



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area

Paper Side

Machine Id

82-2211 3rd Press GB

Component

Gear Reducer

Fluid

SHELL PM S2 M 220 (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PE0001541	---	---
Sample Date		Client Info		07 Feb 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184		27	---	---
Iron	ppm	ASTM D5185m	>150	22	---	---
Chromium	ppm	ASTM D5185m	>10	0	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		3	---	---
Aluminum	ppm	ASTM D5185m	>25	0	---	---
Lead	ppm	ASTM D5185m	>100	<1	---	---
Copper	ppm	ASTM D5185m	>50	36	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

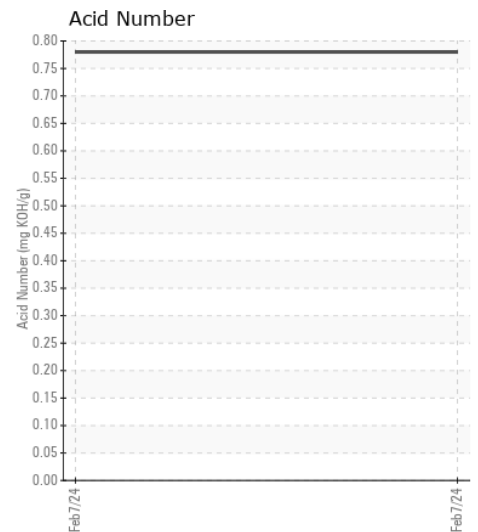
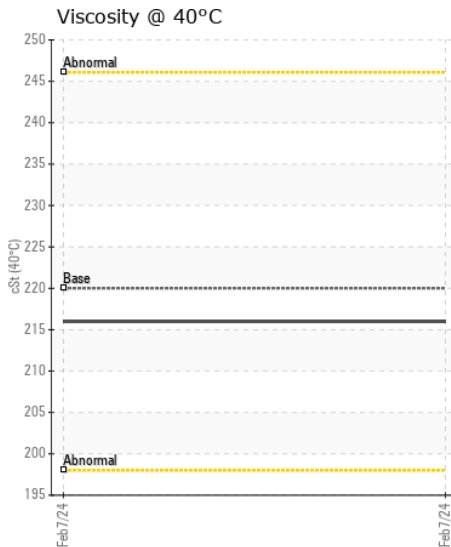
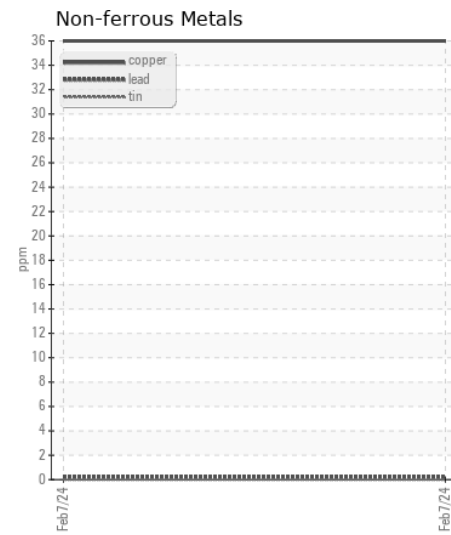
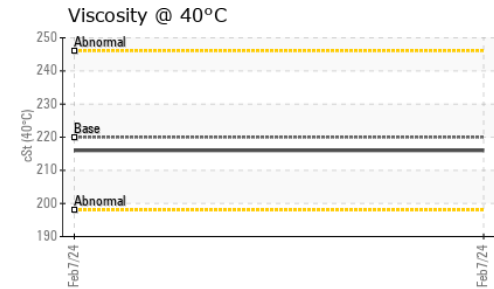
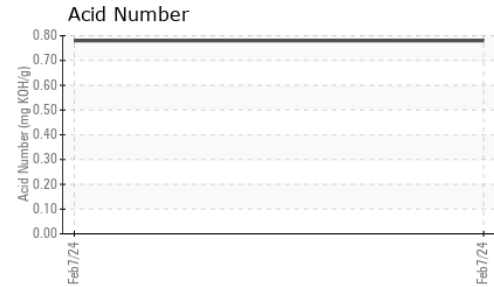
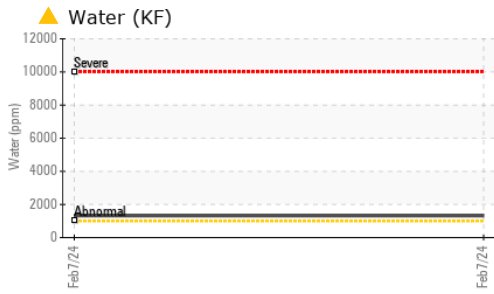
There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>50	12	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Water	%	ASTM D6304	>0.1	▲ 0.132	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ 1320	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	▲ MODER	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	0.2%	---	---

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	---	---
Boron	ppm	ASTM D5185m		0	---	---
Barium	ppm	ASTM D5185m		<1	---	---
Molybdenum	ppm	ASTM D5185m		<1	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		8	---	---
Calcium	ppm	ASTM D5185m		81	---	---
Phosphorus	ppm	ASTM D5185m		661	---	---
Zinc	ppm	ASTM D5185m		892	---	---
Sulfur	ppm	ASTM D5185m		5246	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.78	---	---
Visc @ 40°C	cSt	ASTM D445	220	216	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0001541 **Received** : 13 Feb 2024
Lab Number : 06088101 **Tested** : 15 Feb 2024
Unique Number : 10875546 **Diagnosed** : 15 Feb 2024 - Jonathan Hester
Test Package : PLANT (Additional Tests: ICP, KF, KV40, PQ, PrtCount, SCREEN)

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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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F: