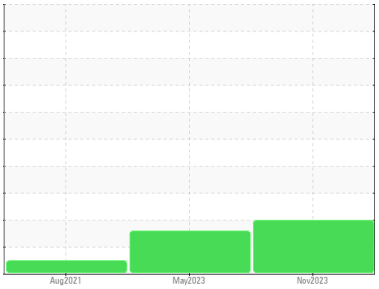
PROBLEM SUMMARY

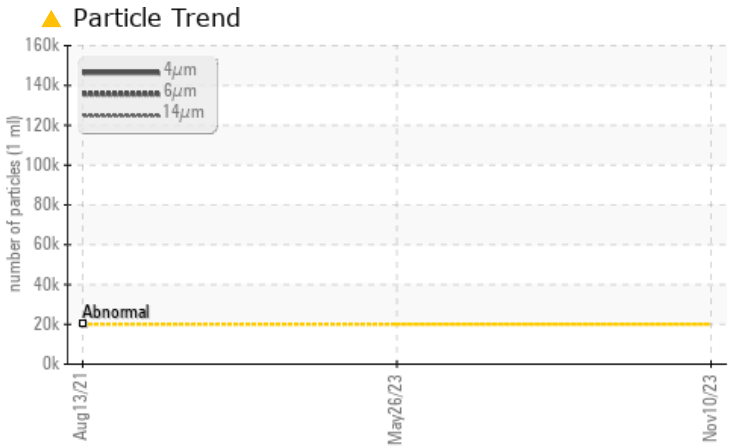
Sample Rating Trend

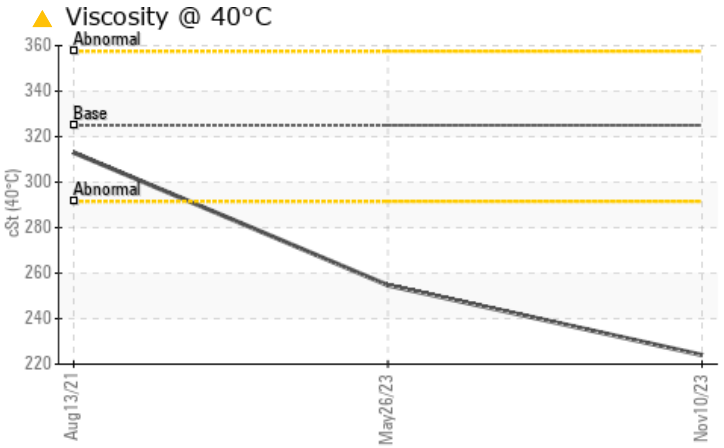


VISCOSITY

Area
COLD MILL/CM-5-STAND
Machine Id
DRAG BRIDLE GEARBOX F (CENTER) 1710-003-4131
Component
Gearbox
Fluid
PETRO CANADA ENDURATEX EP 320 (--- GAL)

COMPONENT CONDITION SUMMARY





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	NORMAL
Particles >4µm		ASTM D7647	>20000	▲ **156715**	---	---
Particles >6µm		ASTM D7647	>5000	▲ **61056**	---	---
Particles >14µm		ASTM D7647	>640	▲ **689**	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **24/23/17**	---	---
Visc @ 40°C	cSt	ASTM D445	325	▲ **224**	▲ 254.7	313

Customer Id: CONMUSAL
Sample No.: KFS0004863
Lab Number: 06007658
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

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

26 May 2023 Diag: Doug Bogart

VISUAL METAL

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample.Moderate concentration of visible metal present. All component wear rates are normal. No other contaminants were detected in the oil. The oil viscosity is lower than typical, possibly indicating the addition of lighter grade oil. The AN level is acceptable for this fluid.

view report

13 Aug 2021 Diag: Jonathan Hester

NORMAL

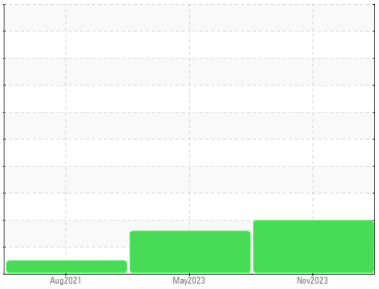
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

KIMBRO FLUID SOLUTIONS

OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY

Area
COLD MILL/CM-5-STAND
Machine Id
DRAG BRIDLE GEARBOX F (CENTER) 1710-003-4131
Component
Gearbox
Fluid
PETRO CANADA ENDURATEX EP 320 (--- 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. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**KFS0004863**	KFS0003379	KFS0000077
Sample Date		Client Info		**10 Nov 2023**	26 May 2023	13 Aug 2021
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	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**59**	129	80
Chromium	ppm	ASTM D5185m	>15	**0**	1	<1
Nickel	ppm	ASTM D5185m	>15	**0**	1	<1
Titanium	ppm	ASTM D5185m		**0**	<1	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**0**	<1	1
Lead	ppm	ASTM D5185m	>100	**0**	<1	0
Copper	ppm	ASTM D5185m	>200	**0**	<1	<1
Tin	ppm	ASTM D5185m	>25	**0**	0	<1
Antimony	ppm	ASTM D5185m	>5	**---**	---	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	55	**0**	2	10
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	0	**0**	<1	<1
Manganese	ppm	ASTM D5185m	0	**<1**	1	<1
Magnesium	ppm	ASTM D5185m	0	**0**	<1	0
Calcium	ppm	ASTM D5185m	0	**4**	20	1
Phosphorus	ppm	ASTM D5185m	240	**85**	115	96
Zinc	ppm	ASTM D5185m	1	**4**	24	0
Sulfur	ppm	ASTM D5185m	13700	**5644**	6668	5936

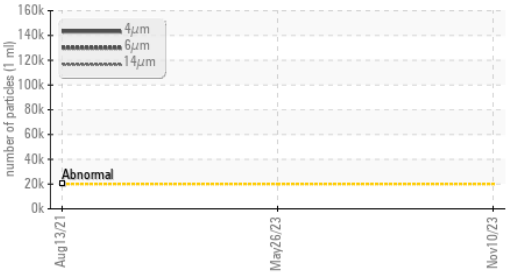
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**1**	3	5
Sodium	ppm	ASTM D5185m		**15**	67	3
Potassium	ppm	ASTM D5185m	>20	**2**	19	5

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **156715**	---	---
Particles >6µm		ASTM D7647	>5000	▲ **61056**	---	---
Particles >14µm		ASTM D7647	>640	▲ **689**	---	---
Particles >21µm		ASTM D7647	>160	**63**	---	---
Particles >38µm		ASTM D7647	>40	**0**	---	---
Particles >71µm		ASTM D7647	>10	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **24/23/17**	---	---

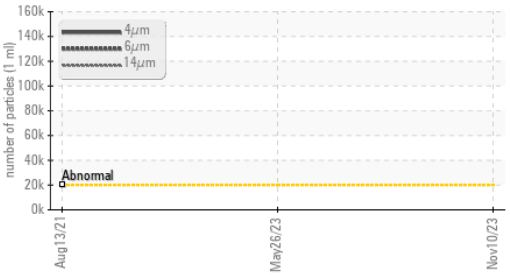
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	**0.14**	0.10	0.139

OIL ANALYSIS REPORT

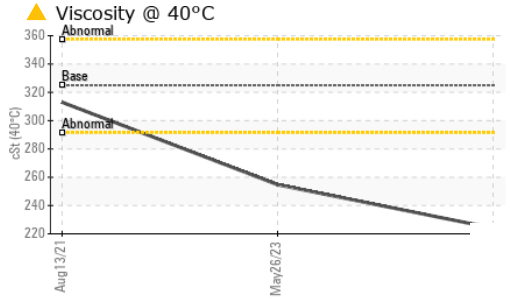
Particle Trend



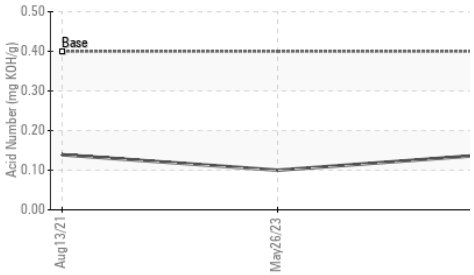
Particle Trend



Viscosity @ 40°C

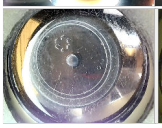
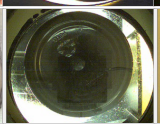


Acid Number



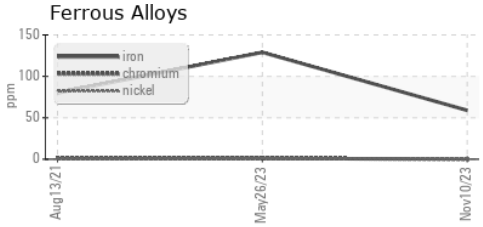
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	▲ MODER	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	325	▲ **224**	▲ 254.7	313

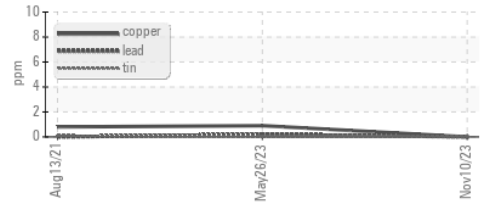
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

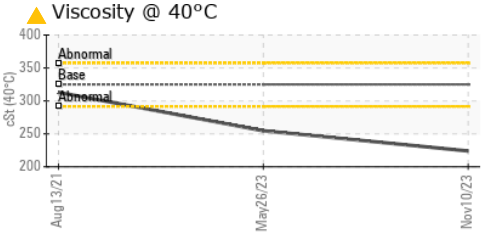
Ferrous Alloys



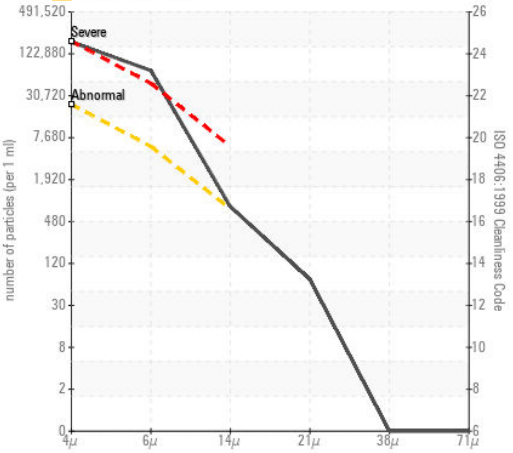
Non-ferrous Metals



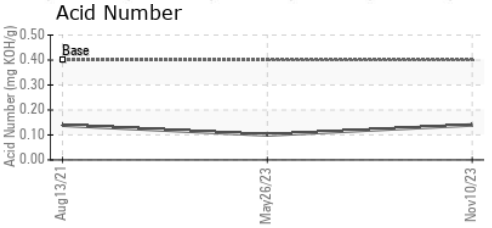
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0004863 **Received** : 14 Nov 2023
Lab Number : 06007658 **Diagnosed** : 16 Nov 2023
Unique Number : 10741420 **Diagnostician** : Don Baldridge
Test Package : IND 2 (Additional Tests: 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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