

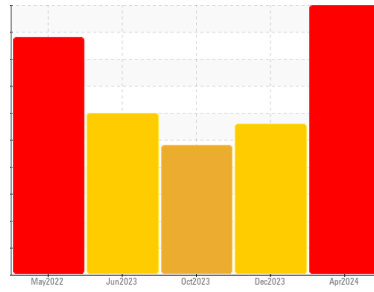


PROBLEM SUMMARY

Area
BAGLINE
Machine Id
KETTLE 5 - BAG

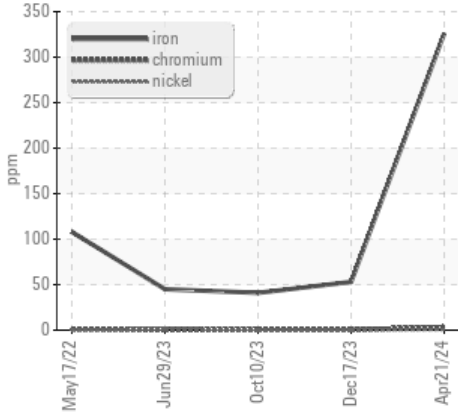
Component
Top Refrigeration Compressor
Fluid
PETRO CANADA PURITY FG SYNTH EP GEAR 220 (--- GAL)

Sample Rating Trend

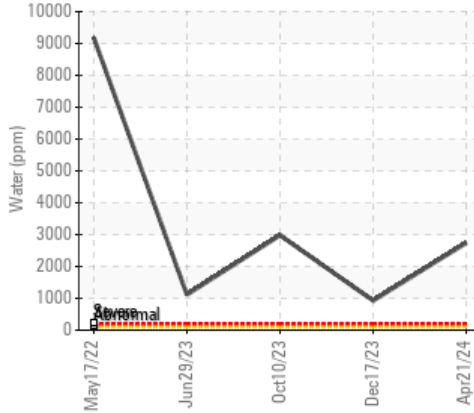


COMPONENT CONDITION SUMMARY

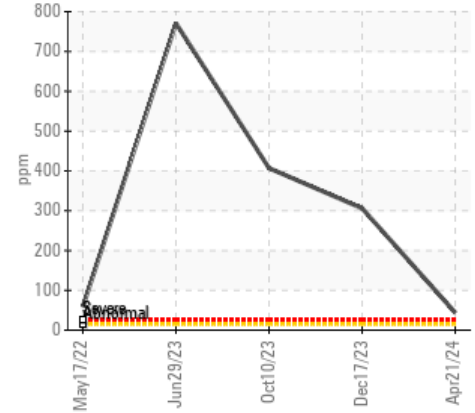
▲ Ferrous Alloys



▲ Water (KF)



▲ Silicon (ppm)



RECOMMENDATION

We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>8	▲ 326	▲ 53	▲ 41
Silicon	ppm	ASTM D5185m	>15	▲ 44	▲ 306	▲ 407
Water	%	ASTM D6304	>0.01	▲ 0.274	▲ 0.093	▲ 0.298
ppm Water	ppm	ASTM D6304	>100	▲ 2740	▲ 930	▲ 2980
Debris	scalar	*Visual	NONE	▲ HEAVY	NONE	NONE
Emulsified Water	scalar	*Visual	>0.01	▲ 0.2%	▲ 0.2%	▲ 0.2%

Customer Id: KRACED
Sample No.: USP0006489
Lab Number: 06156020
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@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
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

WATER



17 Dec 2023 Diag: Doug Bogart

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. The iron level is abnormal. Appearance is milky. Elemental level of silicon (Si) above normal. There is a high amount of visible silt present in the sample. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid.

view report



WATER



10 Oct 2023 Diag: Doug Bogart

We advise that you check for the source of water entry. We advise that you perform a filter service and use off-line filtration to improve the cleanliness of the system fluid. There is too much water present in this sample to perform a particle count. The iron level has decreased but is still abnormal. Appearance is milky. Elemental level of silicon (Si) above normal. There is a moderate concentration of water present in the oil. The AN level is acceptable for this fluid.

view report



WATER



29 Jun 2023 Diag: Doug Bogart

We advise that you perform a filter service and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. The iron level is abnormal. Appearance is hazy. Elemental level of silicon (Si) above normal. High concentration of visible dirt/debris present in the oil. There is a high amount of visible silt present in the sample. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid.

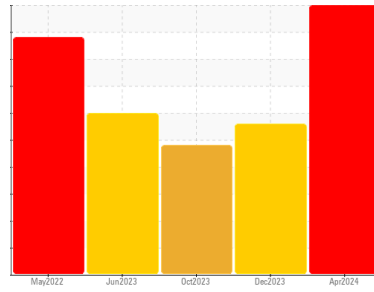
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area

BAGLINE

Machine Id

KETTLE 5 - BAG

Component

Top Refrigeration Compressor

Fluid

PETRO CANADA PURITY FG SYNTH EP GEAR 220 (--- GAL)

DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

▲ Wear

The iron level is severe.

▲ Contamination

Appearance is milky. High concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		USP0006489	USP0004477	USP0001360
Sample Date	Client Info		21 Apr 2024	17 Dec 2023	10 Oct 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			SEVERE	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >8	▲ 326	▲ 53	▲ 41
Chromium	ppm	ASTM D5185m >2	3	<1	<1
Nickel	ppm	ASTM D5185m	<1	<1	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >3	2	0	0
Lead	ppm	ASTM D5185m >2	0	0	0
Copper	ppm	ASTM D5185m >8	<1	0	0
Tin	ppm	ASTM D5185m >4	<1	0	<1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	<1	0	0
Molybdenum	ppm	ASTM D5185m	<1	0	0
Manganese	ppm	ASTM D5185m	2	<1	<1
Magnesium	ppm	ASTM D5185m	1	0	2
Calcium	ppm	ASTM D5185m	5	0	2
Phosphorus	ppm	ASTM D5185m	458	354	328
Zinc	ppm	ASTM D5185m	3	0	0
Sulfur	ppm	ASTM D5185m	401	380	421

CONTAMINANTS

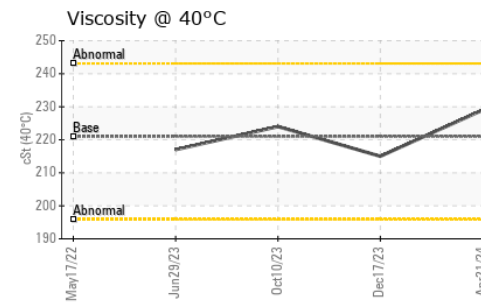
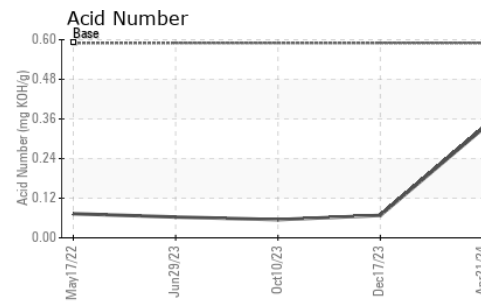
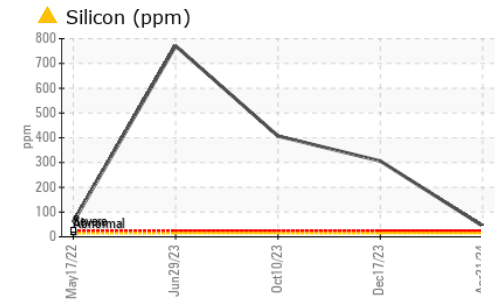
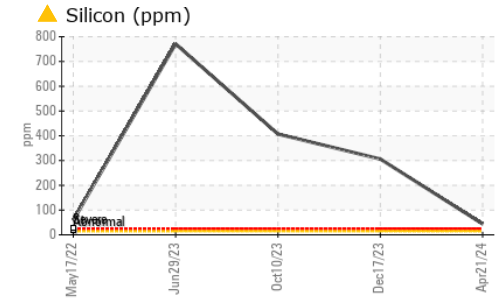
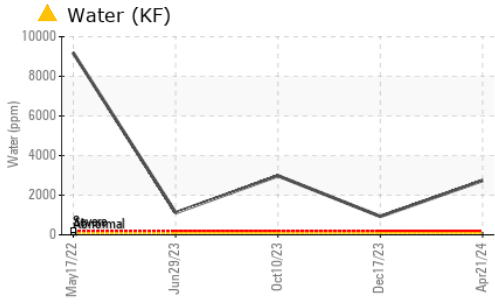
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	▲ 44	▲ 306	▲ 407
Sodium	ppm	ASTM D5185m	4	1	2
Potassium	ppm	ASTM D5185m >20	2	0	0
Water	%	ASTM D6304 >0.01	▲ 0.274	▲ 0.093	▲ 0.298
ppm Water	ppm	ASTM D6304 >100	▲ 2740	▲ 930	▲ 2980

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974 0.59	0.33	0.068	0.055



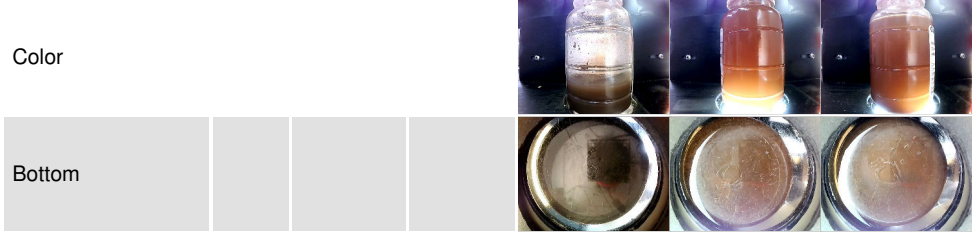
OIL ANALYSIS REPORT



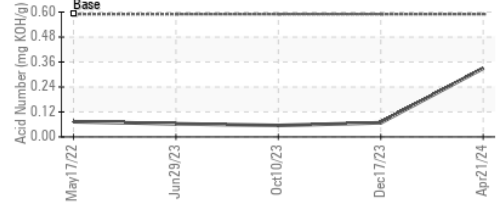
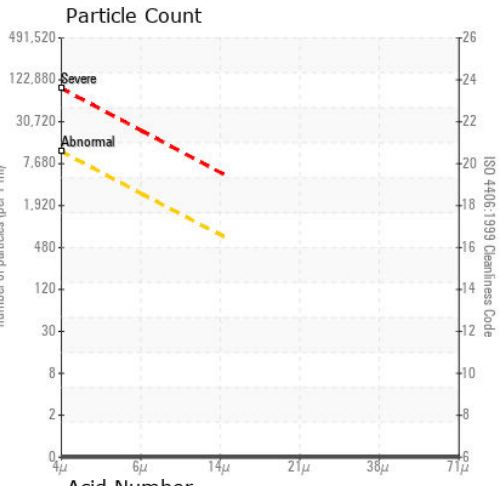
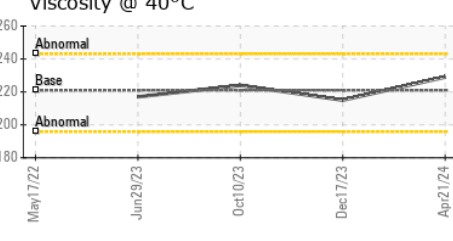
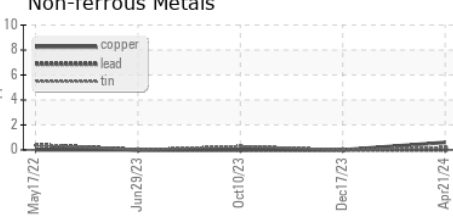
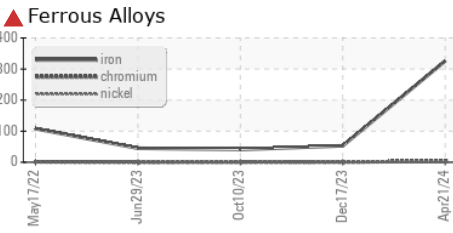
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ HEAVY	NONE
Debris	scalar	*Visual	▲ HEAVY	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	● MILKY	● MILKY	● 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 221	229	215	224

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0006489
Lab Number : 06156020
Unique Number : 10991443
Test Package : IND 2
Received : 22 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 24 Apr 2024 - Jonathan Hester

KraftHeinz - Cedar Rapids - Plant 8370
 4601 C ST SW
 CEDAR RAPIDS, IA
 US 52404
 Contact: Service Manager

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)