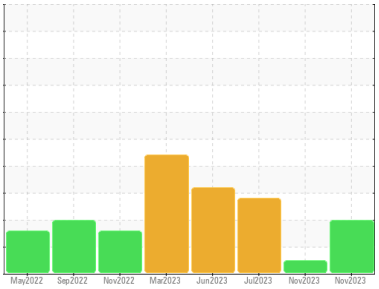
KIMBRO FLUID SOLUTIONS

PROBLEM SUMMARY

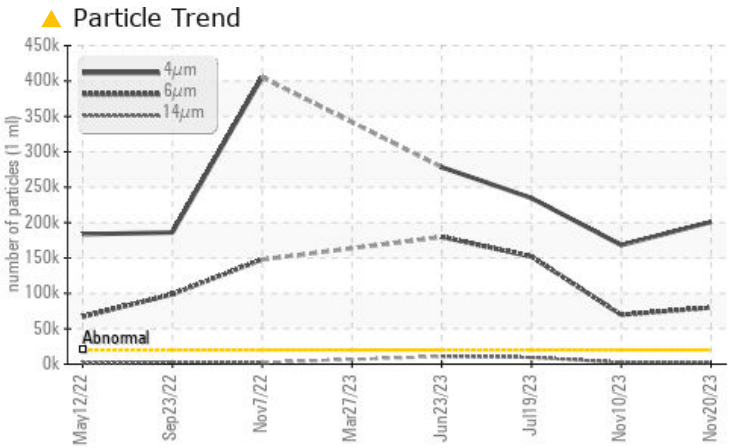
Area
HOTLINE/120 MILL
Machine Id
120 SCREWDOWN LUBE RESV 1415-014-0160
Component
Gearbox
Fluid
CITGO COMPOUND EP 320 (3000 GAL)

Sample Rating Trend



ISO

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	---	ABNORMAL
Particles >4µm		ASTM D7647	>20000	▲ **200858**	⬢ 168165	▲ 234626
Particles >6µm		ASTM D7647	>5000	▲ **79859**	⬢ 69647	▲ 151999
Particles >14µm		ASTM D7647	>640	▲ **2194**	▲ 2371	▲ 9491
Particles >21µm		ASTM D7647	>160	▲ **212**	▲ 280	▲ 964
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **25/23/18**	⬢ 25/23/18	▲ 25/24/20

Customer Id: CONMUSAL
Sample No.: KFS0005201
Lab Number: 06015770
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component if applicable.

HISTORICAL DIAGNOSIS

10 Nov 2023 Diag:

UNKNOWN

view report

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19 Jul 2023 Diag: Angela Borella

WEAR

Check seals and/or filters for points of contaminant entry. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor.The aluminum level is abnormal. All other component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report

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23 Jun 2023 Diag: Angela Borella

WEAR

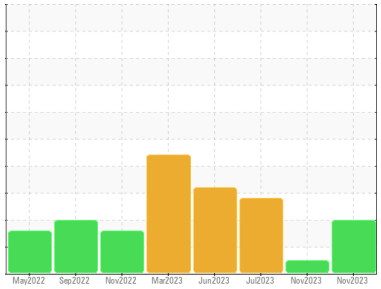
We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.The aluminum level is abnormal. All other component wear rates are normal. There is a high amount of particulates present in the oil. The oil viscosity is higher than normal. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report

KIMBRO FLUID SOLUTIONS

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
HOTLINE/120 MILL
Machine Id
120 SCREWDOWN LUBE RESV 1415-014-0160
Component
Gearbox
Fluid
CITGO COMPOUND EP 320 (3000 GAL)

DIAGNOSIS

▲ Recommendation
We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

▲ Contamination
There is a high amount of particulates 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 INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**KFS0005201**	KFS0004923	KFS0003799
Sample Date		Client Info		**20 Nov 2023**	10 Nov 2023	19 Jul 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				**ABNORMAL**	---	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**12**	12	41
Chromium	ppm	ASTM D5185m	>15	**0**	0	<1
Nickel	ppm	ASTM D5185m	>15	**0**	0	<1
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**7**	7	▲ 30
Lead	ppm	ASTM D5185m	>100	**2**	3	2
Copper	ppm	ASTM D5185m	>200	**2**	<1	7
Tin	ppm	ASTM D5185m	>25	**0**	0	<1
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**1**	<1	31
Barium	ppm	ASTM D5185m		**0**	0	2
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	0	<1
Magnesium	ppm	ASTM D5185m		**0**	3	6
Calcium	ppm	ASTM D5185m		**70**	33	598
Phosphorus	ppm	ASTM D5185m		**107**	129	108
Zinc	ppm	ASTM D5185m		**0**	12	4
Sulfur	ppm	ASTM D5185m		**5398**	5288	4887

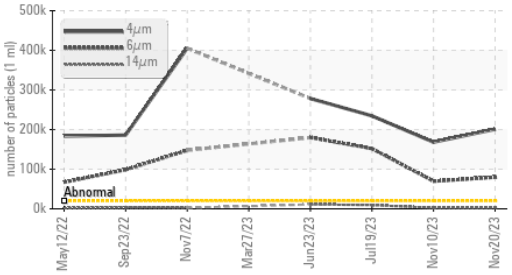
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**<1**	<1	2
Sodium	ppm	ASTM D5185m		**1**	1	6
Potassium	ppm	ASTM D5185m	>20	**2**	2	3

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **200858**	⬢ 168165	▲ 234626
Particles >6µm		ASTM D7647	>5000	▲ **79859**	⬢ 69647	▲ 151999
Particles >14µm		ASTM D7647	>640	▲ **2194**	▲ 2371	▲ 9491
Particles >21µm		ASTM D7647	>160	▲ **212**	▲ 280	▲ 964
Particles >38µm		ASTM D7647	>40	**2**	4	8
Particles >71µm		ASTM D7647	>10	**0**	0	2
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **25/23/18**	⬢ 25/23/18	▲ 25/24/20

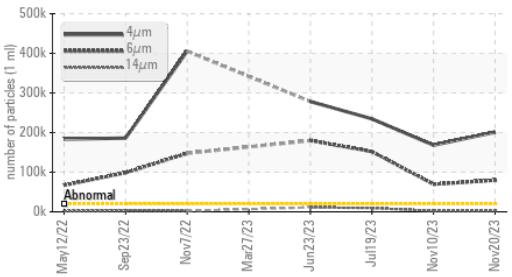
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.22**	0.31	0.27

OIL ANALYSIS REPORT

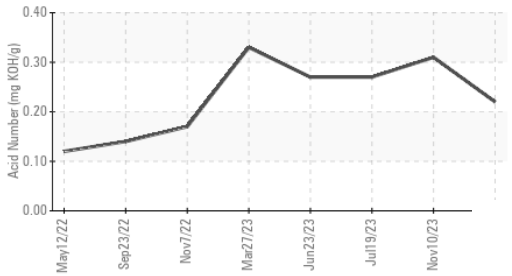
Particle Trend



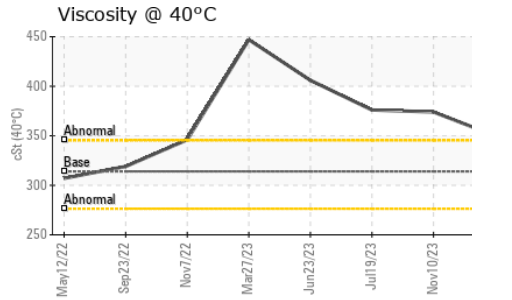
Particle Trend



Acid Number



Viscosity @ 40°C



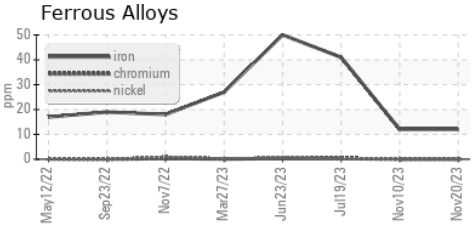
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	314	**350**	374	376

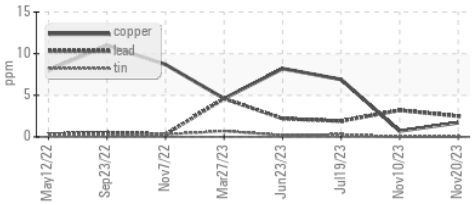
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						

GRAPHS

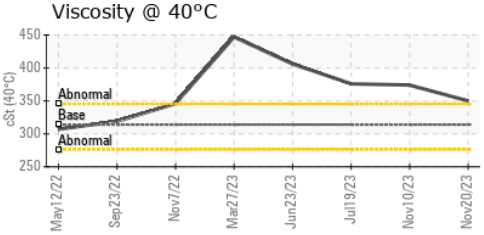
Ferrous Alloys



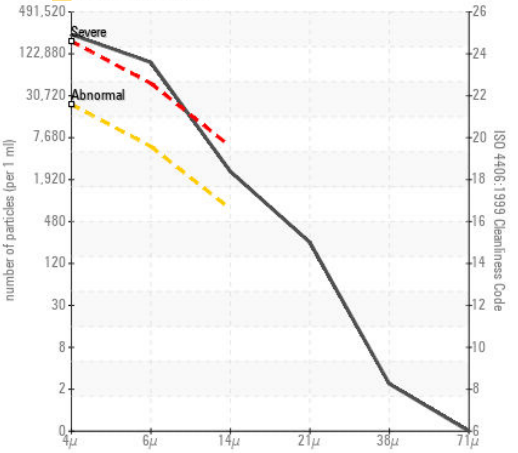
Non-ferrous Metals



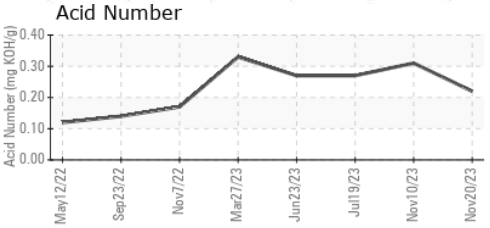
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0005201 **Received** : 22 Nov 2023
Lab Number : 06015770 **Diagnosed** : 27 Nov 2023
Unique Number : 10754914 **Diagnostician** : Jonathan Hester
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)

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