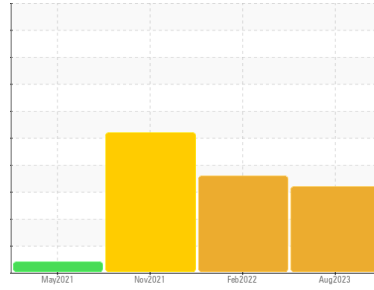


PROBLEM SUMMARY

Area
[98364180]
 Machine Id
KR-GR-003127 (S/N MIX D - 11535134)
 Component
Pump
 Fluid
PETRO CANADA PURITY FG SYNTH EP GEAR FLUID 460 (44 GAL)

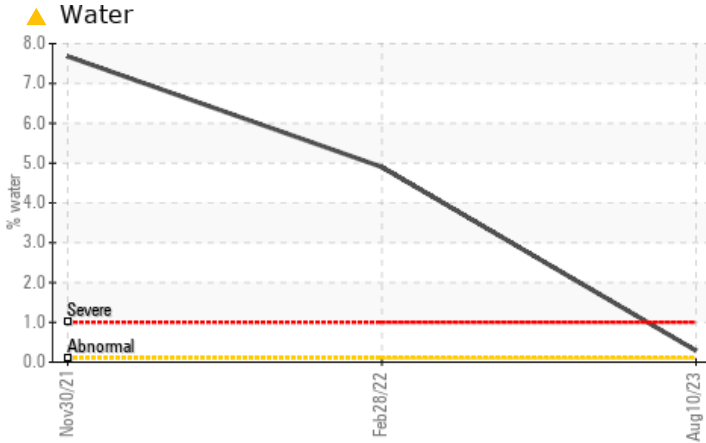
Sample Rating Trend



WATER



COMPONENT CONDITION SUMMARY



RECOMMENDATION

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. 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.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	SEVERE	SEVERE
Water	%	ASTM D6304		▲ 0.289	● 4.90	● 7.68
ppm Water	ppm	ASTM D6304	>.1	▲ 2890	● 49000	● 76800
Silt	scalar	*Visual	NONE	▲ MODER	NONE	▲ MODER
Appearance	scalar	*Visual	NORML	▲ MILKY	NORML	▲ LAYRD
Emulsified Water	scalar	*Visual		▲ 0.2%	● 0.2%	● 0.2%

Customer Id: KRAKIR
 Sample No.: PCA0103747
 Lab Number: 05924831
 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
Water Drain-off	---	---	?	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.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

28 Feb 2022 Diag: Don Baldrige

WATER



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 recommend an early resample to monitor this condition. All component wear rates are normal. There is a high concentration of water present in the oil. The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

[view report](#)



30 Nov 2021 Diag: Don Baldrige

WATER



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 recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of visible silt present in the sample. There is a high concentration of water present in the oil. The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

[view report](#)



24 May 2021 Diag: Jonathan Hester

VISCOSITY



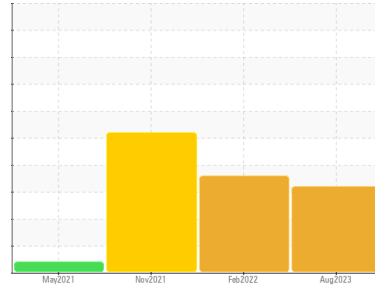
No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 460 range, advise investigate. Confirm oil type.

[view report](#)



OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area
[98364180]
 Machine Id
KR-GR-003127 (S/N MIX D - 11535134)
 Component
Pump
 Fluid
PETRO CANADA PURITY FG SYNTH EP GEAR FLUID 460 (44 GAL)

DIAGNOSIS

Recommendation

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. 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.

Wear

All component wear rates are normal.

Contamination

Appearance is milky. There is a light concentration of water present in the oil. There is a moderate amount of visible silt present in the sample.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0103747	PCA0065860	PCA0058575
Sample Date	Client Info	10 Aug 2023	28 Feb 2022	30 Nov 2021
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	SEVERE	SEVERE

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >90	35	75	64
Chromium	ppm ASTM D5185m >5	<1	1	<1
Nickel	ppm ASTM D5185m >5	<1	2	<1
Titanium	ppm ASTM D5185m >3	0	<1	<1
Silver	ppm ASTM D5185m >3	0	<1	0
Aluminum	ppm ASTM D5185m >7	2	9	7
Lead	ppm ASTM D5185m >12	0	0	<1
Copper	ppm ASTM D5185m >30	0	<1	<1
Tin	ppm ASTM D5185m >9	0	<1	1
Antimony	ppm ASTM D5185m	---	2	<1
Vanadium	ppm ASTM D5185m	0	<1	0
Cadmium	ppm ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	15	37	8
Barium	ppm ASTM D5185m	0	0	0
Molybdenum	ppm ASTM D5185m	<1	66	13
Manganese	ppm ASTM D5185m	<1	1	<1
Magnesium	ppm ASTM D5185m 0	<1	2	2
Calcium	ppm ASTM D5185m 0	237	349	442
Phosphorus	ppm ASTM D5185m 600	238	544	492
Zinc	ppm ASTM D5185m 0	39	101	78
Sulfur	ppm ASTM D5185m 500	691	5049	1717

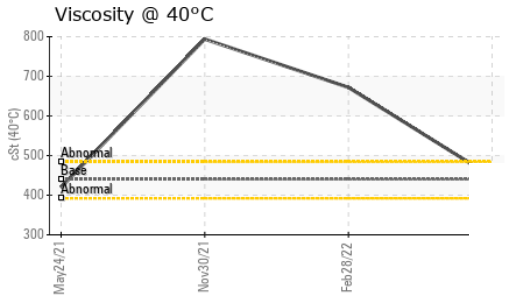
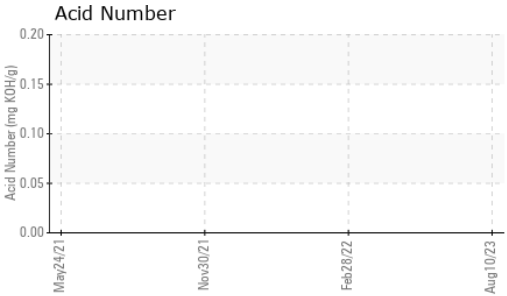
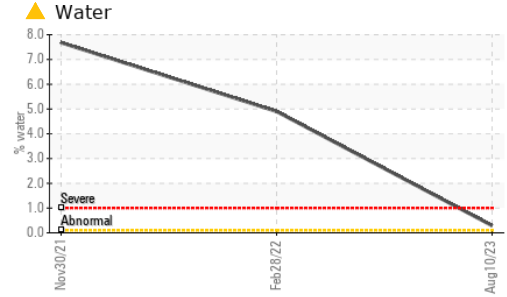
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >60	12	8	9
Sodium	ppm ASTM D5185m	<1	23	1
Potassium	ppm ASTM D5185m >20	<1	<1	<1
Water	% ASTM D6304	▲ 0.289	4.90	7.68
ppm Water	ppm ASTM D6304 >.1	▲ 2890	49000	76800

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	0.19	---	---

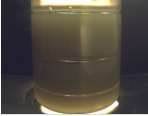

OIL ANALYSIS REPORT



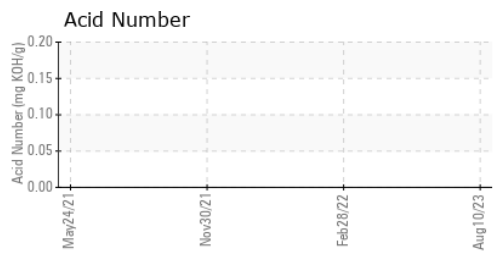
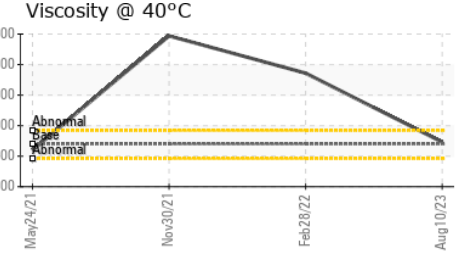
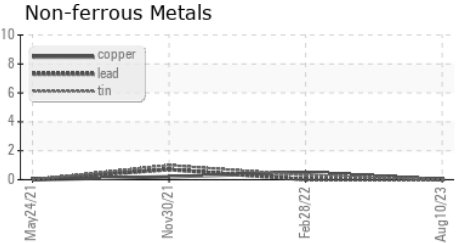
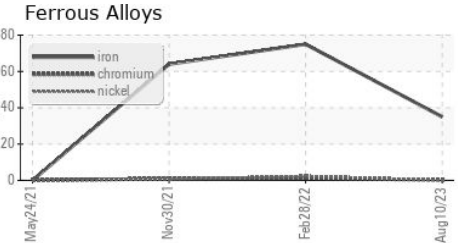
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	▲ MODER
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	▲ MILKY	▲ LAYRD
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 440	446	▲ 672	▲ 794

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color				no image	no image
Bottom				no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0103747 **Received** : 15 Aug 2023
Lab Number : 05924831 **Diagnosed** : 16 Aug 2023
Unique Number : 10604778 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

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

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)