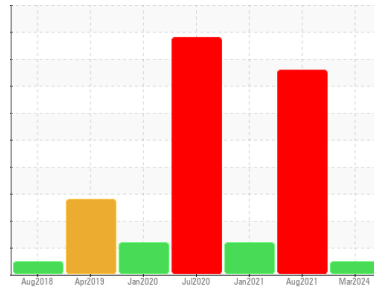




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**KAESER SM 7.5 4581547 (S/N 1094)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

Sample leaked in transit. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

Insufficient sample was received to conduct all the routine laboratory tests. There is no indication of any contamination in the oil.

### Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>KCP015753</b>	KCP36017	KCP28032
Sample Date	Client Info			<b>21 Mar 2024</b>	18 Aug 2021	21 Jan 2021
Machine Age	hrs	Client Info		<b>3601</b>	2514	2342
Oil Age	hrs	Client Info		<b>200</b>	2514	600
Oil Changed	Client Info			<b>Not Changed</b>	Not Changed	Changed
Sample Status				<b>NORMAL</b>	SEVERE	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>50	<b>6</b>	4	1
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m		<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	<1	0

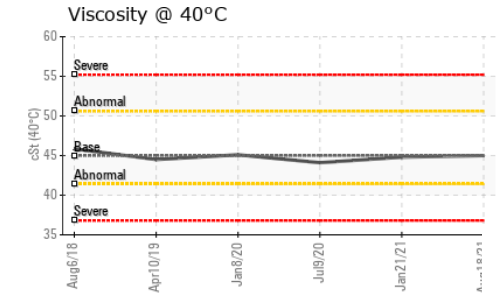
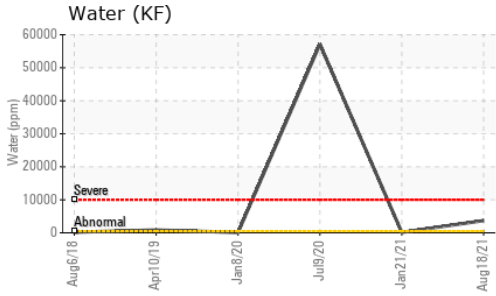
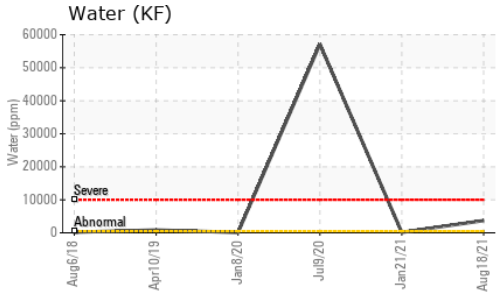
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	26	0
Barium	ppm	ASTM D5185m	90	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	100	<b>18</b>	42	51
Calcium	ppm	ASTM D5185m	0	<b>2</b>	0	0
Phosphorus	ppm	ASTM D5185m	0	<b>4</b>	<1	6
Zinc	ppm	ASTM D5185m	0	<b>3</b>	18	7
Sulfur	ppm	ASTM D5185m	23500	<b>21557</b>	16781	17571

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185m		<b>8</b>	5	17
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	2
Water	%	ASTM D6304	>0.05	<b>NEG</b>	▲ 0.371	0.014
ppm Water	ppm	ASTM D6304	>500	<b>---</b>	▲ 3710	143.2

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>---</b>	1481	8303
Particles >6µm		ASTM D7647	>1300	<b>---</b>	807	● 2122
Particles >14µm		ASTM D7647	>80	<b>---</b>	● 137	● 119
Particles >21µm		ASTM D7647	>20	<b>---</b>	● 46	● 29
Particles >38µm		ASTM D7647	>4	<b>---</b>	● 7	0
Particles >71µm		ASTM D7647	>3	<b>---</b>	1	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>---</b>	● 17/14	● 18/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>---</b>	0.293	0.253

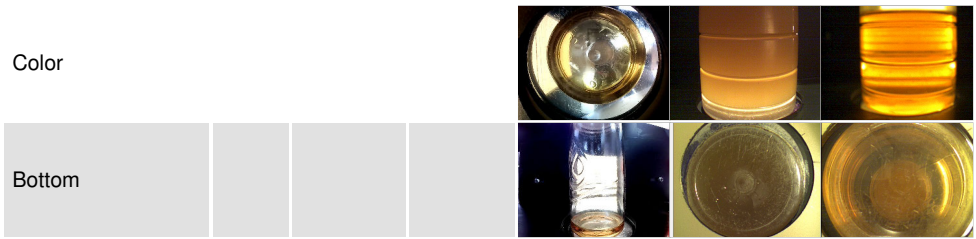
# OIL ANALYSIS REPORT



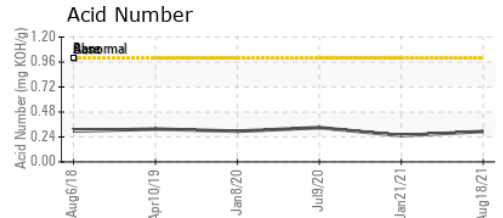
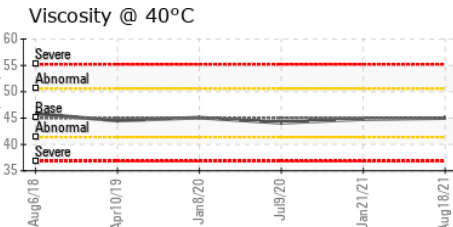
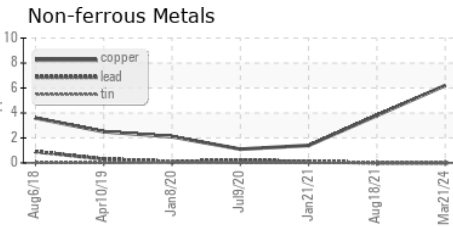
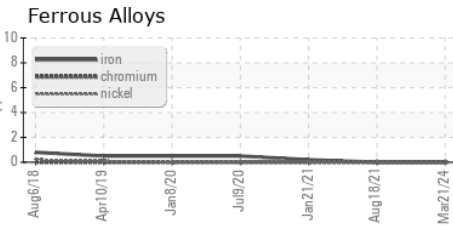
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	---	45.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP015753 **Received** : 10 Apr 2024  
**Lab Number** : 06145516 **Tested** : 22 Apr 2024  
**Unique Number** : 10970324 **Diagnosed** : 22 Apr 2024 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**OLD DOMINION FREIGHT INC**  
 401 W CAYTON AVE  
 MILWAUKEE, WI  
 US 53207  
 Contact: JEFF JONES

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)

T:  
F: