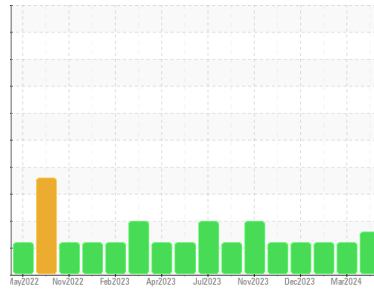




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

HOTLINE/130 REVERSING MILL

Machine Id

130 MAIN DRIVE PINION-INACTIVE 1414-014-0230

Component

Gearbox

Fluid

CITGO EP COMPOUND ISO 800 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

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			KFS0004572	KFS0002562	KFS0004624
Sample Date	Client Info			21 Jun 2024	22 Mar 2024	16 Feb 2024
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	>200	17	22	28
Chromium	ppm	ASTM D5185m	>15	0	<1	0
Nickel	ppm	ASTM D5185m	>15	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	1	0
Lead	ppm	ASTM D5185m	>100	0	1	0
Copper	ppm	ASTM D5185m	>200	<1	2	0
Tin	ppm	ASTM D5185m	>25	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	0

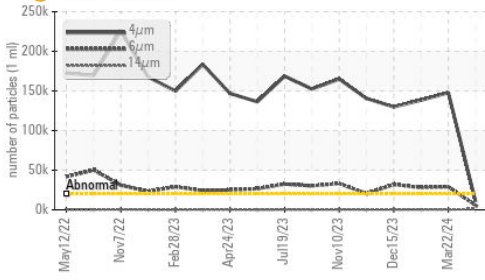
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	1	0
Barium	ppm	ASTM D5185m		0	0	1
Molybdenum	ppm	ASTM D5185m		0	<1	0
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		0	<1	1
Calcium	ppm	ASTM D5185m		4	9	10
Phosphorus	ppm	ASTM D5185m		117	121	115
Zinc	ppm	ASTM D5185m		0	2	13
Sulfur	ppm	ASTM D5185m		7637	6533	6180

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<1	2	0
Sodium	ppm	ASTM D5185m		1	0	0
Potassium	ppm	ASTM D5185m	>20	0	1	0
Water	%	ASTM D6304	>0.2	0.034	0.068	---
ppm Water	ppm	ASTM D6304	>2000	340	680	---

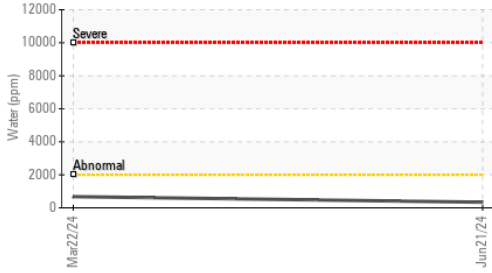
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	10248	▲ 147773	▲ 138416
Particles >6µm		ASTM D7647	>5000	● 5583	▲ 29095	▲ 28103
Particles >14µm		ASTM D7647	>640	● 950	385	351
Particles >21µm		ASTM D7647	>160	● 320	56	43
Particles >38µm		ASTM D7647	>40	49	2	1
Particles >71µm		ASTM D7647	>10	5	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	● 21/20/17	▲ 24/22/16	▲ 24/22/16

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.56	0.58	0.53

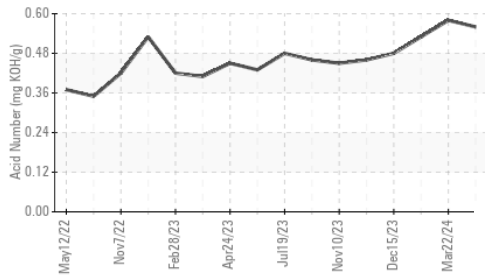
Particle Trend



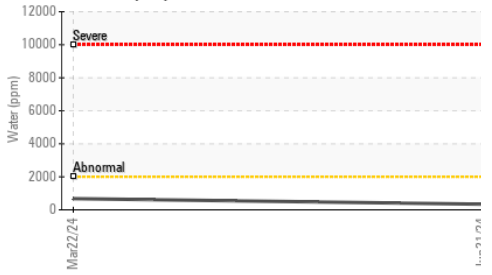
Water (KF)



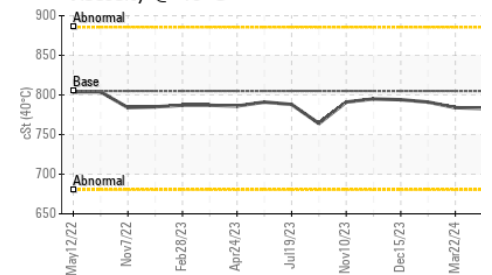
Acid Number



Water (KF)



Viscosity @ 40°C

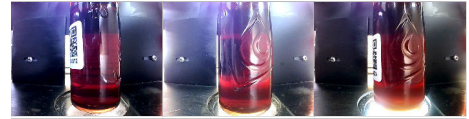


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 805	783	784	791

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

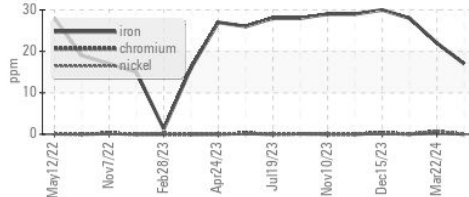


Bottom

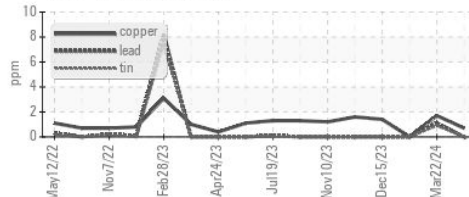


GRAPHS

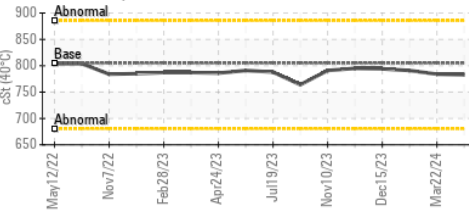
Ferrous Alloys



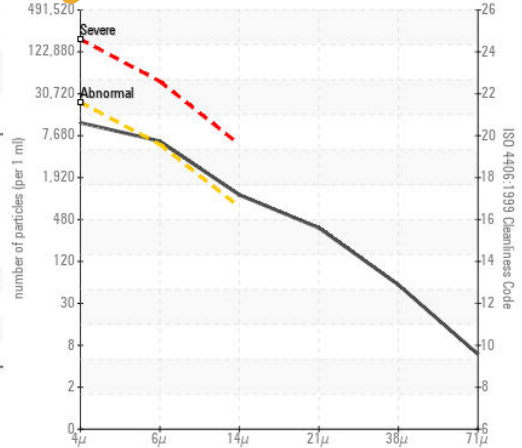
Non-ferrous Metals



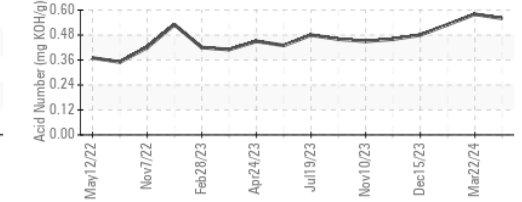
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : KFS0004572

Lab Number : 06219642

Unique Number : 11097839

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)

Received : 25 Jun 2024

Tested : 28 Jun 2024

Diagnosed : 28 Jun 2024 - Wes Davis

CONSTELLIUM

4805 SECOND STREET

MUSCLE SHOALS, AL

US 35661

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