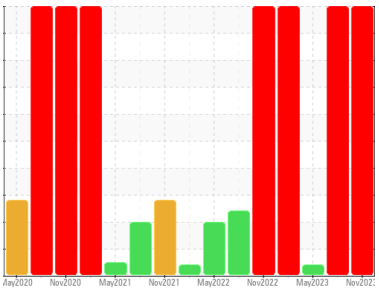
OIL DIAGNOSTICS

PROBLEM SUMMARY

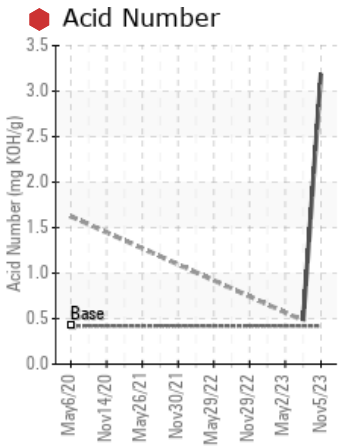
Sample Rating Trend

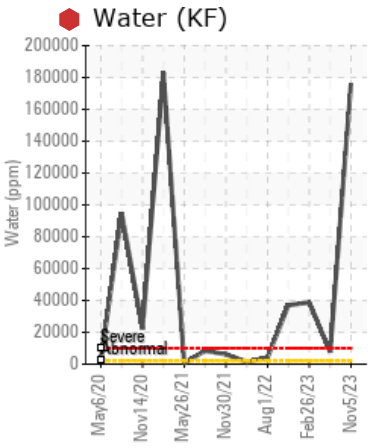


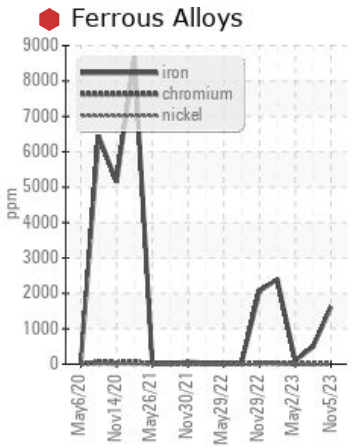
WEAR

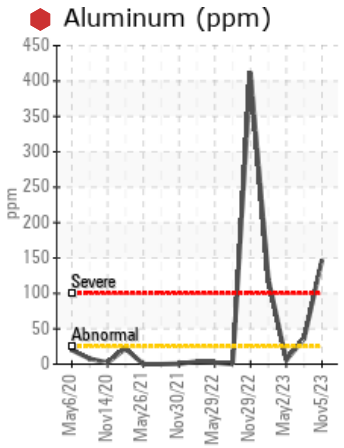
Area
[98543984]
Machine Id
KR-GR-003249 - PUMP GB - REWORK MEAT PUMP (S/N MIX A - 11555556)
Component
Gearbox
Fluid
PETRO CANADA PURITY FG SYN GEAR ISO 220 (2 LTR)

COMPONENT CONDITION SUMMARY









RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Please note that there was too much water present in the oil to perform a viscosity test.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	ATTENTION
Iron	ppm	ASTM D5185m	>200	**1617**	490	94
Chromium	ppm	ASTM D5185m	>15	**19**	5	0
Aluminum	ppm	ASTM D5185m	>25	**147**	36	6
Water	%	ASTM D6304	>0.2	**17.6**	0.762	---
ppm Water	ppm	ASTM D6304	>2000	**176000**	7620	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.42	**3.188**	0.48	---
Emulsified Water	scalar	*Visual	>0.2	**0.2%**	0.2%	NEG

Customer Id: KRAKIR
Sample No.: PCA0106505
Lab Number: 06000481
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 Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Alert	---	---	?	Please note that there was too much water present in the oil to perform a viscosity test.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

10 Aug 2023 Diag: Jonathan Hester

WEAR

We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. 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.Gear wear is indicated. Appearance is milky. There is a moderate concentration of water present in the oil. High concentration of visible dirt/debris present in the oil. There is a high amount of visible silt present in the sample. The AN level is acceptable for this fluid.

view report

02 May 2023 Diag: Jonathan Hester

VISCOSITY

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 460 range, advise investigate. Confirm oil type.

view report

26 Feb 2023 Diag: Doug Bogart

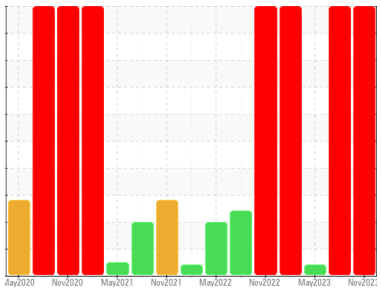
WEAR

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.Gear wear is indicated. Appearance is unacceptable. There is a high concentration of water present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable due to the presence of contaminants.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
[98543984]
Machine Id
KR-GR-003249 - PUMP GB - REWORK MEAT PUMP (S/N MIX A - 11555556)
Component
Gearbox
Fluid
PETRO CANADA PURITY FG SYN GEAR ISO 220 (2 LTR)

DIAGNOSIS

Recommendation
We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Please note that there was too much water present in the oil to perform a viscosity test.

Wear
Gear wear is indicated.

Contamination
There is a high concentration of water present in the oil.

Fluid Condition
The AN level is above the recommended limit. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PCA0106505**	PCA0102515	PCA0073070
Sample Date		Client Info		**05 Nov 2023**	10 Aug 2023	02 May 2023
Machine Age	yrs	Client Info		**0**	0	0
Oil Age	yrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**SEVERE**	SEVERE	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**1617**	490	94
Chromium	ppm	ASTM D5185m	>15	**19**	5	0
Nickel	ppm	ASTM D5185m	>15	**7**	1	0
Titanium	ppm	ASTM D5185m		**3**	<1	0
Silver	ppm	ASTM D5185m		**<1**	0	0
Aluminum	ppm	ASTM D5185m	>25	**147**	36	6
Lead	ppm	ASTM D5185m	>100	**3**	0	0
Copper	ppm	ASTM D5185m	>200	**5**	<1	0
Tin	ppm	ASTM D5185m	>25	**5**	0	0
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		**38**	6	0
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**4**	1	0
Manganese	ppm	ASTM D5185m		**15**	4	<1
Magnesium	ppm	ASTM D5185m		**16**	2	<1
Calcium	ppm	ASTM D5185m		**933**	100	18
Phosphorus	ppm	ASTM D5185m		**448**	408	570
Zinc	ppm	ASTM D5185m		**999**	150	31
Sulfur	ppm	ASTM D5185m		**1302**	983	299

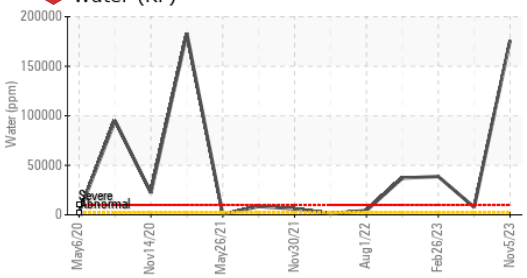
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**32**	9	0
Sodium	ppm	ASTM D5185m		**541**	102	17
Potassium	ppm	ASTM D5185m	>20	**135**	21	4
Water	%	ASTM D6304	>0.2	**17.6**	0.762	---
ppm Water	ppm	ASTM D6304	>2000	**176000**	7620	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.42	**3.188**	0.48	---

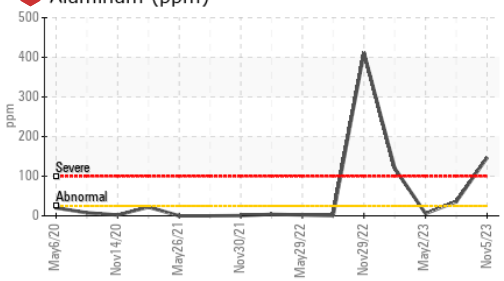
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

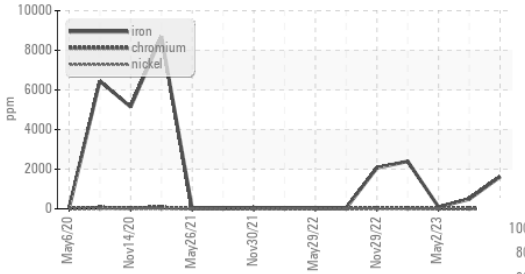
Water (KF)



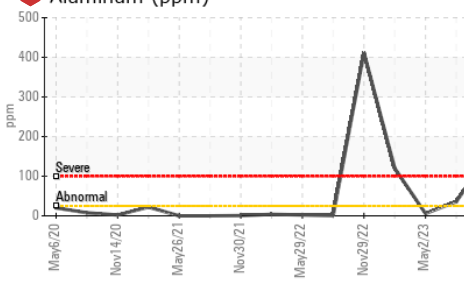
Aluminum (ppm)



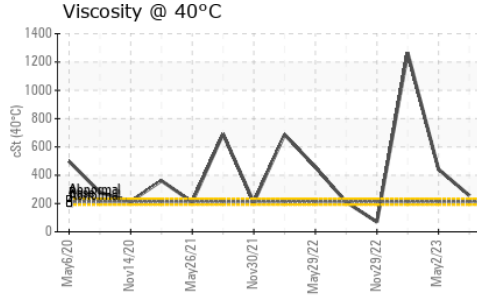
Ferrous Alloys



Aluminum (ppm)

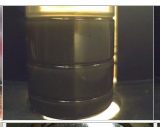
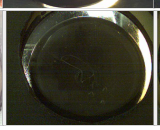
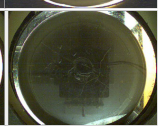


Viscosity @ 40°C



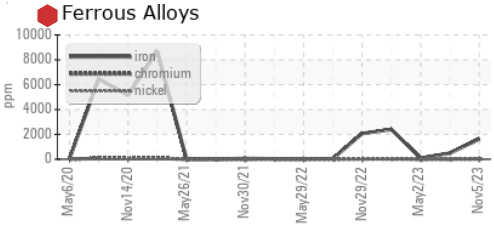
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	▲ HEAVY	NONE
Debris	scalar	*Visual	NONE	**NONE**	▲ HEAVY	NONE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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213	---	257	▲ 442

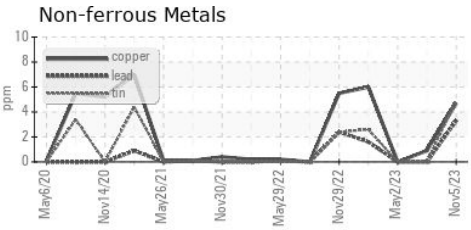
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

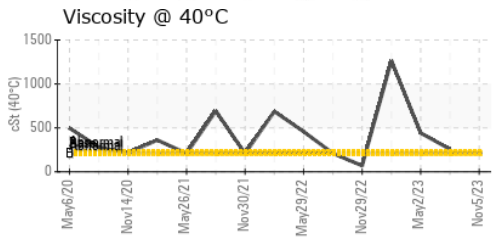
Ferrous Alloys



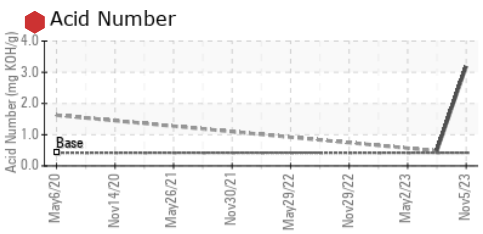
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0106505 **Received** : 07 Nov 2023
Lab Number : 06000481 **Diagnosed** : 09 Nov 2023
Unique Number : 10728841 **Diagnostician** : Jonathan Hester
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)

KraftHeinz - Kirksville - Plant 8333 PCA
2504 INDUSTRIAL DR
KIRKSVILLE, MO
US 63501
Contact: WALLACE WARD
wallace.ward@kraftheinzcompany.com
T: (660)627-1031
F: (660)627-5887