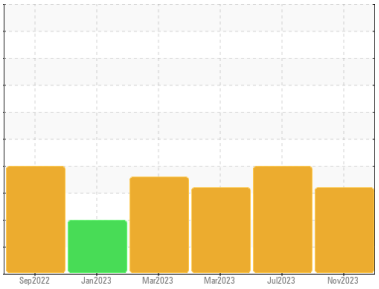
KIMBRO FLUID SOLUTIONS

PROBLEM SUMMARY

Sample Rating Trend

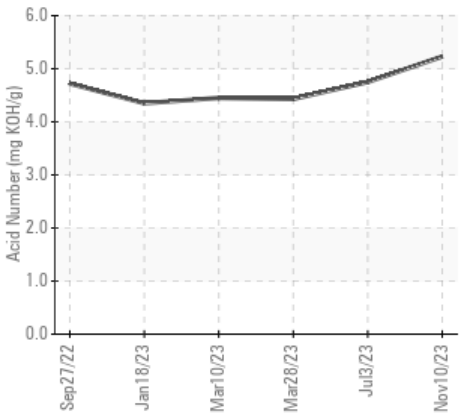


DEGRADATION

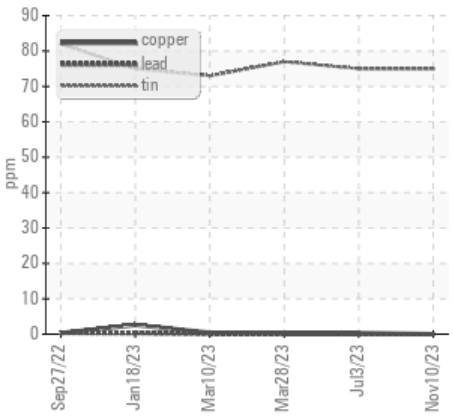
Area
HOTLINE/PUSHER FURNACES
Machine Id
#2 PUSHER MAIN HYD SYS 1406-B10-0190
Component
Hydraulic System
Fluid
BENZ OIL ULTRA GUARD 552 (--- GAL)

COMPONENT CONDITION SUMMARY

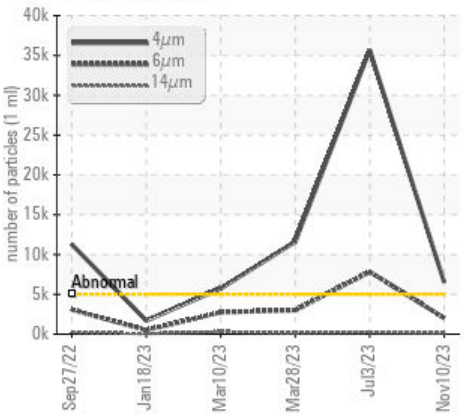
Acid Number



Non-ferrous Metals



Particle Trend



RECOMMENDATION

No corrective action is recommended at this time.
Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ATTENTION**	ABNORMAL	ABNORMAL
Tin	ppm	ASTM D5185m	>20	▲ **75**	▲ 75	▲ 77
Particles >4µm		ASTM D7647	>5000	▲ **6543**	▲ 35669	▲ 11611
Particles >6µm		ASTM D7647	>1300	▲ **2028**	▲ 7826	▲ 3010
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/18/14**	▲ 22/20/15	▲ 21/19/14
Acid Number (AN)	mg KOH/g	ASTM D8045		▲ **5.23**	▲ 4.75	▲ 4.43

Customer Id: CONMUSAL
Sample No.: KFS0004830
Lab Number: 06007649
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

03 Jul 2023 Diag: Doug Bogart

DEGRADATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. Tin noted. There is a high amount of particulates present in the oil. The AN level is above the recommended limit.

view report

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28 Mar 2023 Diag: Doug Bogart

DEGRADATION

Resample at the next service interval to monitor. Please submit a sample of the new (unused) oil to establish a baseline.The tin level is abnormal. All other component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is above the recommended limit.

view report

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10 Mar 2023 Diag: Don Baldridge

