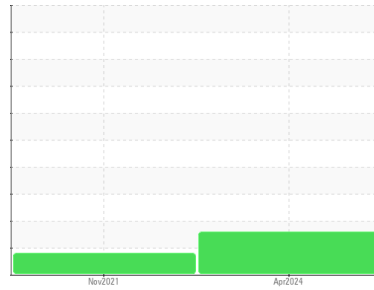




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER 7480390 (S/N 1508)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

▲ Contamination

There is a moderate amount of particulates present in the oil.

Fluid Condition

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	KCPA016967	KCP39539	---
Sample Date	Client Info	09 Apr 2024	16 Nov 2021	---
Machine Age	hrs	4297	1185	---
Oil Age	hrs	0	1185	---
Oil Changed	Client Info	Changed	Changed	---
Sample Status		ABNORMAL	ATTENTION	---

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<1	1	---
Chromium	ppm	ASTM D5185m >10	<1	0	---
Nickel	ppm	ASTM D5185m >3	<1	<1	---
Titanium	ppm	ASTM D5185m >3	<1	0	---
Silver	ppm	ASTM D5185m >2	<1	0	---
Aluminum	ppm	ASTM D5185m >10	3	<1	---
Lead	ppm	ASTM D5185m >10	<1	0	---
Copper	ppm	ASTM D5185m >50	10	1	---
Tin	ppm	ASTM D5185m >10	<1	0	---
Antimony	ppm	ASTM D5185m	---	1	---
Vanadium	ppm	ASTM D5185m	<1	0	---
Cadmium	ppm	ASTM D5185m	<1	<1	---

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	0	19	---
Barium	ppm	ASTM D5185m 90	4	10	---
Molybdenum	ppm	ASTM D5185m 0	<1	<1	---
Manganese	ppm	ASTM D5185m	<1	<1	---
Magnesium	ppm	ASTM D5185m 100	43	88	---
Calcium	ppm	ASTM D5185m 0	0	<1	---
Phosphorus	ppm	ASTM D5185m 0	0	<1	---
Zinc	ppm	ASTM D5185m 0	17	4	---
Sulfur	ppm	ASTM D5185m 23500	19915	22984	---

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	1	<1	---
Sodium	ppm	ASTM D5185m	6	13	---
Potassium	ppm	ASTM D5185m >20	5	23	---
Water	%	ASTM D6304 >0.05	0.018	0.023	---
ppm Water	ppm	ASTM D6304 >500	186	235.6	---

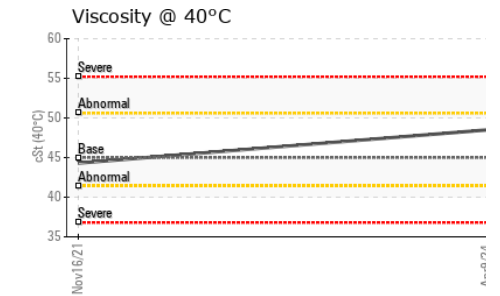
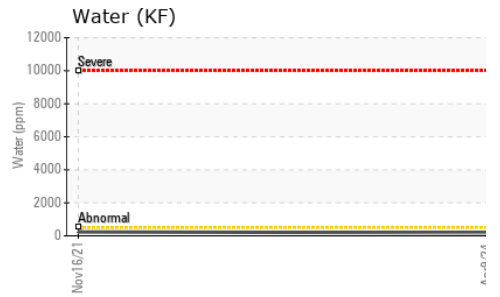
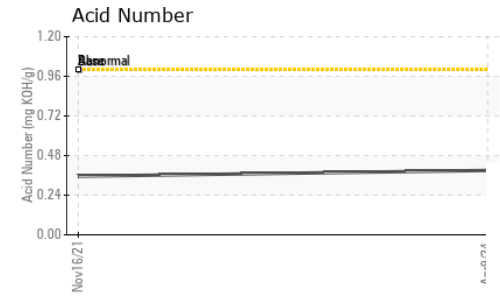
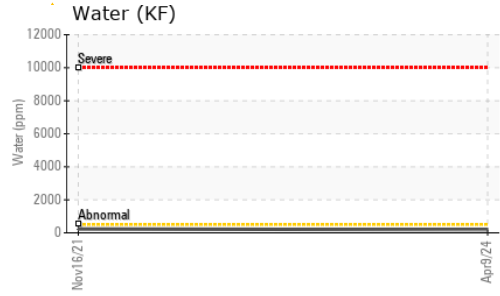
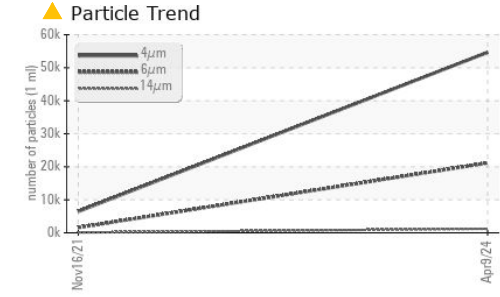
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	54666	6469	---
Particles >6µm	ASTM D7647 >1300	▲ 21150	● 1589	---
Particles >14µm	ASTM D7647 >80	▲ 1217	● 82	---
Particles >21µm	ASTM D7647 >20	▲ 232	20	---
Particles >38µm	ASTM D7647 >4	4	1	---
Particles >71µm	ASTM D7647 >3	0	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 23/22/17	● 18/14	---

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.39	0.355	---

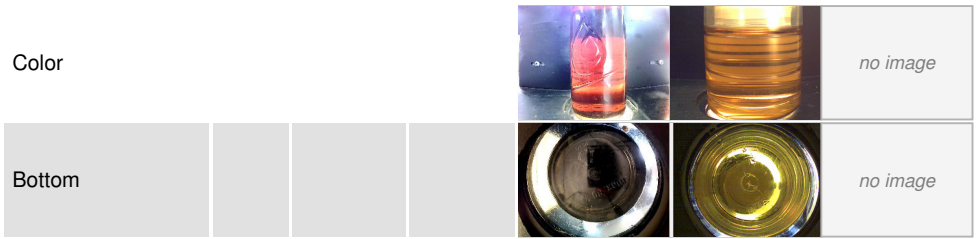
OIL ANALYSIS REPORT



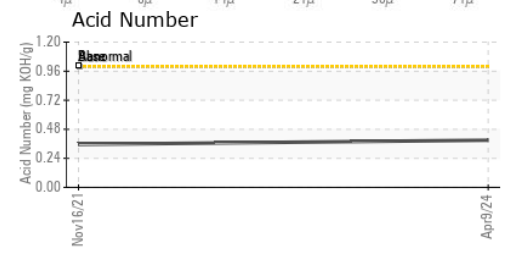
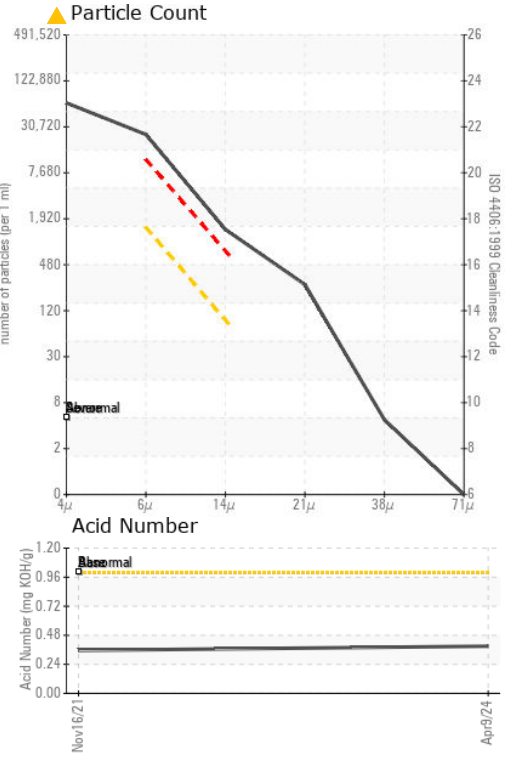
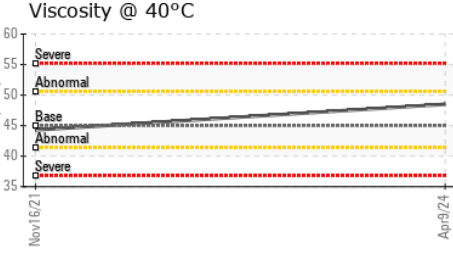
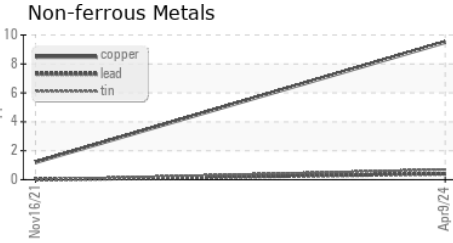
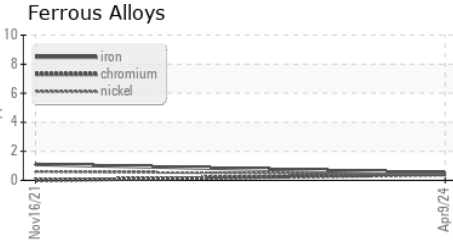
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	48.5	44.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA016967 **Received** : 22 Apr 2024
Lab Number : 06156938 **Tested** : 24 Apr 2024
Unique Number : 10992361 **Diagnosed** : 24 Apr 2024 - Angela Borella
Test Package : IND 2 (Additional Tests: KF, PrtCount)

MODERNO TWIN CITIES LLC
 2800 N 2ND STREET
 MINNEAPOLIS, MN
 US 55411
 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)