



PROBLEM SUMMARY

Sample Rating Trend

WATER



Area

[97059]

Machine Id

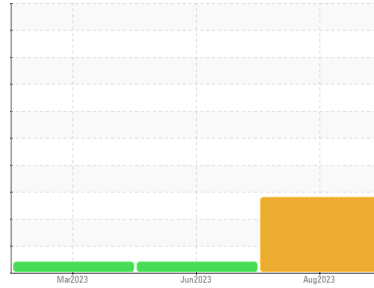
FREEZER #4 INTERNAL

Component

Gearbox

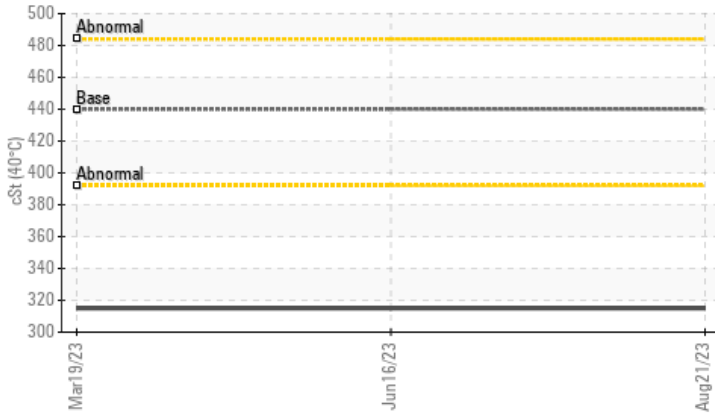
Fluid

PETRO CANADA PURITY FG SYNTH EP GEAR FLUID 460 (6 LTR)



COMPONENT CONDITION SUMMARY

▲ Viscosity @ 40°C



RECOMMENDATION

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. Please specify the component make and model with your next sample.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Appearance	scalar	Visual*	NORML	▲ WGOIL	NORML	NORML
Free Water	scalar	Visual*		▲ 1%	NEG	NEG
Visc @ 40°C	cSt	ASTM D7279(m)	440	▲ 315	▲ 315	▲ 315

Customer Id: GRA685CAM

Sample No.: WC0850428

Lab Number: 02578250

Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:

Kevin Marson +1 (289)291-4644 x4644

Kevin.Marson@wearcheck.com

To change component or sample information:

Gloria Gonzalez +1 (289)291-4643 x4643

gloria.gonzalez@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.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	Please specify the component make and model with your next sample.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

16 Jun 2023 Diag: Kevin Marson

VISCOSITY



Resample at the next service interval to monitor. Please specify the component make and model with your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 320 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



19 Mar 2023 Diag: Bill Quesnel

VISCOSITY



Resample at the next service interval to monitor. Please specify the component make and model with your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 320 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

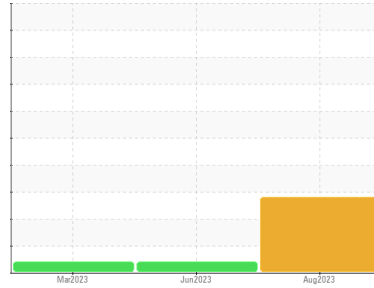
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area
[97059]

Machine Id
FREEZER #4 INTERNAL

Component
Gearbox

Fluid
PETRO CANADA PURITY FG SYNTH EP GEAR FLUID 460 (6 LTR)

DIAGNOSIS

Recommendation

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. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

Free water present.

Fluid Condition

Viscosity of sample indicates oil is within ISO 320 range, advise investigate. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0850428	WC0829244	WC0789502
Sample Date	Client Info		21 Aug 2023	16 Jun 2023	19 Mar 2023
Machine Age	days	Client Info	0	0	60
Oil Age	days	Client Info	0	0	0
Oil Changed	Client Info		N/A	Not Changd	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		26	12	7
Iron	ppm	ASTM D5185(m) >200	119	90	84
Chromium	ppm	ASTM D5185(m) >10	1	<1	<1
Nickel	ppm	ASTM D5185(m) >10	0	<1	0
Titanium	ppm	ASTM D5185(m)	<1	0	<1
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >25	4	3	3
Lead	ppm	ASTM D5185(m) >50	0	0	0
Copper	ppm	ASTM D5185(m) >200	<1	<1	<1
Tin	ppm	ASTM D5185(m) >10	0	0	0
Antimony	ppm	ASTM D5185(m) >5	<1	0	<1
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<1	1	<1
Barium	ppm	ASTM D5185(m)	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0
Manganese	ppm	ASTM D5185(m)	1	1	1
Magnesium	ppm	ASTM D5185(m) 0	2	1	1
Calcium	ppm	ASTM D5185(m) 0	5	4	2
Phosphorus	ppm	ASTM D5185(m) 600	481	485	495
Zinc	ppm	ASTM D5185(m) 0	54	48	43
Sulfur	ppm	ASTM D5185(m) 500	966	1302	894
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

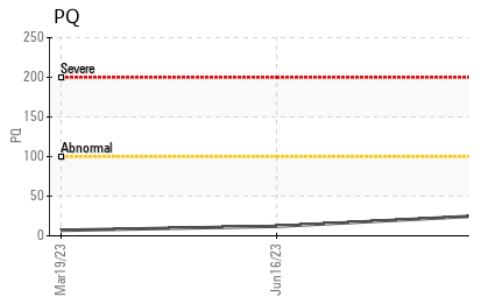
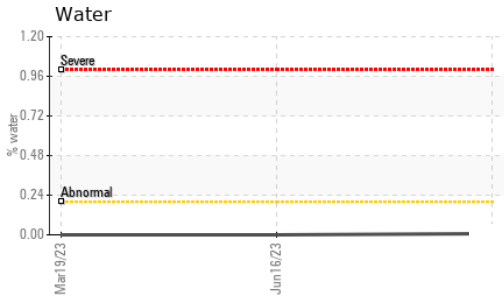
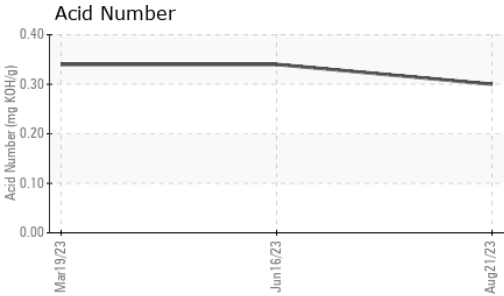
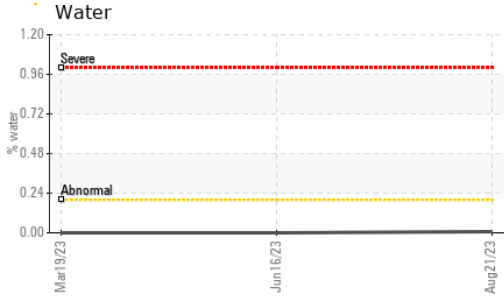
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	11	8	9
Sodium	ppm	ASTM D5185(m)	3	2	2
Potassium	ppm	ASTM D5185(m) >20	1	0	<1
Water	%	ASTM D6304* >0.2	0.007	---	---
ppm Water	ppm	ASTM D6304* >2000	77.6	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.30	0.34	0.34



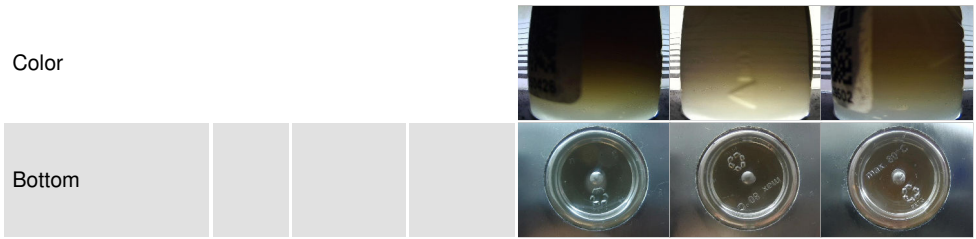
OIL ANALYSIS REPORT



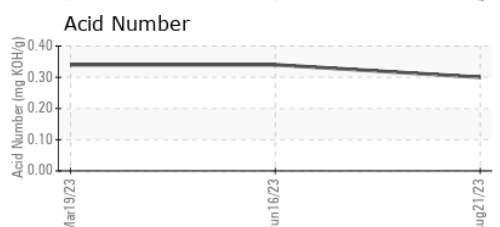
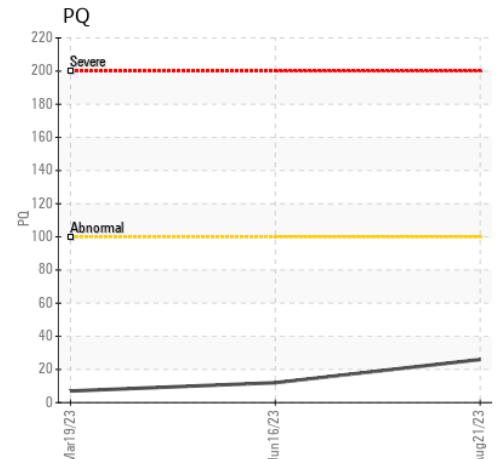
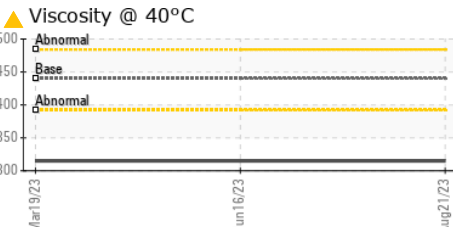
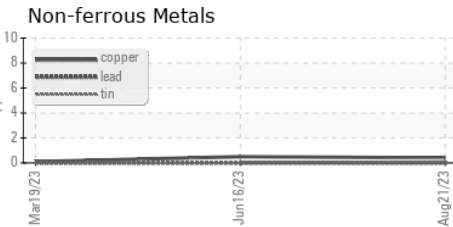
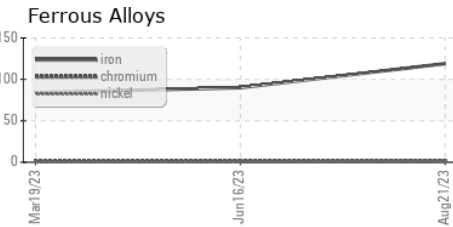
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	▲ WGOIL	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	.2%	NEG
Free Water	scalar	Visual*		▲ 1%	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	440	▲ 315	▲ 315

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



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0850428 **Received** : 24 Aug 2023
Lab Number : 02578250 **Diagnosed** : 29 Aug 2023
Unique Number : 5631310 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: KF)

GRAND RIVER FOODS
 190 VONDRAU DRIVE
 CAMBRIDGE, ON
 CA N3E 1B8
 Contact: Ryan Shea
 rshea@grandriverfoods.com
 T: (519)653-3577
 F:

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.