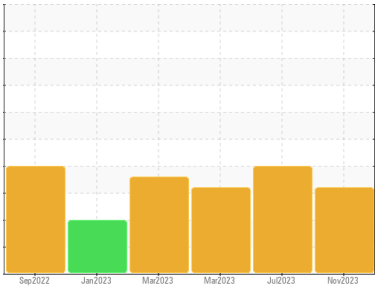
DEGRADATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. Tin noted. There is a high amount of particulates present in the oil. The AN level is above the recommended limit.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION

Area
HOTLINE/PUSHER FURNACES
Machine Id
#2 PUSHER MAIN HYD SYS 1406-B10-0190
Component
Hydraulic System
Fluid
BENZ OIL ULTRA GUARD 552 (--- GAL)

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a moderate amount of particulates present in the oil.

Fluid Condition
The AN level is above the recommended limit.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**KFS0004830**	KFS0003775	KFS0003721
Sample Date		Client Info		**10 Nov 2023**	03 Jul 2023	28 Mar 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				**ATTENTION**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**0**	<1	<1
Chromium	ppm	ASTM D5185m	>20	**3**	3	3
Nickel	ppm	ASTM D5185m	>20	**0**	0	<1
Titanium	ppm	ASTM D5185m		**0**	1	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**0**	<1	1
Lead	ppm	ASTM D5185m	>20	**0**	0	0
Copper	ppm	ASTM D5185m	>20	**0**	<1	<1
Tin	ppm	ASTM D5185m	>20	▲ **75**	▲ 75	▲ 77
Vanadium	ppm	ASTM D5185m		**0**	<1	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**	0	<1
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	0	0
Magnesium	ppm	ASTM D5185m		**0**	<1	<1
Calcium	ppm	ASTM D5185m		**0**	1	0
Phosphorus	ppm	ASTM D5185m		**231**	230	222
Zinc	ppm	ASTM D5185m		**6**	0	5
Sulfur	ppm	ASTM D5185m		**1167**	1439	1188

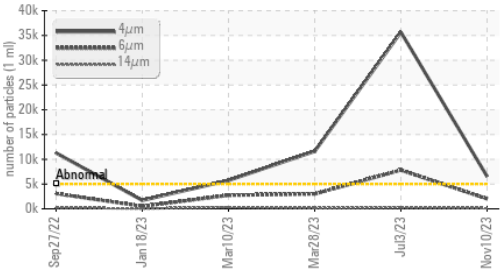
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**<1**	<1	1
Sodium	ppm	ASTM D5185m		**0**	0	0
Potassium	ppm	ASTM D5185m	>20	**0**	0	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **6543**	▲ 35669	▲ 11611
Particles >6µm		ASTM D7647	>1300	▲ **2028**	▲ 7826	▲ 3010
Particles >14µm		ASTM D7647	>160	**113**	▲ 222	120
Particles >21µm		ASTM D7647	>40	**22**	▲ 43	33
Particles >38µm		ASTM D7647	>10	**1**	1	1
Particles >71µm		ASTM D7647	>3	**1**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/18/14**	▲ 22/20/15	▲ 21/19/14

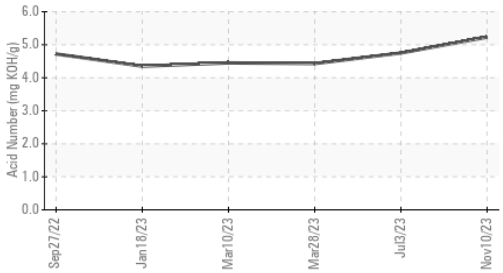
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		▲ **5.23**	▲ 4.75	▲ 4.43

