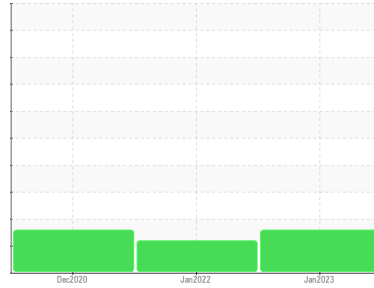




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER 7181381

Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- QTS)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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

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			KCP55522	KCP43952	KCP28836
Sample Date	Client Info			06 Jan 2023	06 Jan 2022	29 Dec 2020
Machine Age	hrs	Client Info		10983	7508	3149
Oil Age	hrs	Client Info		4200	3000	3149
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	<1	<1
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	<1	0
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>50	25	31	9
Tin	ppm	ASTM D5185m	>10	0	0	0
Antimony	ppm	ASTM D5185m		---	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

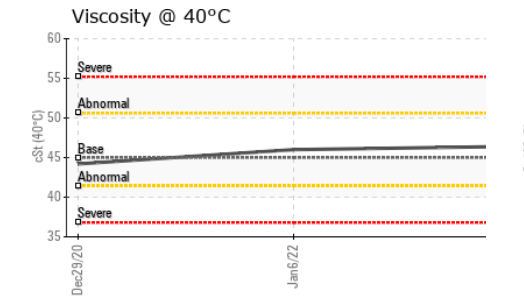
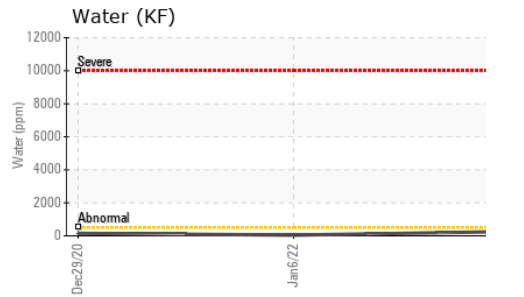
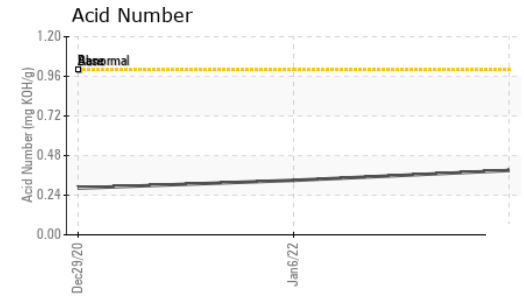
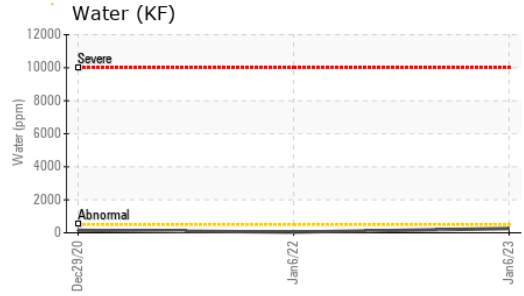
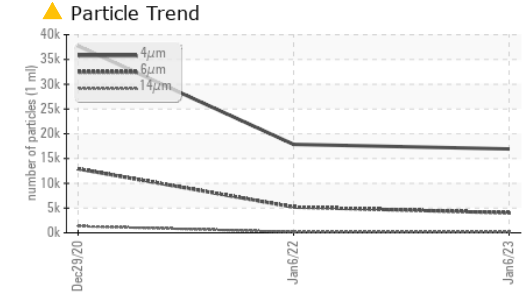
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	<1	0
Barium	ppm	ASTM D5185m	90	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	100	0	<1	25
Calcium	ppm	ASTM D5185m	0	0	0	0
Phosphorus	ppm	ASTM D5185m	0	0	3	8
Zinc	ppm	ASTM D5185m	0	8	8	<1
Sulfur	ppm	ASTM D5185m	23500	22354	16205	15521

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	0
Sodium	ppm	ASTM D5185m		0	1	7
Potassium	ppm	ASTM D5185m	>20	0	0	4
Water	%	ASTM D6304	>0.05	0.025	0.004	0.015
ppm Water	ppm	ASTM D6304	>500	259.5	42.4	153.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		16932	17857	37720
Particles >6µm		ASTM D7647	>1300	▲ 4019	▲ 5195	▲ 12922
Particles >14µm		ASTM D7647	>80	▲ 135	▲ 179	▲ 1345
Particles >21µm		ASTM D7647	>20	▲ 38	▲ 23	▲ 396
Particles >38µm		ASTM D7647	>4	1	0	▲ 23
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 21/19/14	▲ 20/15	▲ 21/18

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.39	0.33	0.283

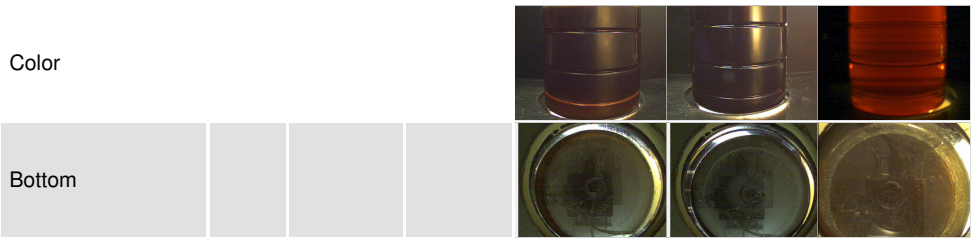
OIL ANALYSIS REPORT



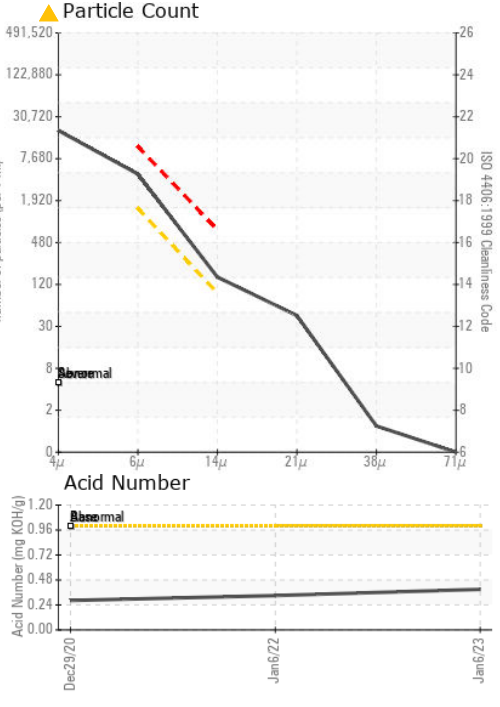
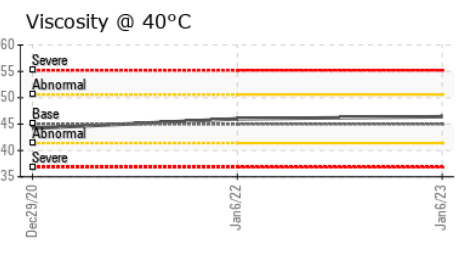
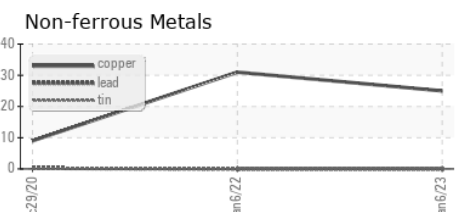
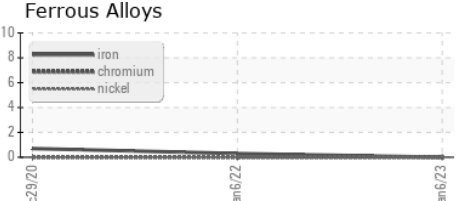
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	46.4	46.0	44.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP55522 **Received** : 13 Jan 2023
Lab Number : 05738973 **Diagnosed** : 16 Jan 2023
Unique Number : 10293572 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

PENSKE TRUCK
 6485 STARK DR
 DEFOREST, WI
 US 53598
 Contact: RICHARD AMMANN
 RICHARD.AMMANN@PENSKE.COM
 T:
 F:

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)