



Built for a lifetime™

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
7627785 (S/N 1787)

Component
Compressor

Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

RECOMMENDATION

We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KCPA005106	KCP48658	---
Sample Date		Client Info		14 Aug 2023	08 Feb 2022	---
Machine Age	hrs	Client Info		6710	2622	---
Oil Age	hrs	Client Info		0	2622	---
Filter Age	hrs	Client Info		0	2622	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	ATTENTION	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<1	<1	---
Chromium	ppm	ASTM D5185m	>10	0	0	---
Nickel	ppm	ASTM D5185m	>3	0	0	---
Titanium	ppm	ASTM D5185m	>3	0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>10	0	<1	---
Lead	ppm	ASTM D5185m	>10	0	0	---
Copper	ppm	ASTM D5185m	>50	2	2	---
Tin	ppm	ASTM D5185m	>10	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

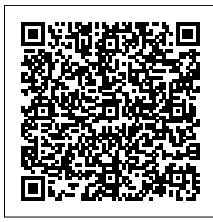
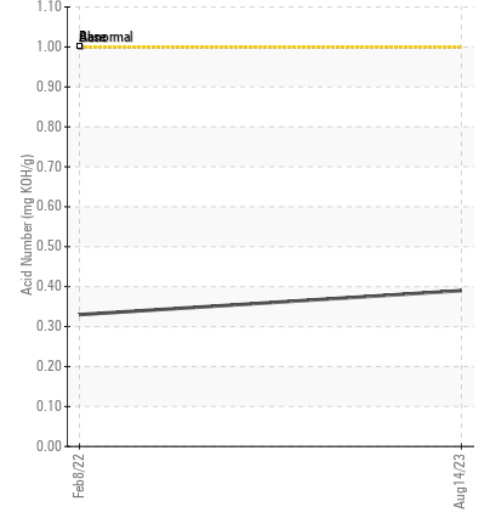
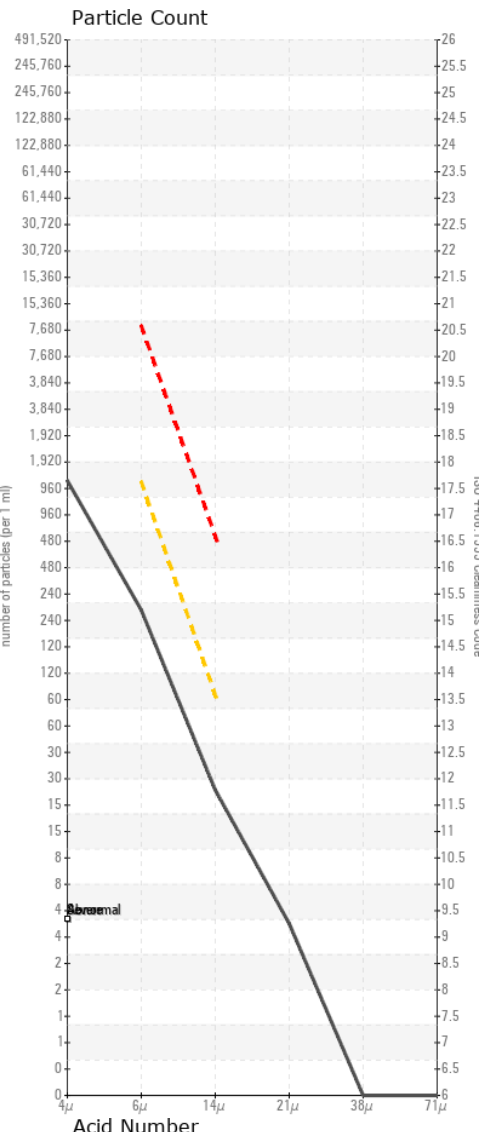
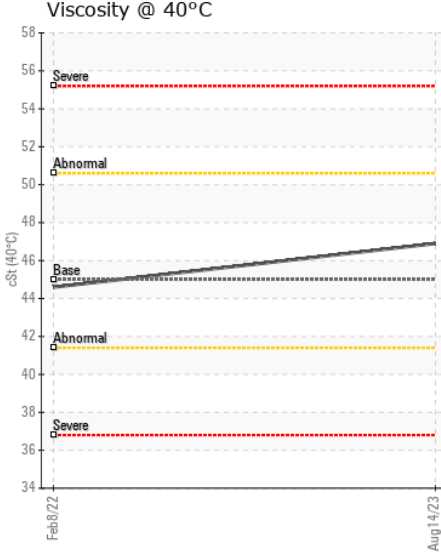
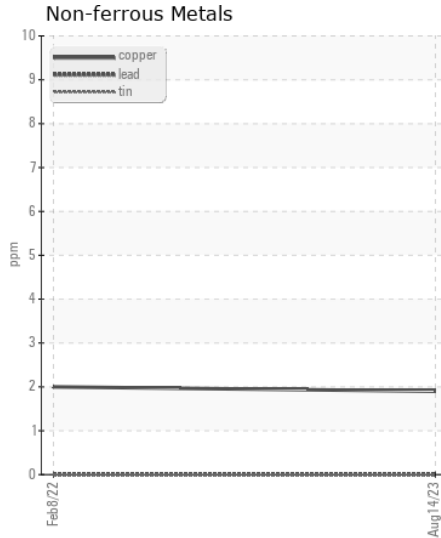
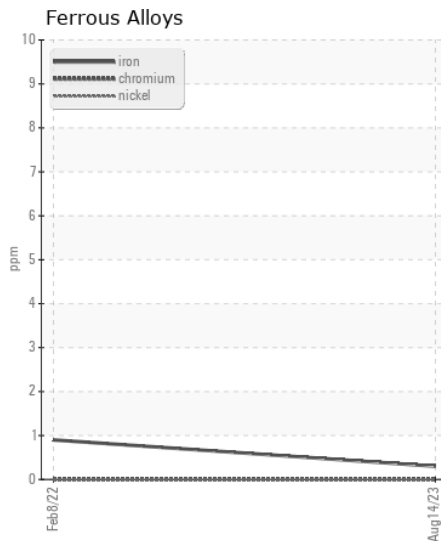
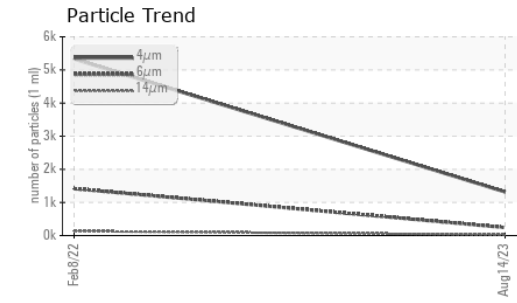
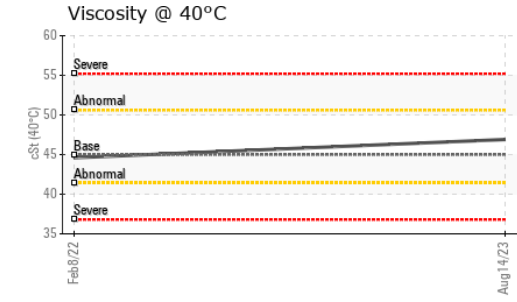
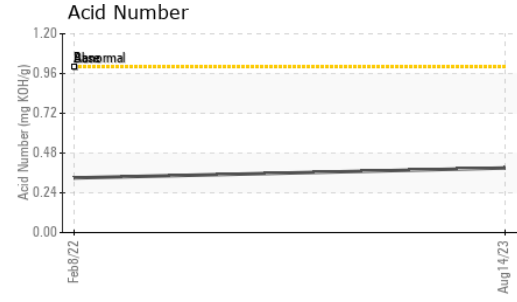
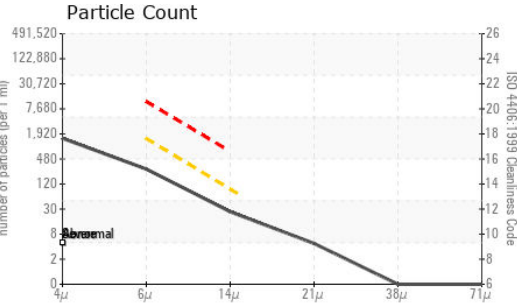
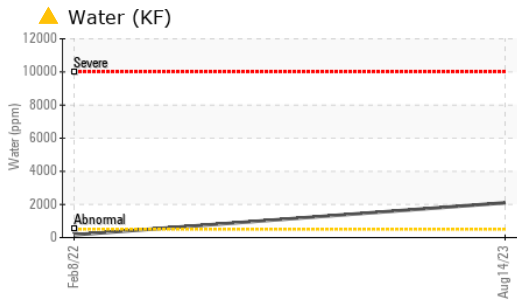
There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>25	<1	<1	---
Potassium	ppm	ASTM D5185m	>20	2	0	---
Water	%	ASTM D6304	>0.05	▲ 0.210	0.016	---
ppm Water	ppm	ASTM D6304	>500	▲ 2100	164.2	---
Particles >4µm		ASTM D7647		1318	5334	---
Particles >6µm		ASTM D7647	>1300	242	▲ 1416	---
Particles >14µm		ASTM D7647	>80	23	▲ 134	---
Particles >21µm		ASTM D7647	>20	4	28	---
Particles >38µm		ASTM D7647	>4	0	2	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>-/17/13	18/15/12	▲ 18/14	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG	---

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		2	14	---
Boron	ppm	ASTM D5185m	0	0	<1	---
Barium	ppm	ASTM D5185m	90	30	4	---
Molybdenum	ppm	ASTM D5185m	0	0	0	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m	100	42	64	---
Calcium	ppm	ASTM D5185m	0	<1	0	---
Phosphorus	ppm	ASTM D5185m	0	2	14	---
Zinc	ppm	ASTM D5185m	0	2	0	---
Sulfur	ppm	ASTM D5185m	23500	19777	14965	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.39	0.33	---
Visc @ 40°C	cSt	ASTM D445	45	46.9	44.6	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA005106 **Received** : 24 Aug 2023
Lab Number : 05934370 **Diagnosed** : 30 Aug 2023
Unique Number : 10619641 **Diagnostician** : Angela Borella
Test Package : IND 2 (Additional Tests: KF, PrtCount)

TESLA MOTOR
 450 E 52ND AVE
 DENVER, CO
 US 80216
 Contact: Service Manager

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: