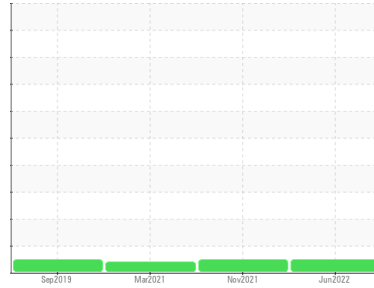




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**KAESER BSD 60 6664597 (S/N 1284)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

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

### 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			<b>KCP28393</b>	KCP11966	KCP28384
Sample Date	Client Info			<b>23 Jun 2022</b>	05 Nov 2021	24 Mar 2021
Machine Age	hrs	Client Info		<b>11844</b>	9169	7652
Oil Age	hrs	Client Info		<b>0</b>	0	1767
Oil Changed	Client Info			<b>Not Changed</b>	Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>&lt;1</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	<1
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	1	<1
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>50	<b>4</b>	11	4
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	<1

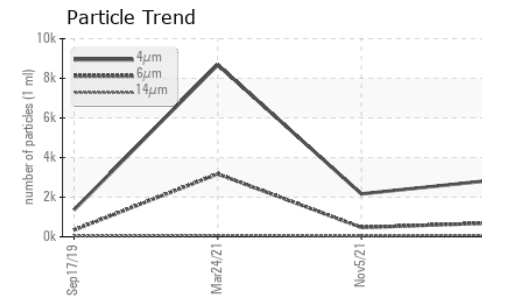
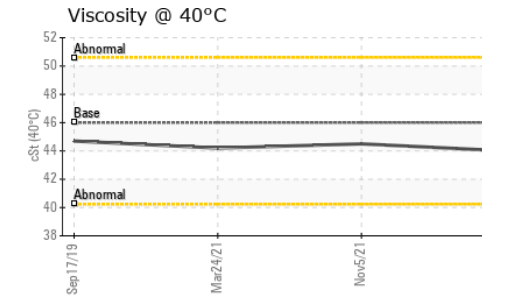
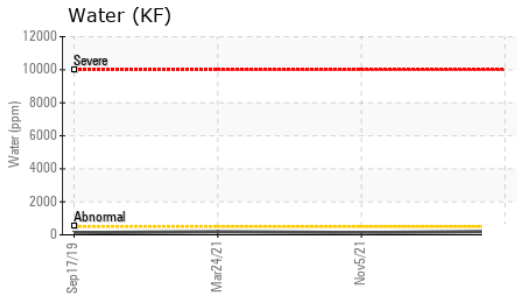
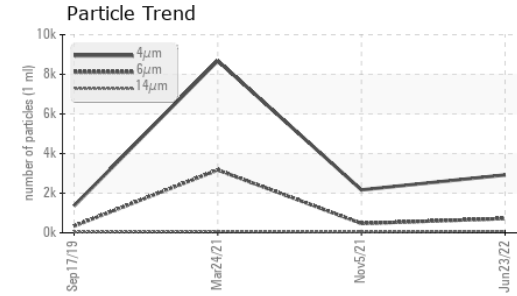
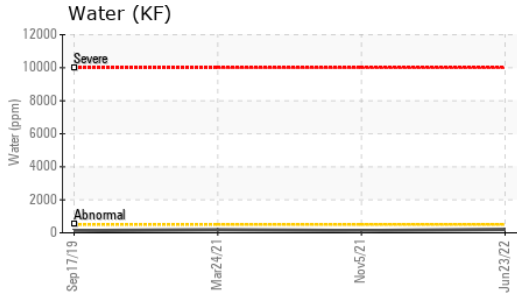
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	8
Barium	ppm	ASTM D5185m	90	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	90	<b>30</b>	15	30
Calcium	ppm	ASTM D5185m	2	<b>&lt;1</b>	0	0
Phosphorus	ppm	ASTM D5185m		<b>10</b>	5	3
Zinc	ppm	ASTM D5185m		<b>36</b>	36	24
Sulfur	ppm	ASTM D5185m		<b>20119</b>	16120	13080

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	0
Sodium	ppm	ASTM D5185m		<b>7</b>	9	16
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	0	2
Water	%	ASTM D6304	>0.05	<b>0.020</b>	0.012	0.018
ppm Water	ppm	ASTM D6304	>500	<b>205.1</b>	129.7	188.3

