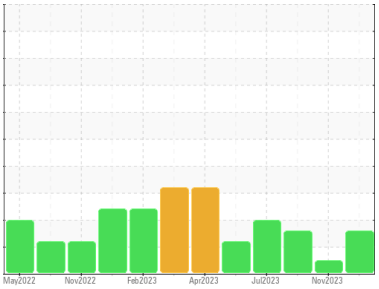
PROBLEM SUMMARY

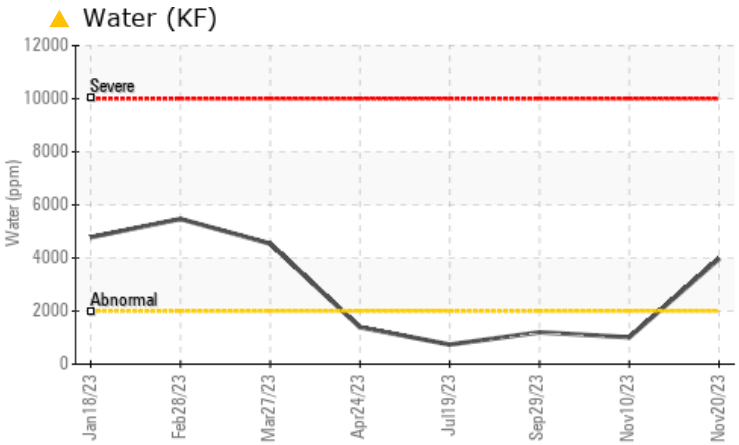
Sample Rating Trend



WATER

Area
HOTLINE/130 REVERSING MILL
Machine Id
130 SCREWDOWN LUBE RESV 1414-041-1010
Component
Gearbox
Fluid
CITGO COMPOUND EP 320 (2500 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of water entry. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	---	ABNORMAL
Water	%	ASTM D6304	>0.2	▲ **0.397**	0.101	0.120
ppm Water	ppm	ASTM D6304	>2000	▲ **3970**	1010	1200

Customer Id: CONMUSAL
Sample No.: KFS0004823
Lab Number: 06015764
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
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

10 Nov 2023 Diag:

UNKNOWN

view report

29 Sep 2023 Diag: Wes Davis

ISO

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.All component wear rates are normal. There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The water content is negligible. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

19 Jul 2023 Diag: Jonathan Hester

CONTAMINANT

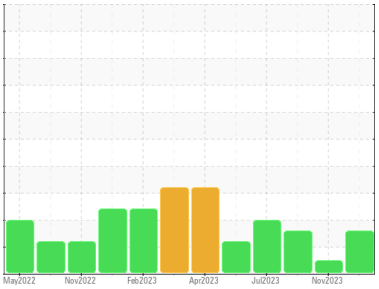
We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.All component wear rates are normal. Appearance is hazy. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

KIMBRO FLUID SOLUTIONS

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
HOTLINE/130 REVERSING MILL
Machine Id
130 SCREWDOWN LUBE RESV 1414-041-1010
Component
Gearbox
Fluid
CITGO COMPOUND EP 320 (2500 GAL)

DIAGNOSIS

Recommendation
We advise that you check for the source of water entry. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a moderate concentration of water present 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		**KFS0004823**	KFS0004926	KFS0004891
Sample Date		Client Info		**20 Nov 2023**	10 Nov 2023	29 Sep 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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**21**	17	13
Chromium	ppm	ASTM D5185m	>15	**0**	0	<1
Nickel	ppm	ASTM D5185m	>15	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**1**	<1	0
Lead	ppm	ASTM D5185m	>100	**0**	0	0
Copper	ppm	ASTM D5185m	>200	**4**	2	2
Tin	ppm	ASTM D5185m	>25	**0**	0	0
Vanadium	ppm	ASTM D5185m		**<1**	0	<1
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	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	0	<1
Magnesium	ppm	ASTM D5185m		**0**	<1	<1
Calcium	ppm	ASTM D5185m		**0**	1	1
Phosphorus	ppm	ASTM D5185m		**116**	125	110
Zinc	ppm	ASTM D5185m		**0**	7	2
Sulfur	ppm	ASTM D5185m		**5293**	5050	4625

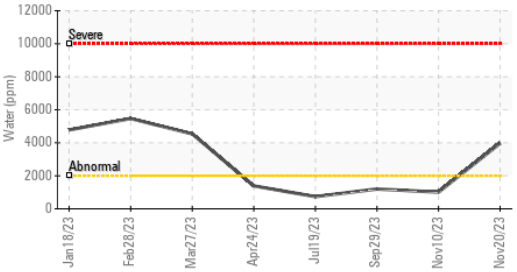
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**<1**	0	<1
Sodium	ppm	ASTM D5185m		**0**	0	3
Potassium	ppm	ASTM D5185m	>20	**4**	3	2
Water	%	ASTM D6304	>0.2	▲ **0.397**	0.101	0.120
ppm Water	ppm	ASTM D6304	>2000	▲ **3970**	1010	1200

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	**5072**	---	11553
Particles >6µm		ASTM D7647	>5000	**2763**	---	▲ 6294
Particles >14µm		ASTM D7647	>640	**470**	---	▲ 1071
Particles >21µm		ASTM D7647	>160	**158**	---	▲ 361
Particles >38µm		ASTM D7647	>40	**24**	---	56
Particles >71µm		ASTM D7647	>10	**2**	---	6
Oil Cleanliness		ISO 4406 (c)	>21/19/16	**20/19/16**	---	▲ 21/20/17

