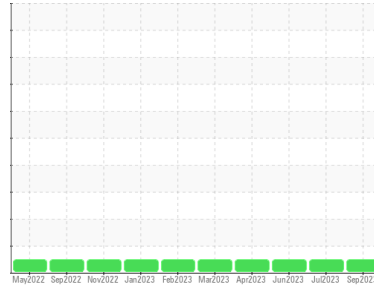




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
HOTLINE/120 MILL
 Machine Id
ROLL BENDING 120 1415-023-2000
 Component
Hydraulic System
 Fluid
QUAKER CHEMICAL QUINTOLUBRIC 888-46 (400 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	KFS0004886	KFS0003841	KFS0003862
Sample Date	Client Info	29 Sep 2023	19 Jul 2023	23 Jun 2023
Machine Age	hrs Client Info	0	0	0
Oil Age	hrs Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	NORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	<1	<1	<1
Chromium	ppm ASTM D5185m >20	0	0	0
Nickel	ppm ASTM D5185m >20	0	0	<1
Titanium	ppm ASTM D5185m	0	0	0
Silver	ppm ASTM D5185m	0	0	0
Aluminum	ppm ASTM D5185m >20	0	0	<1
Lead	ppm ASTM D5185m >20	0	0	0
Copper	ppm ASTM D5185m >20	<1	<1	<1
Tin	ppm ASTM D5185m >20	312	318	309
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	0
Barium	ppm ASTM D5185m	0	2	0
Molybdenum	ppm ASTM D5185m	0	0	0
Manganese	ppm ASTM D5185m	0	0	<1
Magnesium	ppm ASTM D5185m	0	0	0
Calcium	ppm ASTM D5185m	1	0	0
Phosphorus	ppm ASTM D5185m	100	110	117
Zinc	ppm ASTM D5185m	2	3	0
Sulfur	ppm ASTM D5185m	675	620	869

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >15	3	4	2
Sodium	ppm ASTM D5185m	2	1	1
Potassium	ppm ASTM D5185m >20	<1	0	<1

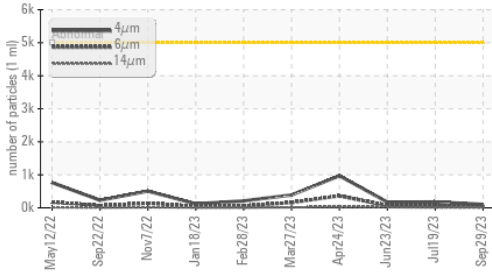
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	104	178	173
Particles >6µm	ASTM D7647 >1300	42	75	71
Particles >14µm	ASTM D7647 >160	5	9	18
Particles >21µm	ASTM D7647 >40	3	2	7
Particles >38µm	ASTM D7647 >10	1	1	1
Particles >71µm	ASTM D7647 >3	1	1	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	14/13/10	15/13/10	15/13/11

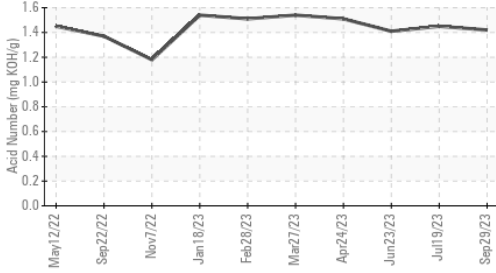
FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	1.42	1.45	1.41