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>2921</b>	2166	8683
Particles >6µm		ASTM D7647	>1300	<b>722</b>	471	▲ 3172
Particles >14µm		ASTM D7647	>80	<b>73</b>	37	65
Particles >21µm		ASTM D7647	>20	<b>27</b>	13	13
Particles >38µm		ASTM D7647	>4	<b>2</b>	2	2
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>19/17/13</b>	16/12	▲ 19/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.39</b>	0.369	0.356

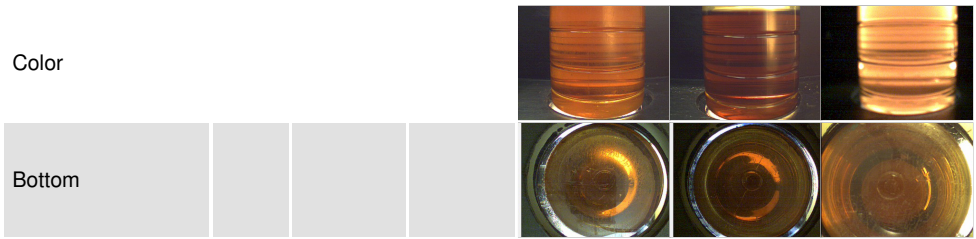
# OIL ANALYSIS REPORT



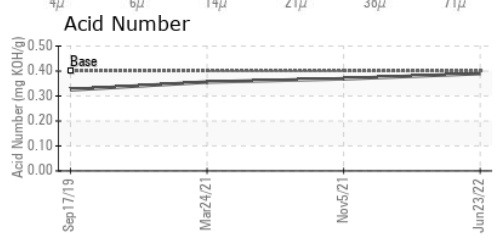
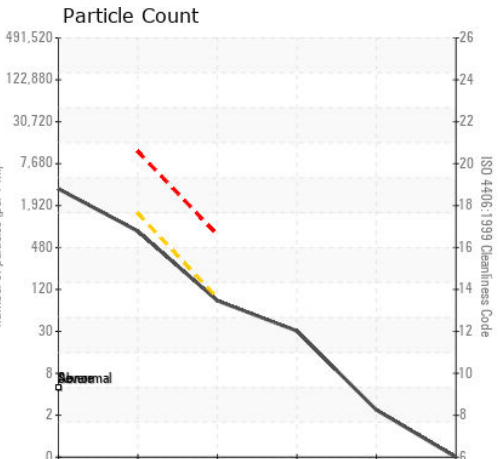
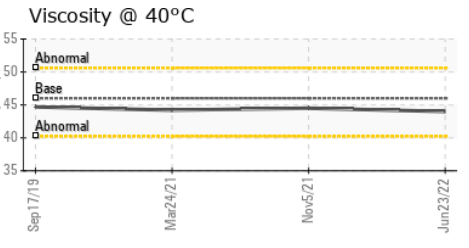
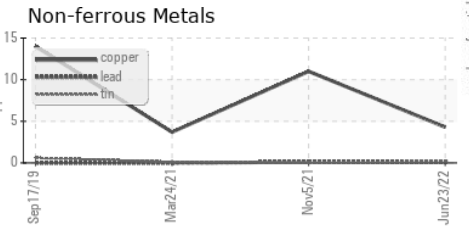
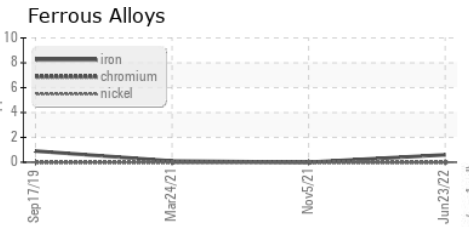
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 46	44.0	44.5	44.2

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP28393 **Received** : 13 Jul 2022  
**Lab Number** : 05590724 **Diagnosed** : 15 Jul 2022  
**Unique Number** : 10050171 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**ZODIAC ENT LLC - BASF MOBILE EMISSIONS CATALYSTS**  
 1112 INDUSTRIAL BLVD  
 CALDWELL, TX  
 US 77836

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)

Contact: DONOVAN KNIGHT  
 donovan.knight@basf-catalystsmetals.com  
 T:  
 F: