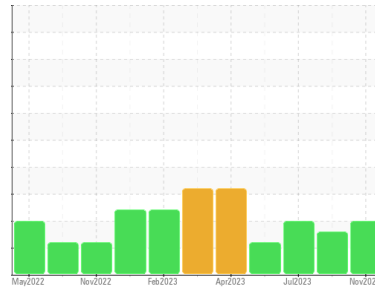




PROBLEM SUMMARY

Sample Rating Trend



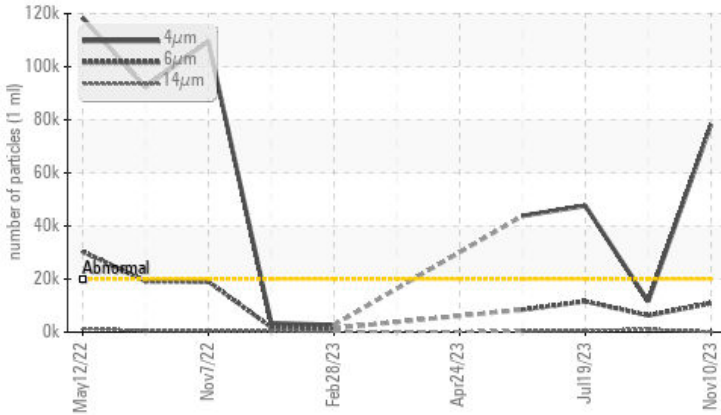
CONTAMINANT



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

▲ Particle Trend



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	ABNORMAL
Particles >4µm	ASTM D7647	>20000	▲ 78249	11553	▲ 47621
Particles >6µm	ASTM D7647	>5000	▲ 10916	▲ 6294	▲ 11596
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 23/21/14	▲ 21/20/17	▲ 23/21/16
Appearance	scalar *Visual	NORML	▲ HAZY	NORML	▲ HAZY

Customer Id: CONMUSAL
 Sample No.: KFS0004926
 Lab Number: 06007654
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Doug Bogart +1 (800)237-1369 x4016
dougb@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

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



23 Jun 2023 Diag: Wes Davis

ISO



We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

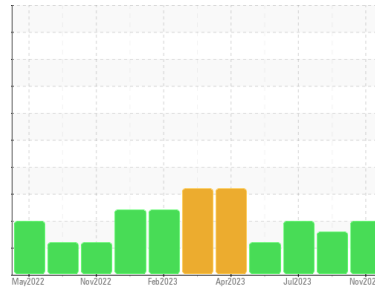
view report





OIL ANALYSIS REPORT

Sample Rating Trend



CONTAMINANT



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 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

Appearance is hazy. There is a high amount of silt (particulates < 14 microns in size) 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		KFS0004926	KFS0004891	KFS0003840
Sample Date	Client Info		10 Nov 2023	29 Sep 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	ABNORMAL

WEAR METALS	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	17	13	7
Chromium	ppm	ASTM D5185m	>15	0	<1	0
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	0	0
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>200	2	2	1
Tin	ppm	ASTM D5185m	>25	0	0	2
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0

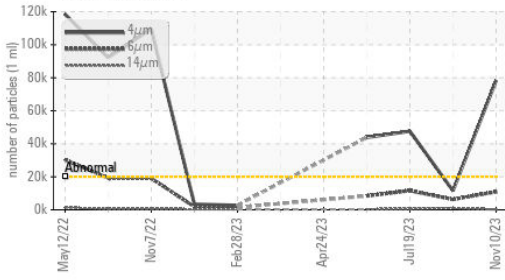
ADDITIVES	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		<1	<1	<1
Calcium	ppm	ASTM D5185m		1	1	2
Phosphorus	ppm	ASTM D5185m		125	110	102
Zinc	ppm	ASTM D5185m		7	2	5
Sulfur	ppm	ASTM D5185m		5050	4625	4401

CONTAMINANTS	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	0	<1	<1
Sodium	ppm	ASTM D5185m		0	3	3
Potassium	ppm	ASTM D5185m	>20	3	2	0
Water	%	ASTM D6304	>0.2	0.101	0.120	0.073
ppm Water	ppm	ASTM D6304	>2000	1010	1200	737.6

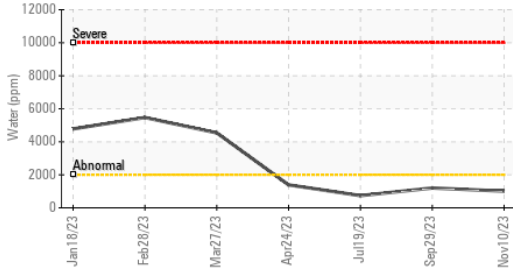
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 78249	11553	▲ 47621
Particles >6µm	ASTM D7647	>5000	▲ 10916	▲ 6294	▲ 11596
Particles >14µm	ASTM D7647	>640	131	▲ 1071	526
Particles >21µm	ASTM D7647	>160	17	▲ 361	103
Particles >38µm	ASTM D7647	>40	4	56	2
Particles >71µm	ASTM D7647	>10	2	6	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 23/21/14	▲ 21/20/17	▲ 23/21/16