OIL ANALYSIS REPORT

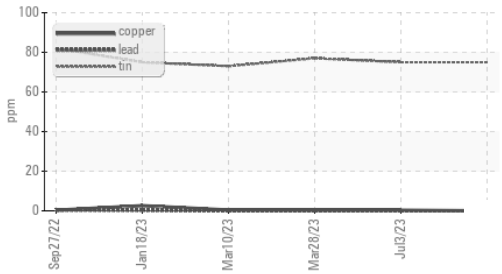
Particle Trend



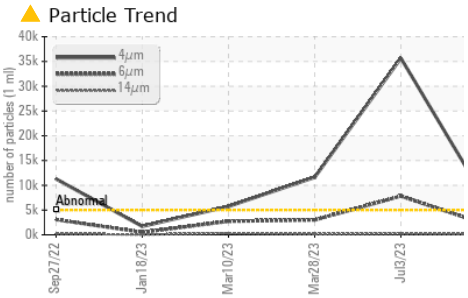
Acid Number



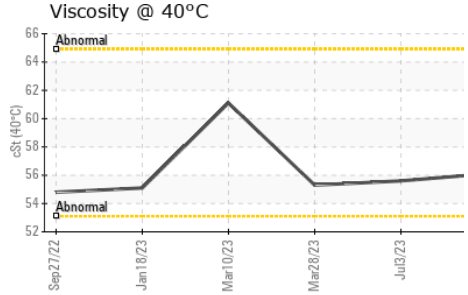
Non-ferrous Metals



Particle Trend

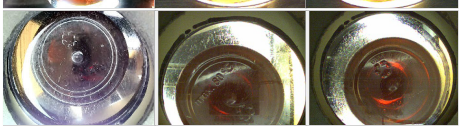


Viscosity @ 40°C



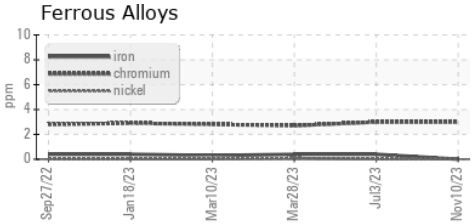
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**56.1**	55.6	55.3

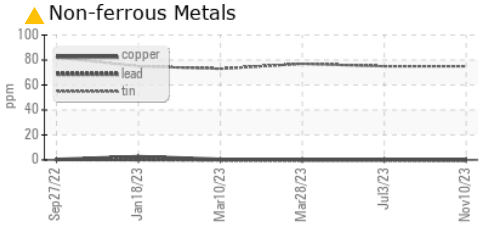
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

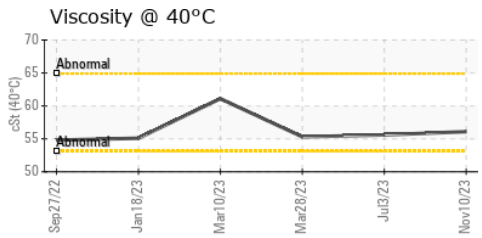
Ferrous Alloys



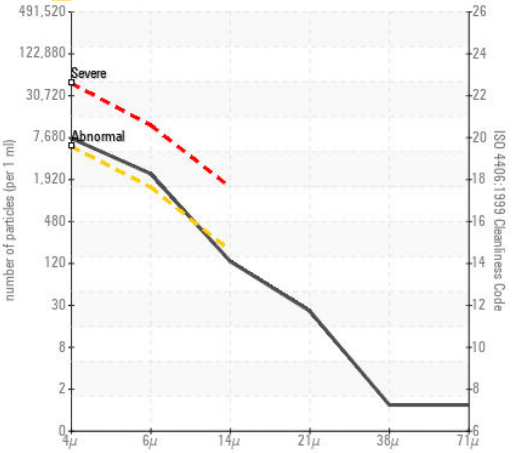
Non-ferrous Metals



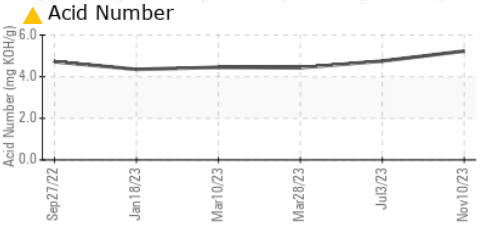
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0004830 **Received** : 14 Nov 2023
Lab Number : 06007649 **Diagnosed** : 16 Nov 2023
Unique Number : 10741411 **Diagnostician** : Don Baldridge
Test Package : IND 2

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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