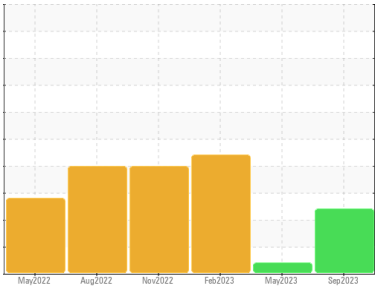
OIL DIAGNOSTICS

PROBLEM SUMMARY

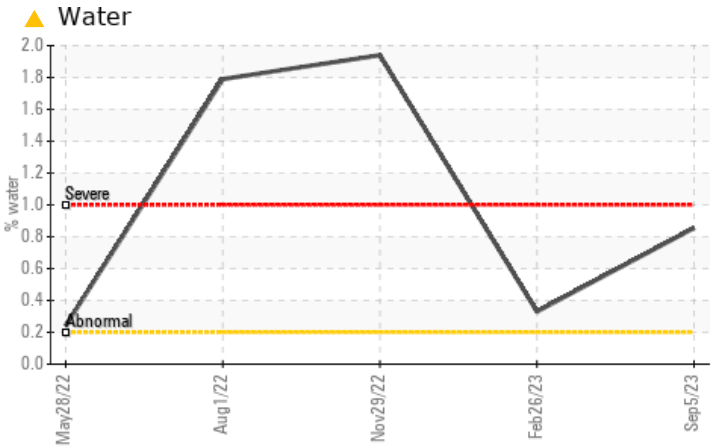
Sample Rating Trend



WATER

Area
[98376295]
Machine Id
KR-GR-003250 - 11 FT GRINDER (S/N INJECT B - 11513044)
Component
Gearbox
Fluid
PETRO CANADA PURITY FG SYN GEAR ISO 220 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of water entry. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ATTENTION	ABNORMAL
Water	%	ASTM D6304	>0.2	▲ **0.855**	---	▲ 0.330
ppm Water	ppm	ASTM D6304	>2000	▲ **8550**	---	▲ 3300
Appearance	scalar	*Visual	NORML	▲ **MILKY**	NORML	▲ MILKY

Customer Id: KRAKIR
Sample No.: PCA0102525
Lab Number: 05945713
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
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

23 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: Angela Borella

WATER

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition.All component wear rates are normal. Appearance is milky. There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil. Free water present. The condition of the oil is acceptable for the time in service.

view report

29 Nov 2022 Diag: Jonathan Hester

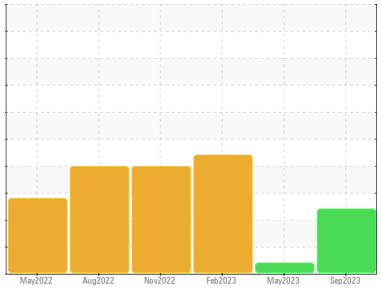
WATER

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition.All component wear rates are normal. Appearance is milky. There is a high concentration of water present in the oil. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
[98376295]
Machine Id
KR-GR-003250 - 11 FT GRINDER (S/N INJECT B - 11513044)
Component
Gearbox
Fluid
PETRO CANADA PURITY FG SYN GEAR ISO 220 (--- GAL)

DIAGNOSIS

▲ Recommendation
We advise that you check for the source of water entry. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

▲ Contamination
Appearance is milky. There is a high concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition
The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PCA0102525**	PCA0097178	PCA0091089
Sample Date		Client Info		**05 Sep 2023**	23 May 2023	26 Feb 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				**ABNORMAL**	ATTENTION	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**56**	37	87
Chromium	ppm	ASTM D5185m	>15	**<1**	<1	0
Nickel	ppm	ASTM D5185m	>15	**0**	<1	0
Titanium	ppm	ASTM D5185m		**0**	<1	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**2**	0	1
Lead	ppm	ASTM D5185m	>100	**0**	0	0
Copper	ppm	ASTM D5185m	>200	**1**	<1	0
Tin	ppm	ASTM D5185m	>25	**0**	0	0
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**10**	0	3
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**40**	4	91
Manganese	ppm	ASTM D5185m		**1**	<1	2
Magnesium	ppm	ASTM D5185m		**0**	0	3
Calcium	ppm	ASTM D5185m		**6**	4	15
Phosphorus	ppm	ASTM D5185m		**507**	527	556
Zinc	ppm	ASTM D5185m		**11**	1	27
Sulfur	ppm	ASTM D5185m		**4929**	779	12618

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**4**	4	3
Sodium	ppm	ASTM D5185m		**9**	<1	2
Potassium	ppm	ASTM D5185m	>20	**3**	<1	0
Water	%	ASTM D6304	>0.2	▲ **0.855**	---	▲ 0.330
ppm Water	ppm	ASTM D6304	>2000	▲ **8550**	---	▲ 3300

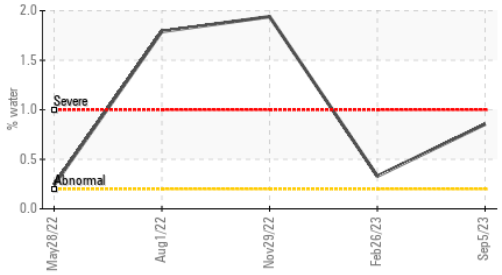
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**1262**	---	---
Particles >6µm		ASTM D7647	>2500	**687**	---	---
Particles >14µm		ASTM D7647	>640	**117**	---	---
Particles >21µm		ASTM D7647	>160	**39**	---	---
Particles >38µm		ASTM D7647	>40	**6**	---	---
Particles >71µm		ASTM D7647	>10	**1**	---	---
Oil Cleanliness		ISO 4406 (c)	>20/18/16	**17/17/14**	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.42	**0.64**	---	---

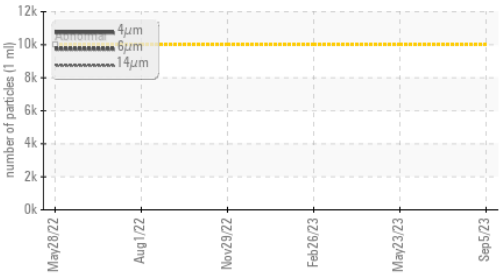
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

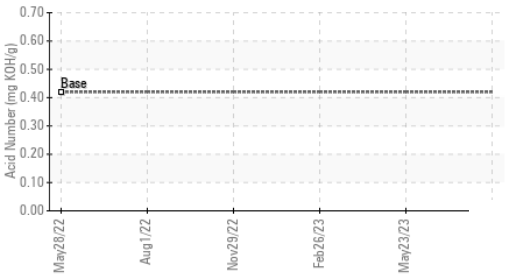
Water



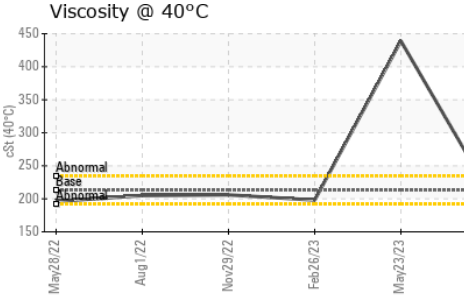
Particle Trend



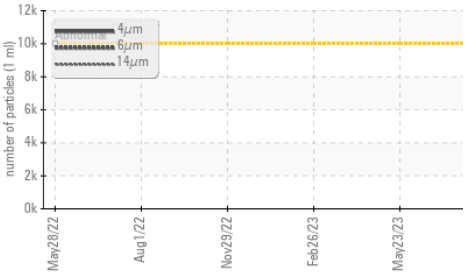
Acid Number



Viscosity @ 40°C



Particle Trend



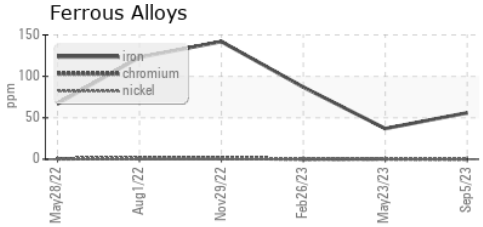
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	MODER
Debris	scalar	*Visual	NONE	**NONE**	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	▲ **MILKY**	NORML	▲ MILKY
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	**0.2%**	NEG	0.2%
Free Water	scalar	*Visual		**NEG**	NEG	▲ 1.0

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213	**215**	▲ 439	198

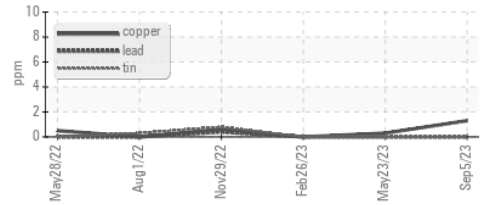
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

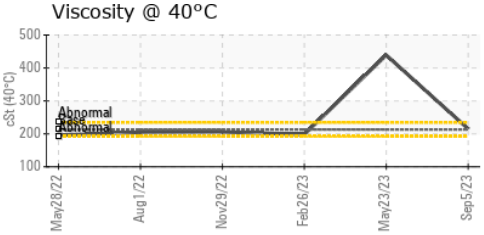
Ferrous Alloys



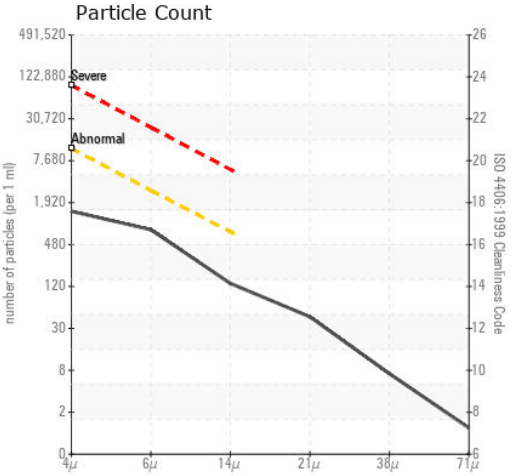
Non-ferrous Metals



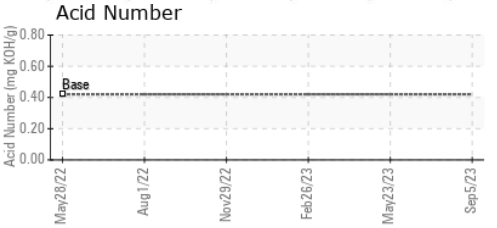
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0102525 **Received** : 08 Sep 2023
Lab Number : 05945713 **Diagnosed** : 15 Sep 2023
Unique Number : 10636325 **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