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045		0.39	0.40	0.43

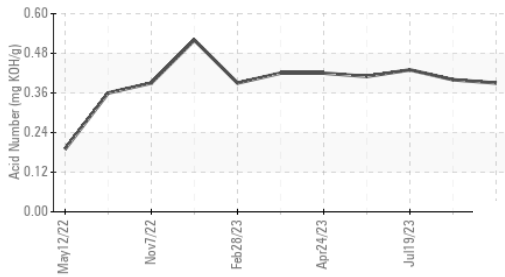
▲ Particle Trend



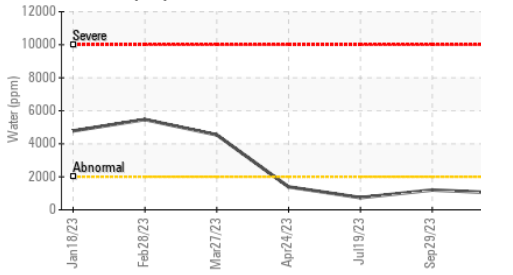
Water (KF)



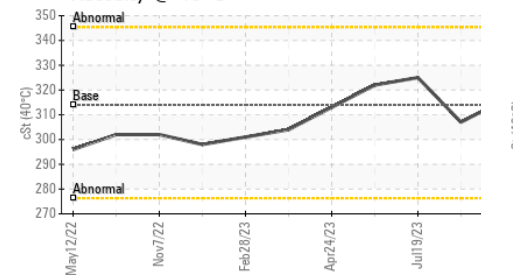
Acid Number



Water (KF)



Viscosity @ 40°C

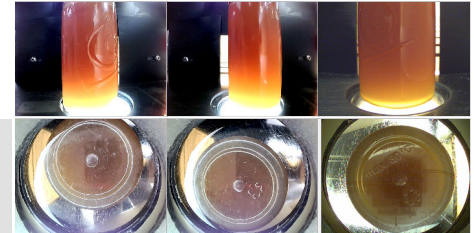


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 314	316	307	325

SAMPLE IMAGES	method	limit/base	current	history1	history2
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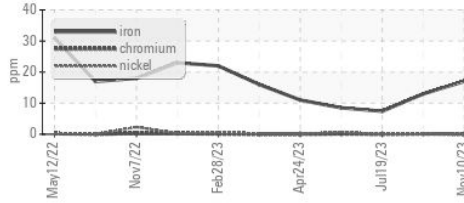
Color



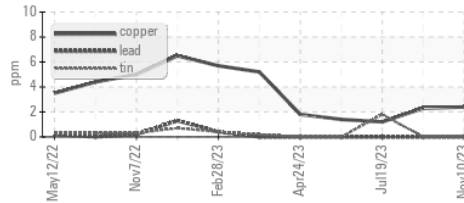
Bottom

GRAPHS

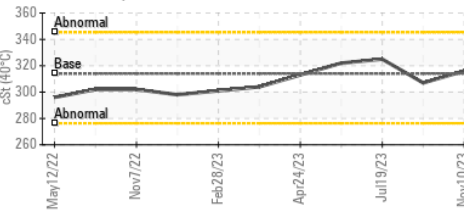
Ferrous Alloys



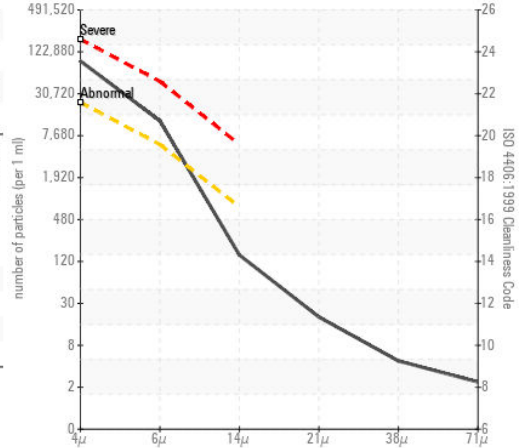
Non-ferrous Metals



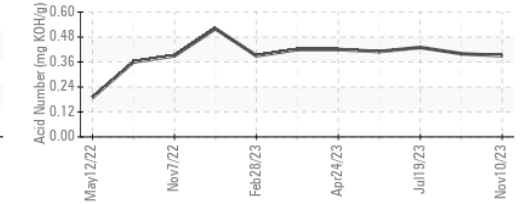
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0004926 **Received** : 14 Nov 2023
Lab Number : 06007654 **Diagnosed** : 06 Dec 2023
Unique Number : 10741416 **Diagnostician** : Doug Bogart
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)

CONSTELLIUM
 4805 SECOND STREET
 MUSCLE SHOALS, AL
 US 35661
 Contact: Joel Even
 joel.even@constellium.com
 T: (256)740-7490
 F: