



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
TRIOLIET BV 11732972/ING05
 Component
Gearbox
 Fluid
SHELL OMALA S4 GX 220 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PE0002535	PE0003841	PE0002509
Sample Date		Client Info		28 May 2024	14 May 2024	20 Oct 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184		6	17	18
Iron	ppm	ASTM D5185m	>200	13	12	11
Chromium	ppm	ASTM D5185m	>15	0	<1	0
Nickel	ppm	ASTM D5185m	>15	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	<1	<1	1
Lead	ppm	ASTM D5185m	>100	<1	<1	0
Copper	ppm	ASTM D5185m	>200	0	<1	0
Tin	ppm	ASTM D5185m	>25	0	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

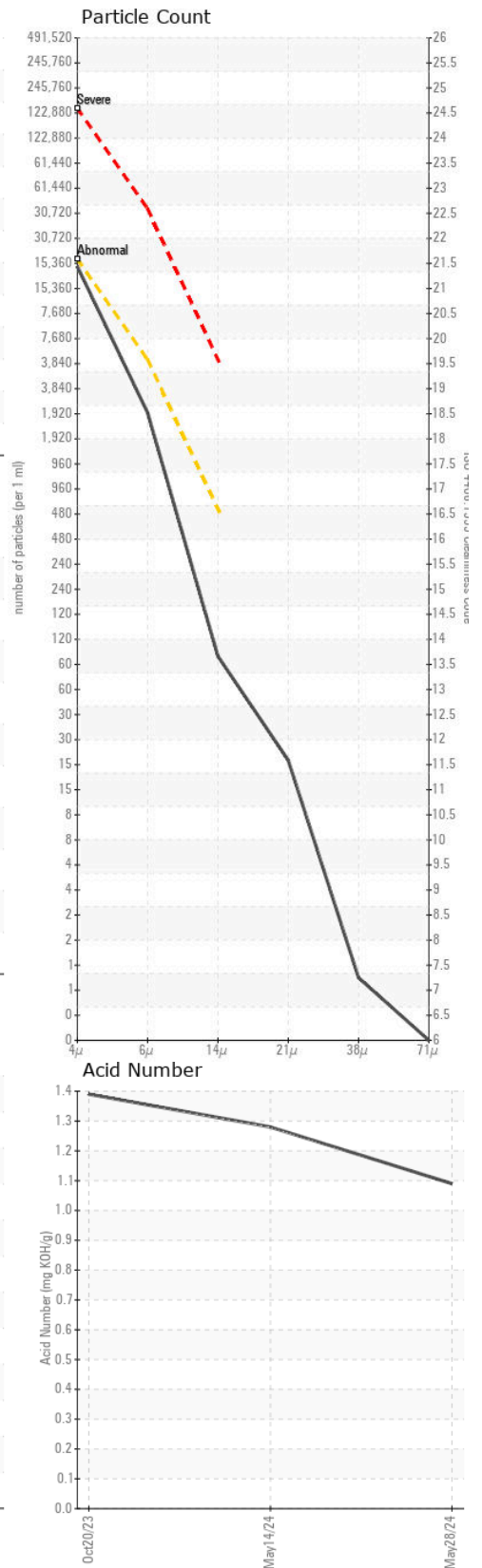
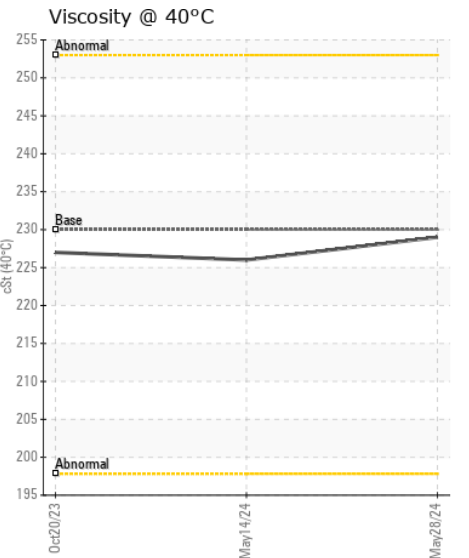
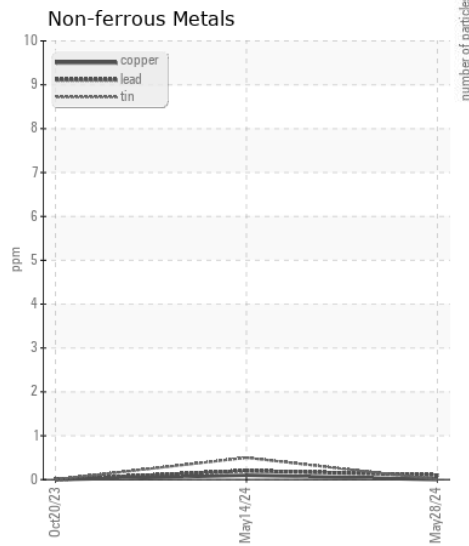
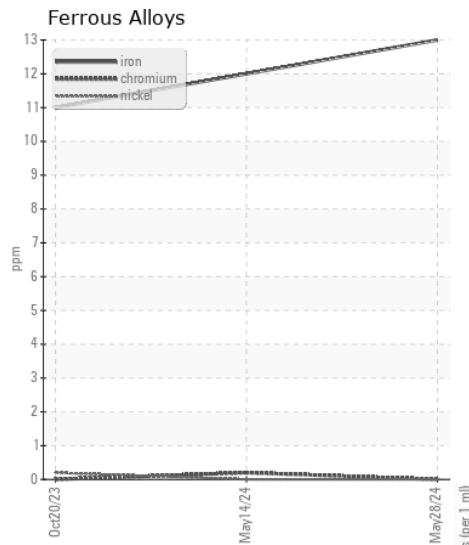
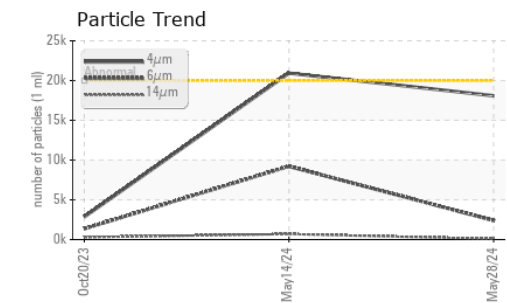
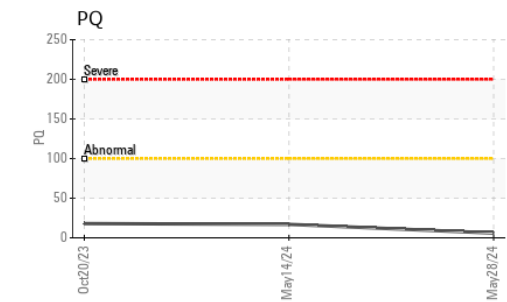
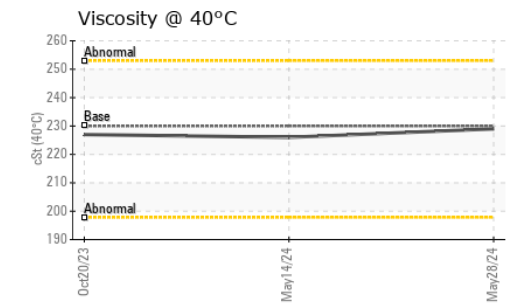
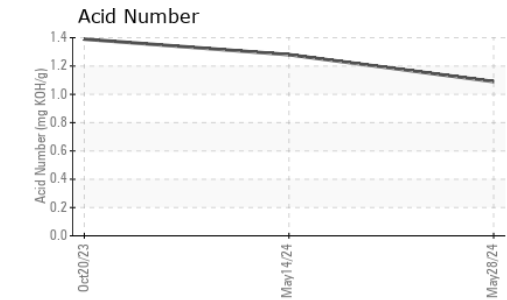
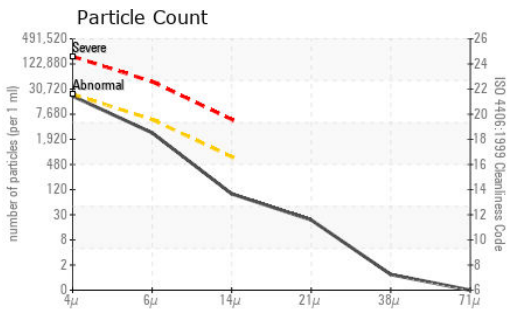
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	4	5	8
Potassium	ppm	ASTM D5185m	>20	<1	<1	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	18088	20933	2852
Particles >6µm		ASTM D7647	>5000	2404	9218	1362
Particles >14µm		ASTM D7647	>640	84	695	297
Particles >21µm		ASTM D7647	>160	20	103	97
Particles >38µm		ASTM D7647	>40	1	6	6
Particles >71µm		ASTM D7647	>10	0	0	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	21/18/14	22/20/17	19/18/15
Silt	scalar	*Visual	NONE	NONE	LIGHT	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
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

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		3	2	0
Boron	ppm	ASTM D5185m		3	11	5
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		<1	0	5
Calcium	ppm	ASTM D5185m		7	2	22
Phosphorus	ppm	ASTM D5185m		389	393	404
Zinc	ppm	ASTM D5185m		281	264	306
Sulfur	ppm	ASTM D5185m		5994	6606	5872
Acid Number (AN)	mg KOH/g	ASTM D8045		1.09	1.28	1.39
Visc @ 40°C	cSt	ASTM D445	230	229	226	227



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0002535 **Received** : 31 May 2024
Lab Number : 06196544 **Tested** : 03 Jun 2024
Unique Number : 11058667 **Diagnosed** : 03 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)

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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