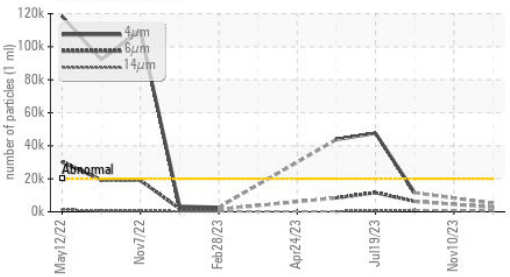
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.41**	0.39	0.40

OIL ANALYSIS REPORT

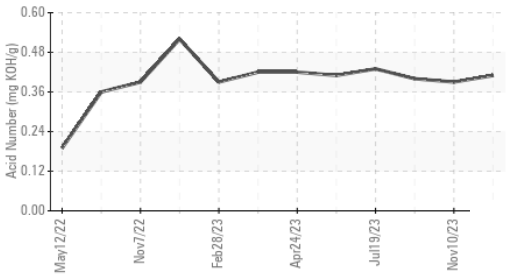
Water (KF)



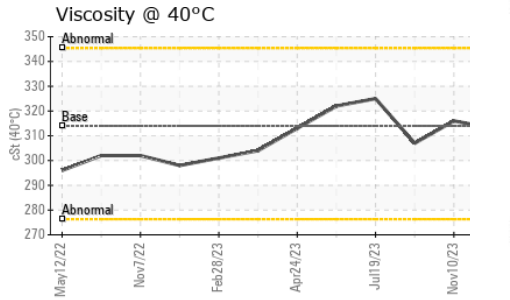
Particle Trend



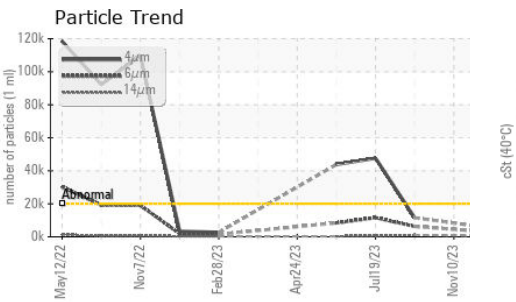
Acid Number



Viscosity @ 40°C

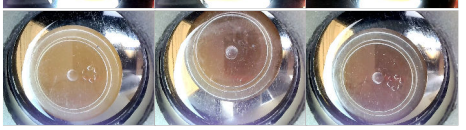


Particle Trend



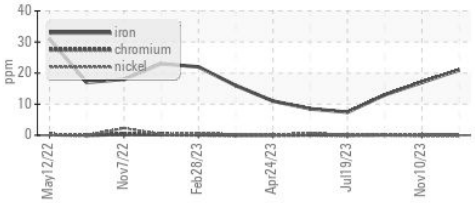
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	314	**313**	316	307

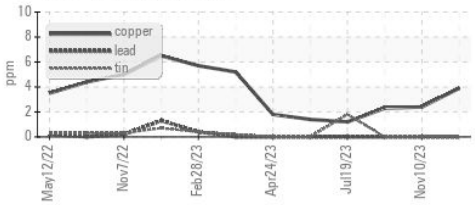
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

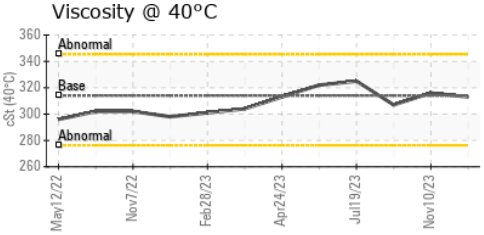
Ferrous Alloys



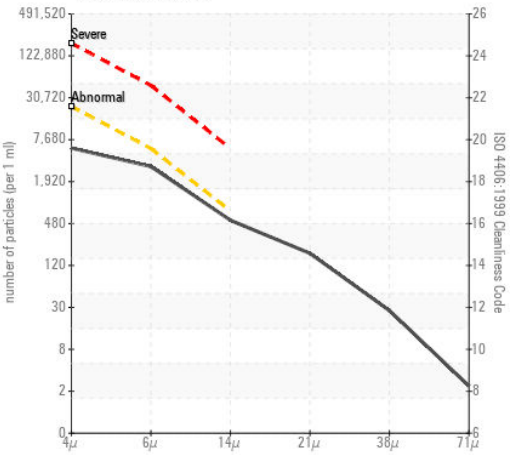
Non-ferrous Metals



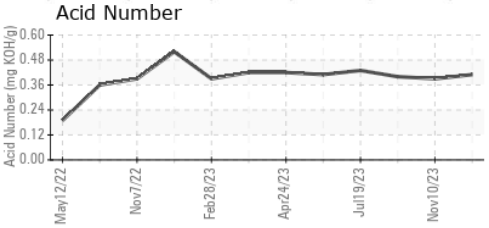
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0004823 **Received** : 22 Nov 2023
Lab Number : 06015764 **Diagnosed** : 30 Nov 2023
Unique Number : 10754908 **Diagnostician** : Jonathan Hester
Test 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.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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