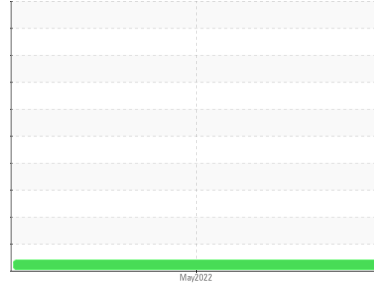


Machine Id
NO UNIT PC0057676
Component
Gearbox
Fluid
SHELL CASSIDA GL 680 (--- LTR)



DIAGNOSIS

Recommendation
We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. We suspect that the abnormal contaminant(s) is the result of incorrect sampling technique. DISCLAIMER: Interpretation of laboratory tests is based on sample, as received from client. Source of sample and sampling technique cannot be verified.

Wear
All component wear rates are normal.

Contamination
Moderate concentration of visible dirt/debris present in the oil. The water content is negligible.

Fluid Condition
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	PC0057676	---	---
Sample Date	Client Info	04 May 2022	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		ABNORMAL	---	---

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	11	---	---
Iron	ppm ASTM D5185(m) >200	36	---	---
Chromium	ppm ASTM D5185(m) >15	<1	---	---
Nickel	ppm ASTM D5185(m) >15	<1	---	---
Titanium	ppm ASTM D5185(m)	0	---	---
Silver	ppm ASTM D5185(m)	0	---	---
Aluminum	ppm ASTM D5185(m) >25	<1	---	---
Lead	ppm ASTM D5185(m) >100	<1	---	---
Copper	ppm ASTM D5185(m) >200	<1	---	---
Tin	ppm ASTM D5185(m) >25	0	---	---
Antimony	ppm ASTM D5185(m)	0	---	---
Vanadium	ppm ASTM D5185(m)	0	---	---
Beryllium	ppm ASTM D5185(m)	0	---	---
Cadmium	ppm ASTM D5185(m)	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m)	<1	---	---
Barium	ppm ASTM D5185(m)	0	---	---
Molybdenum	ppm ASTM D5185(m)	<1	---	---
Manganese	ppm ASTM D5185(m)	<1	---	---
Magnesium	ppm ASTM D5185(m)	<1	---	---
Calcium	ppm ASTM D5185(m)	162	---	---
Phosphorus	ppm ASTM D5185(m)	481	---	---
Zinc	ppm ASTM D5185(m)	10	---	---
Sulfur	ppm ASTM D5185(m)	576	---	---
Lithium	ppm ASTM D5185(m)	<1	---	---

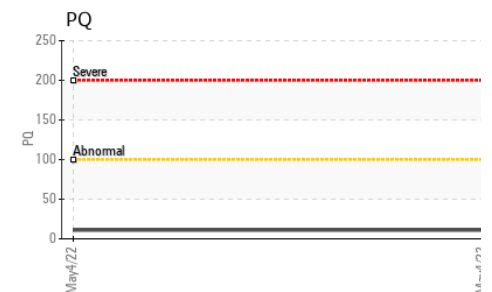
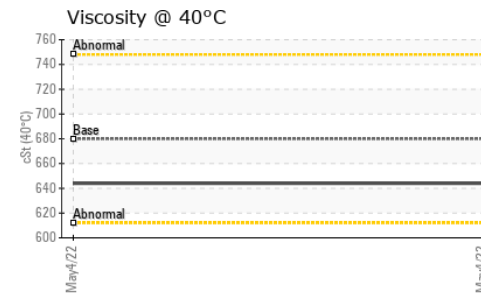
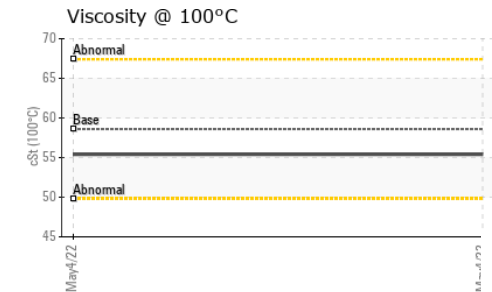
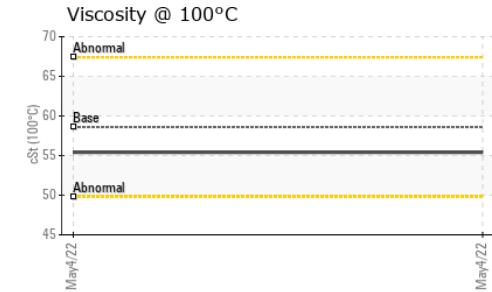
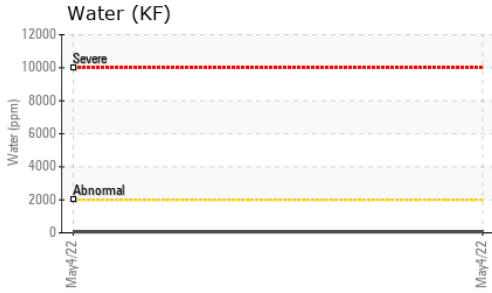
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >50	1	---	---
Sodium	ppm ASTM D5185(m)	<1	---	---
Potassium	ppm ASTM D5185(m) >20	<1	---	---
Water	% ASTM D6304* >0.2	0.006	---	---
ppm Water	ppm ASTM D6304* >2000	61.2	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	0.27	---	---

OIL ANALYSIS REPORT

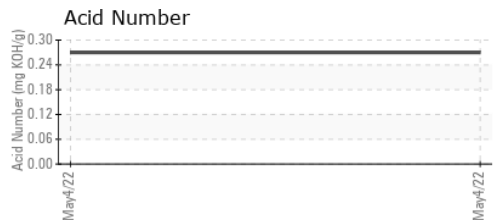
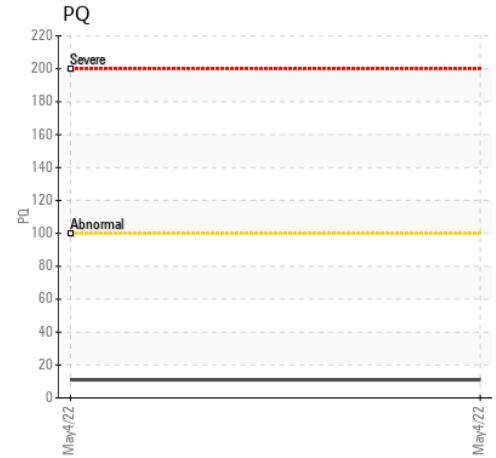
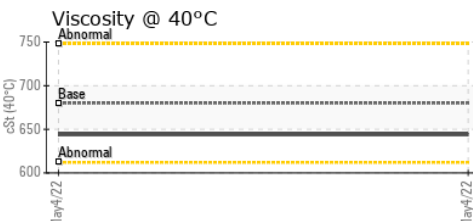
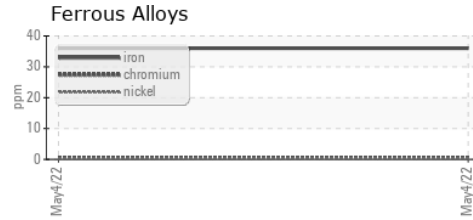


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	▲ MODER	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	680	644	---
Visc @ 100°C	cSt	ASTM D7279(m)	58.6	55.4	---
Viscosity Index (VI)	Scale	ASTM D2270*	152	148	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0057676 **Received** : 05 May 2022
Lab Number : **02487229** **Tested** : 09 May 2022
Unique Number : 5396167 **Diagnosed** : 09 May 2022 - Bill Quesnel
Test Package : IND 2 (Additional Tests: Bottom, KF, KV100, VI)

MCCAIN FOODS (CANADA)
 795 ROUTE 108, PO BOX # 11400
 GRAND FALLS, NB
 CA E3Y 4A5
 Contact: Pat Roach

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.

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