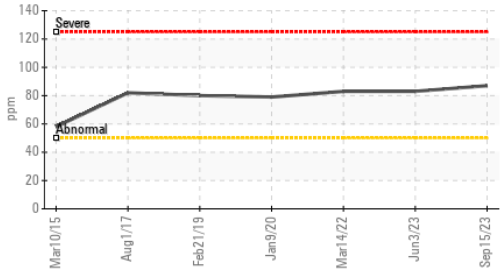
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	▲ **87**	▲ 83	▲ 83
Sodium	ppm	ASTM D5185m		**<1**	0	0
Potassium	ppm	ASTM D5185m	>20	**<1**	2	0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.16**	0.14	0.22

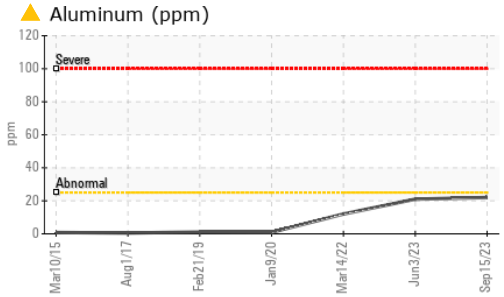
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

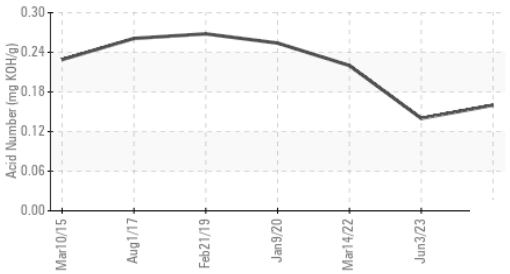
Silicon (ppm)



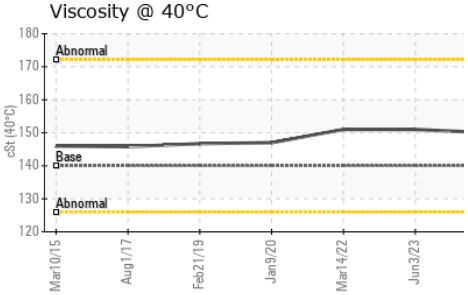
Aluminum (ppm)



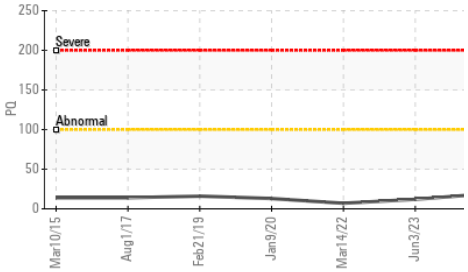
Acid Number



Viscosity @ 40°C

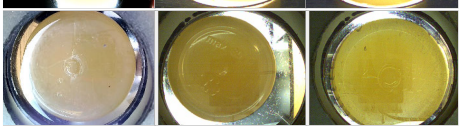


PQ



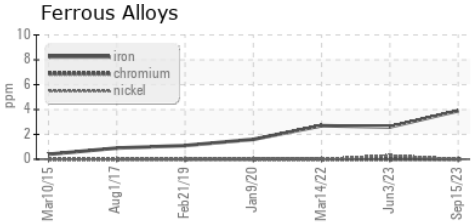
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	▲ MODER
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	140	**150**	151	151

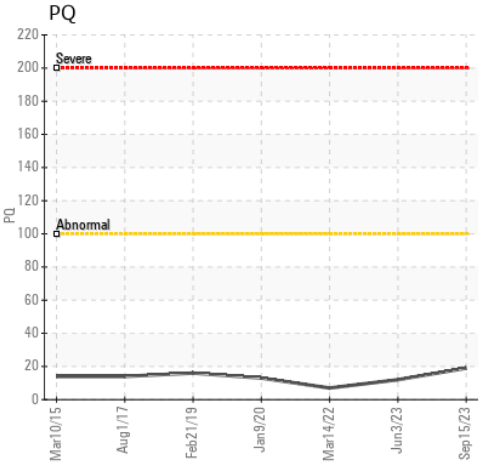
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

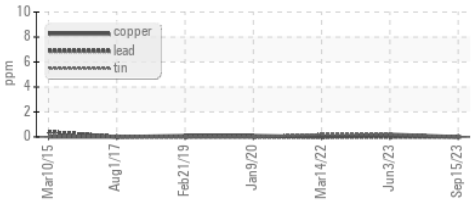
Ferrous Alloys



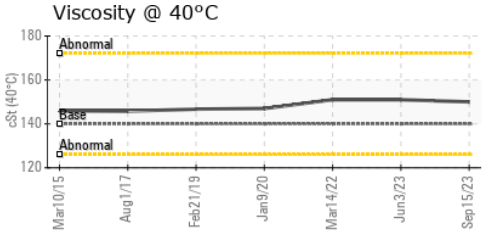
PQ



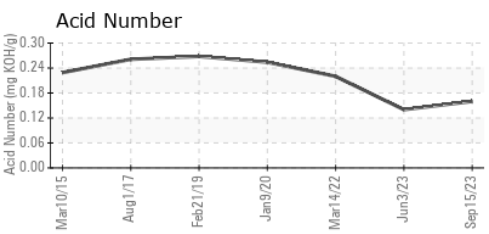
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0103719 **Received** : 02 Oct 2023
Lab Number : 05966472 **Diagnosed** : 04 Oct 2023
Unique Number : 10673023 **Diagnostician** : Don Baldridge
Test Package : IND 2 (Additional Tests: PQ)

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)

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