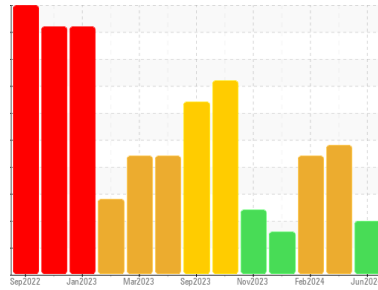




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area
HOTLINE/120 MILL
 Machine Id
120 TRIMMER 1415-003-0020
 Component
Gearbox
 Fluid
PETRO CANADA ENDURATEX EP 220 (700 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 oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	KFS0004570	KFS0002561	KFS0004630
Sample Date	Client Info	21 Jun 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	ABNORMAL	ABNORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>200	<1	4	0
Chromium	ppm	ASTM D5185m	>15	0	<1	0
Nickel	ppm	ASTM D5185m	>15	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	2	9	6
Lead	ppm	ASTM D5185m	>100	0	<1	0
Copper	ppm	ASTM D5185m	>200	1	3	0
Tin	ppm	ASTM D5185m	>25	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	<1

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	60	0	0	0
Barium	ppm	ASTM D5185m	0	0	0	1
Molybdenum	ppm	ASTM D5185m	0	0	<1	0
Manganese	ppm	ASTM D5185m	0	0	<1	0
Magnesium	ppm	ASTM D5185m	0	0	2	3
Calcium	ppm	ASTM D5185m	0	22	34	32
Phosphorus	ppm	ASTM D5185m	270	238	289	293
Zinc	ppm	ASTM D5185m	0	202	330	373
Sulfur	ppm	ASTM D5185m	11200	3201	1097	592

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>50	0	6	0
Sodium	ppm	ASTM D5185m		<1	<1	0
Potassium	ppm	ASTM D5185m	>20	1	1	<1

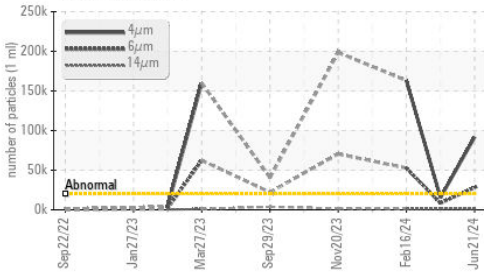
FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>20000	▲ 91766	15452	▲ 163105
Particles >6µm	ASTM D7647	>5000	▲ 28116	▲ 8417	▲ 52690
Particles >14µm	ASTM D7647	>640	▲ 1027	▲ 1433	▲ 996
Particles >21µm	ASTM D7647	>160	137	▲ 483	90
Particles >38µm	ASTM D7647	>40	2	▲ 74	1
Particles >71µm	ASTM D7647	>10	0	8	1
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 24/22/17	▲ 21/20/18	▲ 25/23/17

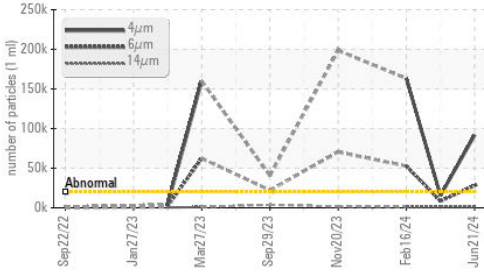
FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D8045	0.40	0.31	0.59	0.58

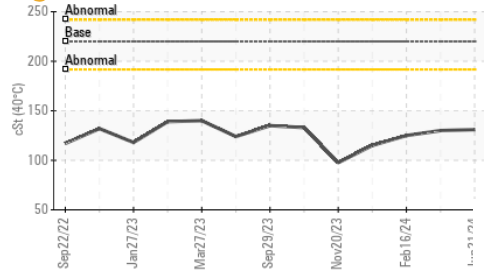
▲ Particle Trend



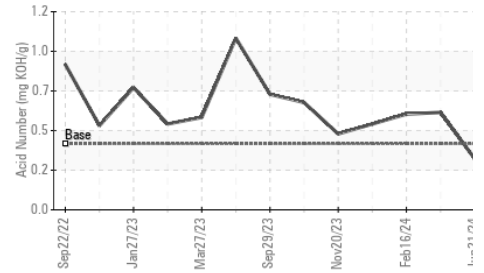
▲ Particle Trend



● Viscosity @ 40°C



Acid Number



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	MILKY	HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	131	130

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

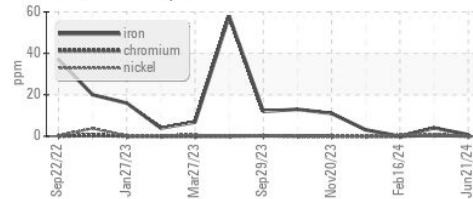


Bottom

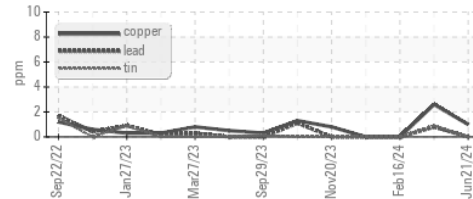


GRAPHS

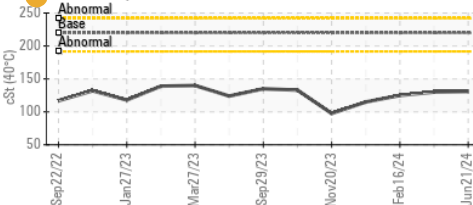
Ferrous Alloys



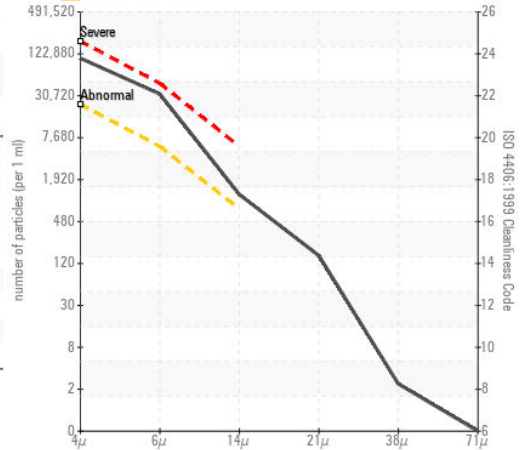
Non-ferrous Metals



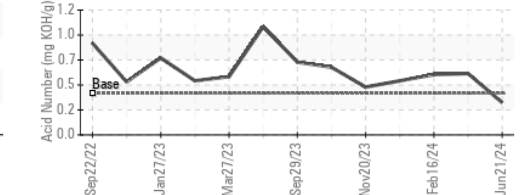
● Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

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

Sample No. : KFS0004570

Lab Number : 06219644

Unique Number : 11097841

Test Package : IND 2 (Additional Tests: PrtCount)

Received : 25 Jun 2024

Tested : 26 Jun 2024

Diagnosed : 26 Jun 2024 - Don Baldrige

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)