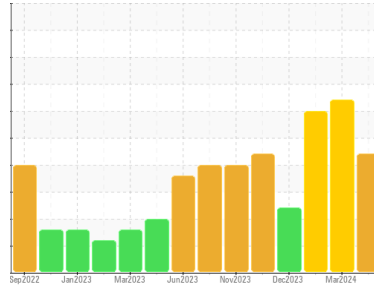




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area
HOTLINE/120 MILL
 Machine Id
120 MAIN DRIVE PINION 1415-014-1190
 Component
Gearbox
 Fluid
CITGO EP COMPOUND ISO 800 (5000 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

Appearance is hazy. There is a moderate amount of particulates present in the oil. There is a light concentration of water 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	KFS0004858	KFS0002560	KFS0004626
Sample Date	Client Info	02 Apr 2024	22 Mar 2024	16 Feb 2024
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	SEVERE	SEVERE

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >200	34	30	51
Chromium	ppm	ASTM D5185m >15	0	<1	0
Nickel	ppm	ASTM D5185m >15	<1	<1	1
Titanium	ppm	ASTM D5185m	0	<1	0
Silver	ppm	ASTM D5185m	<1	<1	0
Aluminum	ppm	ASTM D5185m >25	3	3	3
Lead	ppm	ASTM D5185m >100	15	14	28
Copper	ppm	ASTM D5185m >200	<1	2	0
Tin	ppm	ASTM D5185m >25	1	2	3
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	2	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	1	<1	3
Barium	ppm	ASTM D5185m	<1	0	1
Molybdenum	ppm	ASTM D5185m	0	<1	0
Manganese	ppm	ASTM D5185m	<1	<1	0
Magnesium	ppm	ASTM D5185m	4	2	6
Calcium	ppm	ASTM D5185m	17	17	23
Phosphorus	ppm	ASTM D5185m	144	141	106
Zinc	ppm	ASTM D5185m	5	15	15
Sulfur	ppm	ASTM D5185m	6797	5725	4888

CONTAMINANTS

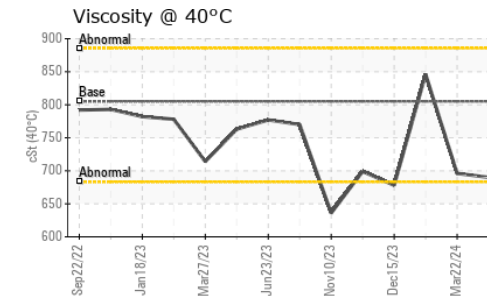
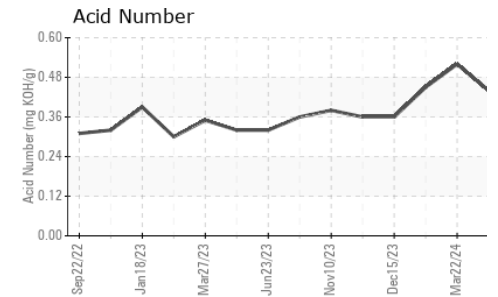
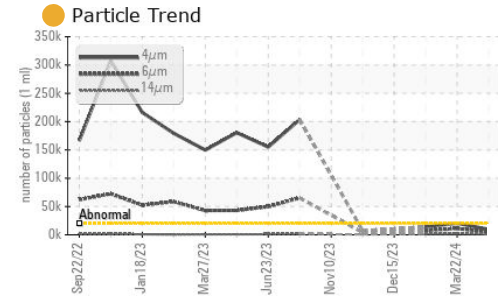
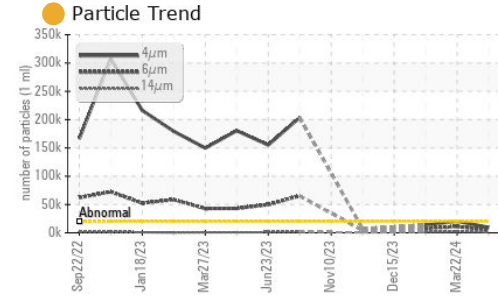
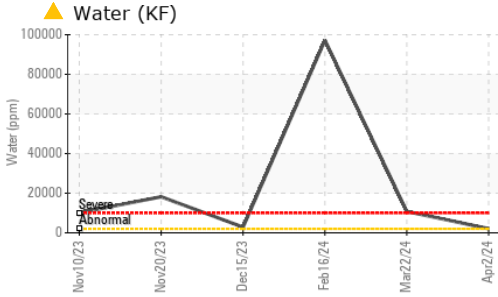
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	1	3	1
Sodium	ppm	ASTM D5185m	6	5	4
Potassium	ppm	ASTM D5185m >20	3	2	3
Water	%	ASTM D6304 >0.2	▲ 0.209	▲ 1.08	▲ 9.72
ppm Water	ppm	ASTM D6304 >2000	▲ 2090	▲ 10800	▲ 97200

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	9630	▲ 20409	13911
Particles >6µm	ASTM D7647 >5000	5246	▲ 11118	7578
Particles >14µm	ASTM D7647 >640	893	▲ 1892	1290
Particles >21µm	ASTM D7647 >160	301	▲ 637	434
Particles >38µm	ASTM D7647 >40	46	▲ 98	67
Particles >71µm	ASTM D7647 >10	5	10	7
Oil Cleanliness	ISO 4406 (c) >21/19/16	● 20/20/17	▲ 22/21/18	● 21/20/17

FLUID DEGRADATION

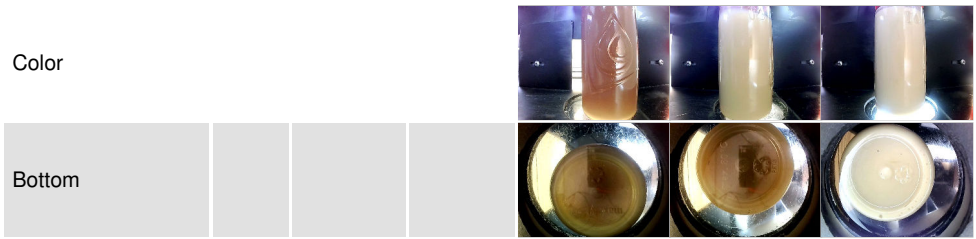
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.44	0.52	0.45



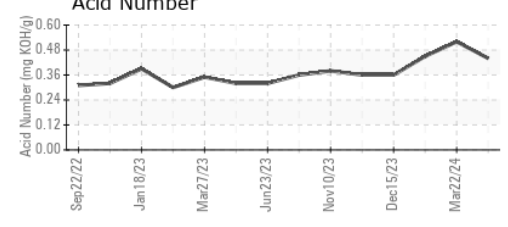
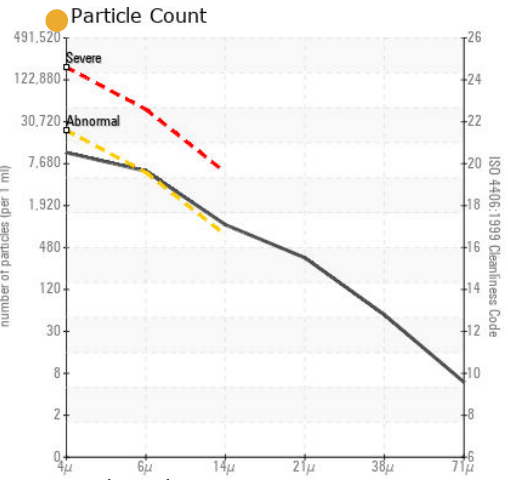
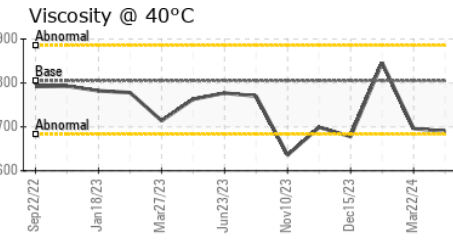
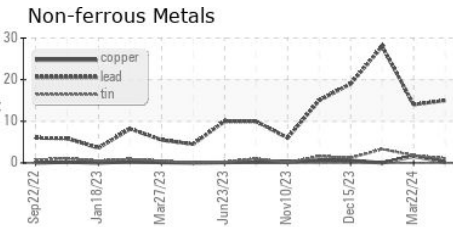
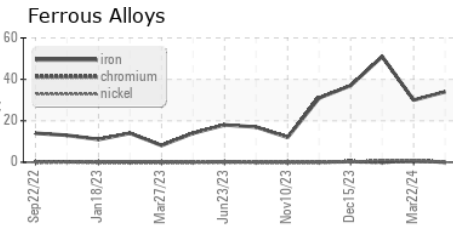
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	MODER	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	HAZY	MILKY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>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 805	690	696	846

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0004858 **Received** : 14 May 2024
Lab Number : 06179311 **Tested** : 20 May 2024
Unique Number : 11030637 **Diagnosed** : 20 May 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

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

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)