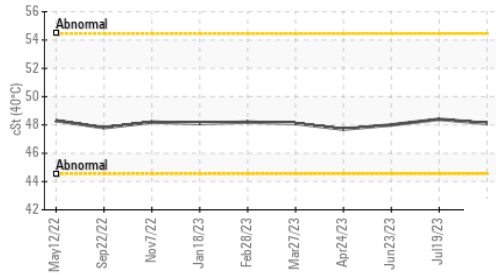
Particle Trend



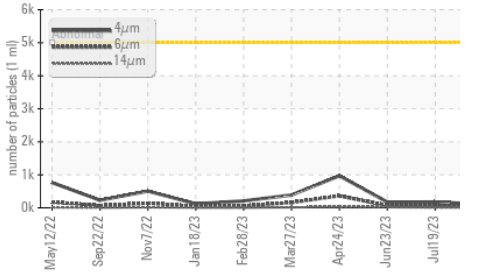
Acid Number



Viscosity @ 40°C



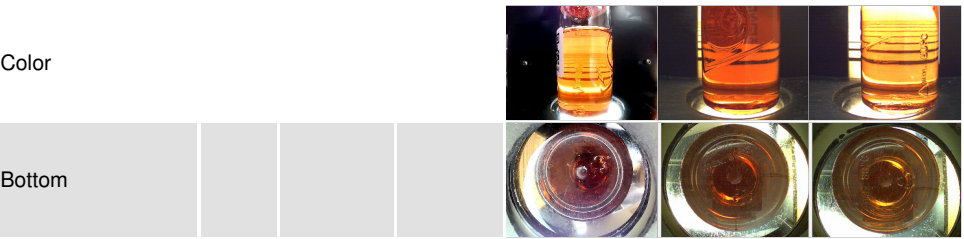
Particle Trend



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

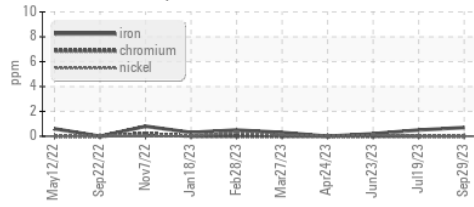
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	48.1	48.4	48.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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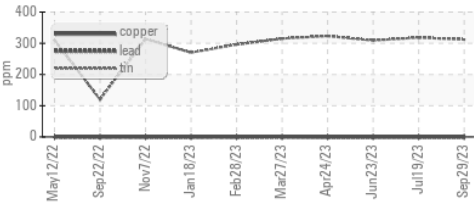


GRAPHS

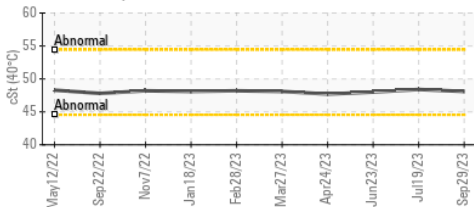
Ferrous Alloys



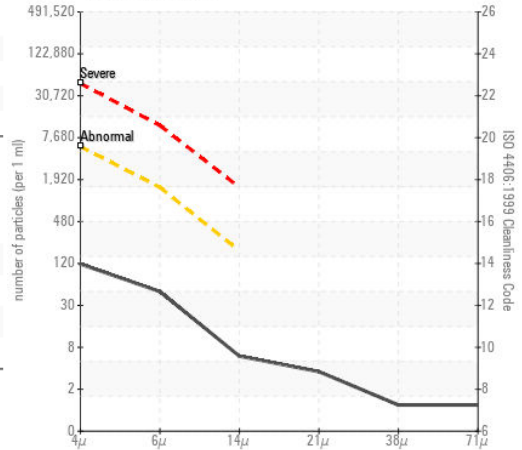
Non-ferrous Metals



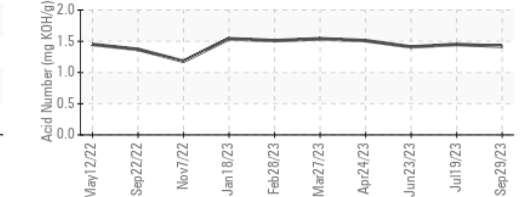
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : KFS0004886 Received : 03 Oct 2023
 Lab Number : 05967736 Diagnosed : 05 Oct 2023
 Unique Number : 10674287 Diagnostician : Don Baldrige
 Test Package : IND 2 (Additional Tests: KF)

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)

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