

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

KAESER SK 20 6323895 (S/N 1018)

Component Compressor Fluid

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

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris 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 INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCP33849	KCP16341	
Sample Date	1	Client Info		29 Apr 2021	09 Aug 2019	
Machine Age	hrs	Client Info		7881	1562	
Oil Age	hrs	Client Info		6319	1562	
Oil Changed		Client Info		Changed	Changed	
Sample Status				ABNORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	2	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>3	0	<1	
Titanium	ppm	ASTM D5185m	>3	0	0	
Silver	ppm	ASTM D5185m	>2	<1	0	
Aluminum	ppm	ASTM D5185m	>10	0	0	
Lead	ppm	ASTM D5185m	>10	<1	<1	
Copper	ppm	ASTM D5185m	>50	11	10	
Tin	ppm	ASTM D5185m	>10	0	0	
Antimony	ppm	ASTM D5185m		0	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
			IIIIII/Dase			
Boron	ppm	ASTM D5185m		0	0	
Barium	ppm	ASTM D5185m	90	0	0	
Molybdenum	ppm	ASTM D5185m		0	0	
Manganese	ppm	ASTM D5185m		0	<1	
Magnesium	ppm	ASTM D5185m	90	17	16	
Calcium	ppm	ASTM D5185m	2	0	<1	
Phosphorus	ppm	ASTM D5185m		15	0	
Zinc	ppm	ASTM D5185m		25	43	
Sulfur	ppm	ASTM D5185m		17471	17105	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	
Sodium	ppm	ASTM D5185m		7	6	
Potassium	ppm	ASTM D5185m	>20	<1	5	
Water	%	ASTM D6304	>0.05	0.008	0.015	
ppm Water	ppm	ASTM D6304	>500	84.9	157.4	
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647			27319	
Particles >6µm		ASTM D7647	>1300		▲ 6289	
Particles >14µm		ASTM D7647	>80		57	
Particles >21µm		ASTM D7647			9	
Particles >38µm		ASTM D7647	>4		0	
Particles >71µm		ASTM D7647			0	
Oil Cleanliness		ISO 4406 (c)	>/17/13		▲ 20/13	
	TION	()				
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN) 23:59) Bev: 1	mg KOH/g	ASTM D8045	0.4	0.302 Contact/Locatio	0.179 on: CHUCK BIT	

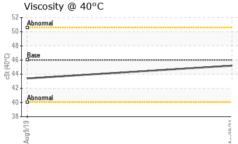
Report Id: DAREDW [WUSCAR] 05277100 (Generated: 05/15/2024 16:23:59) Rev: 1

Contact/Location: CHUCK RITTER - DAREDW



OIL ANALYSIS REPORT

Water (KF)	VISUAL
10000 Severe	White Meta
F 8000	Yellow Me
E 0000 d 6000 → 0000 → 0000	Precipitate
[₩] 4000	Silt
2000	Debris
4 Abnormal	Sand/Dirt
Aug9/19 Aug9/29/21	Appearance
Au	Odor
Water (KF)	Emulsified
12000	Free Wate
10000 - <u>Severe</u>	FLUID P
(m 8000	Visc @ 40
¹⁶ ≥ 4000	SAMPLE
2000 Abnormal	
Aug9/19 -	Color
Viscosity @ 40°C	



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	
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 PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	45.2	43.4	
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Color						no image
Bottom						no image
GRAPHS Ferrous Alloys						
chromium 6			Apr29/21			
Non-ferrous Metal	S		Ap			
0 - tin						
61/60nW		*****	9/21			
Viscosity @ 40°C			Apr29/2	A		
5T :				Acid Number		
Abnormal			Hoy 0.40	Base		******
Base						
			<u>ළී</u> 0.30)		
Abnormal			ළූ 0.30 මූ 0.20)		
			0.30 ag 0.20 W 0.10) =) =) =		
			(0.50 (0.90 0.40 (0.90 0.40 	6		3
L			2 0.40			
/earCheck USA - 50			, NC 27513	Aug9/19 -	RANSIT - STAR LE	EASING CO LL
/earCheck USA - 50 CP33849	Recei	ived : 11	, NC 27513 Jun 2021	Aug9/19 -	148 EN1	FERPRISE DI
5		ived : 11 ed : 14	, NC 27513	DART T	148 EN1	EASING CO LL

- Certificate L2367Test Package: IND 2 (Additional Tests: KF, PrtCount)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.

AD°CI

Laboratory Sample No. Lab Number Unique Number

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: CHUCK RITTER - DAREDW

chuck.ritter@starleasing.com

Т:

F: