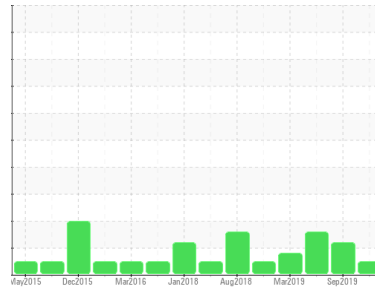




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
KAESER C-1R (S/N 1022)
 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	history 1	history 2
Sample Number	Client Info			WC0390910	WCI2351490	WC04753361
Sample Date	Client Info			08 Jan 2020	04 Sep 2019	18 Jun 2019
Machine Age	hrs	Client Info		45194	42936	40128
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			Not Chngd	N/A	N/A
Sample Status				NORMAL	ATTENTION	ABNORMAL

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>50	<1	0	0
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>3	0	0	<1
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	<1	0	0
Copper	ppm	ASTM D5185m	>50	6	8	5
Tin	ppm	ASTM D5185m	>10	0	<1	0
Antimony	ppm	ASTM D5185m		0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m		<1	0	<1
Barium	ppm	ASTM D5185m	90	11	<1	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m	90	<1	0	0
Calcium	ppm	ASTM D5185m	2	0	0	0
Phosphorus	ppm	ASTM D5185m		3	<1	<1
Zinc	ppm	ASTM D5185m		0	0	0
Sulfur	ppm	ASTM D5185m		14609	12261	16465

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	2	4	7
Sodium	ppm	ASTM D5185m		0	0	2
Potassium	ppm	ASTM D5185m	>20	<1	<1	0

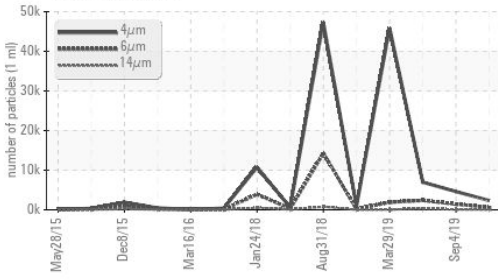
FLUID CLEANLINESS		method	limit/base	current	history 1	history 2
Particles >4µm		ASTM D7647		2354	4609	6965
Particles >6µm		ASTM D7647	>1300	582	▲ 1436	▲ 2382
Particles >14µm		ASTM D7647	>80	41	▲ 91	▲ 296
Particles >21µm		ASTM D7647	>20	11	▲ 22	▲ 88
Particles >38µm		ASTM D7647	>4	0	4	▲ 10
Particles >71µm		ASTM D7647	>3	0	4	2
Oil Cleanliness		ISO 4406 (c)	>--/17/13	18/16/13	▲ 19/18/14	▲ 20/18/15

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.432	0.443	0.427

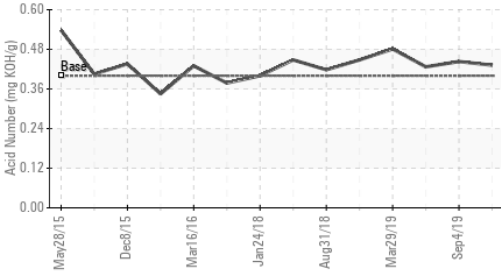


OIL ANALYSIS REPORT

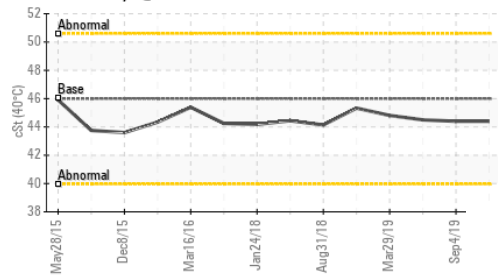
Particle Trend



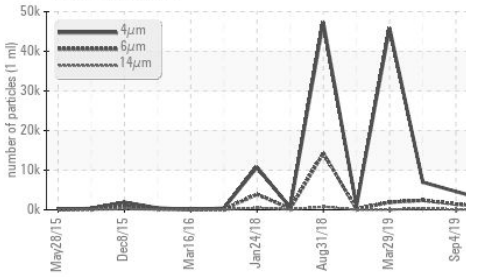
Acid Number



Viscosity @ 40°C



Particle Trend



VISUAL	method	limit/base	current	history 1	history 2
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	VLITE
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	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	46	44.4	44.5

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
---------------	--------	------------	---------	-----------	-----------

Color

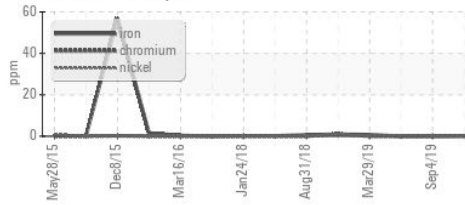


Bottom

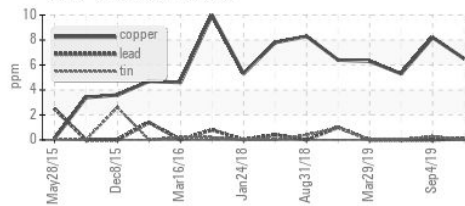


GRAPHS

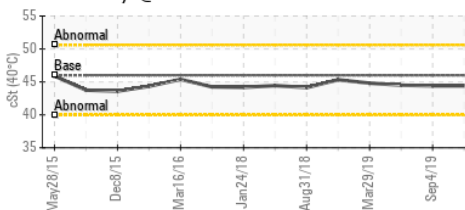
Ferrous Alloys



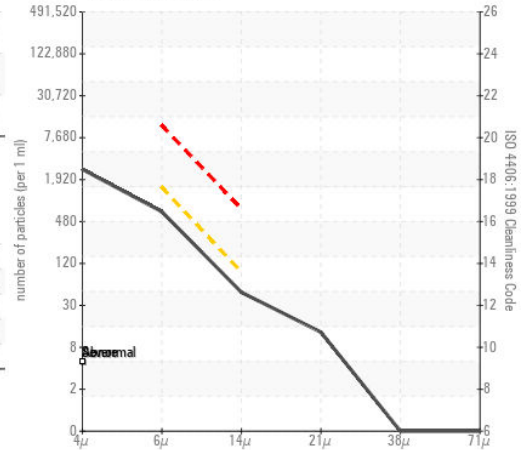
Non-ferrous Metals



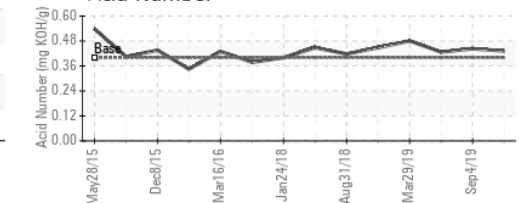
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0390910 Received : 13 Jan 2020
 Lab Number : 04885978 Diagnosed : 14 Jan 2020
 Unique Number : 8881021 Diagnostician : Doug Bogart
 Test Package : IND 2 (Additional Tests: 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.

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

WESTLAKE CHEMICAL
 2290 CALLAHAN RD
 LONGVIEW, TX
 US 75607
 Contact: ROB WALLIN
 rwallin@westlake.com
 T: (903)242-7576
 F: (903)758-9521