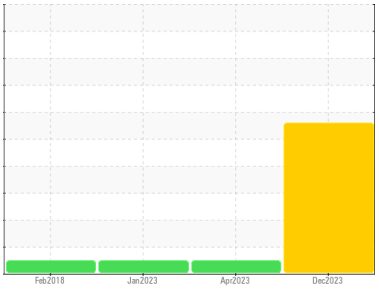
PROBLEM SUMMARY

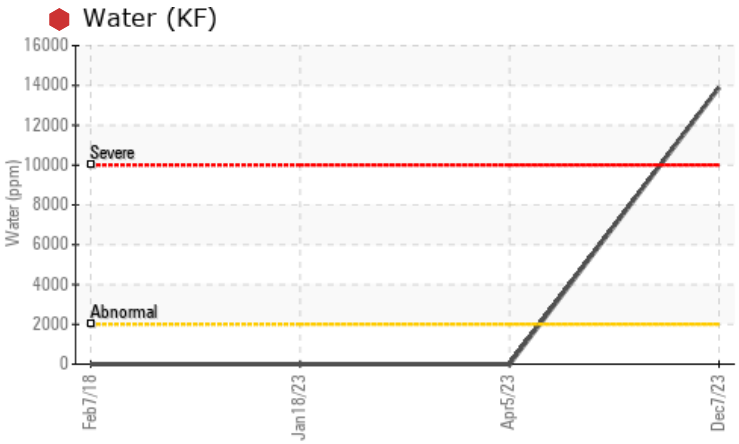
Area
[22052288]
Machine Id
129-172G DISCHARGE SCREW GEARBOX
Component
Gearbox
Fluid
ESSO SPARTAN EP 150 (16 LTR)

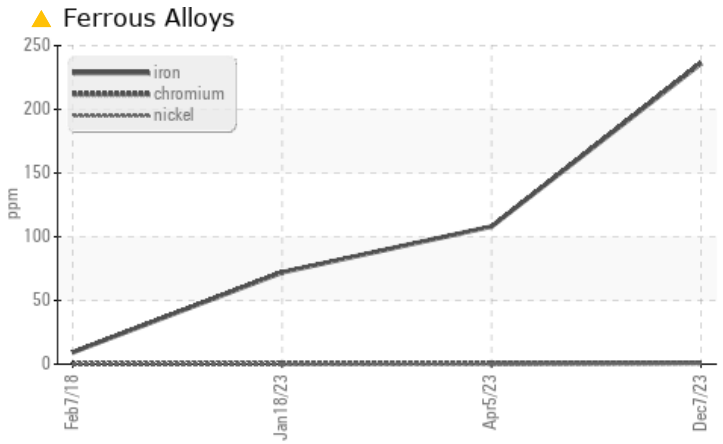
Sample Rating Trend



WATER

COMPONENT CONDITION SUMMARY





RECOMMENDATION

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. We recommend that you drain the oil from the component if this has not already been done. We advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>200	▲ **236**	108	72
Water	%	ASTM D6304*	>0.2	⬢ **1.388**	---	---
ppm Water	ppm	ASTM D6304*	>2000	⬢ **13890**	---	---
Emulsified Water	scalar	Visual*	>0.2	▲ **.5%**	NEG	NEG
Free Water	scalar	Visual*		▲ **5%**	NEG	NEG

Customer Id: FLASTS
Sample No.: WC0870409
Lab Number: 02603335
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
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
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.
Check Water Access	---	---	?	We advise that you check for the source of water entry.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.

HISTORICAL DIAGNOSIS

05 Apr 2023 Diag: Kevin Marson

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

18 Jan 2023 Diag: Bill Quesnel

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

07 Feb 2018 Diag: Wes Davis

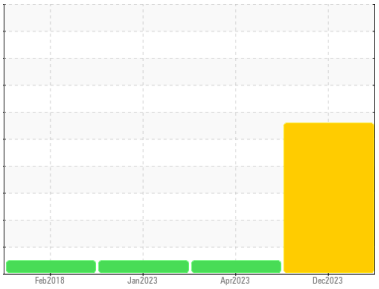
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. 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
[22052288]
Machine Id
129-172G DISCHARGE SCREW GEARBOX
Component
Gearbox
Fluid
ESSO SPARTAN EP 150 (16 LTR)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. We recommend that you drain the oil from the component if this has not already been done. We advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition.

Wear

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

Contamination

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

Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0870409**	WC0799425	WC0760271
Sample Date		Client Info		**07 Dec 2023**	05 Apr 2023	18 Jan 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				**SEVERE**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**87**	35	17
Iron	ppm	ASTM D5185(m)	>200	▲ **236**	108	72
Chromium	ppm	ASTM D5185(m)	>15	**1**	<1	<1
Nickel	ppm	ASTM D5185(m)	>15	**<1**	<1	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**<1**	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	**<1**	<1	0
Lead	ppm	ASTM D5185(m)	>100	**<1**	0	0
Copper	ppm	ASTM D5185(m)	>200	**<1**	<1	<1
Tin	ppm	ASTM D5185(m)	>25	**0**	0	<1
Antimony	ppm	ASTM D5185(m)	>5	**0**	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

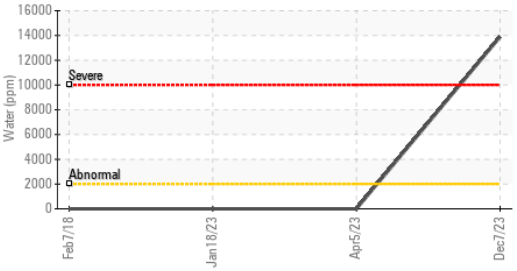
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	4.0	**6**	10	11
Barium	ppm	ASTM D5185(m)	0	**<1**	0	0
Molybdenum	ppm	ASTM D5185(m)	0	**0**	0	0
Manganese	ppm	ASTM D5185(m)		**1**	<1	<1
Magnesium	ppm	ASTM D5185(m)	0	**<1**	<1	<1
Calcium	ppm	ASTM D5185(m)	0.8	**2**	2	2
Phosphorus	ppm	ASTM D5185(m)	250	**284**	353	358
Zinc	ppm	ASTM D5185(m)	1.0	**5**	3	4
Sulfur	ppm	ASTM D5185(m)	5133	**11349**	14502	15082
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	**3**	2	2
Sodium	ppm	ASTM D5185(m)		**1**	0	<1
Potassium	ppm	ASTM D5185(m)	>20	**1**	<1	<1
Water	%	ASTM D6304*	>0.2	● **1.388**	---	---
ppm Water	ppm	ASTM D6304*	>2000	● **13890**	---	---

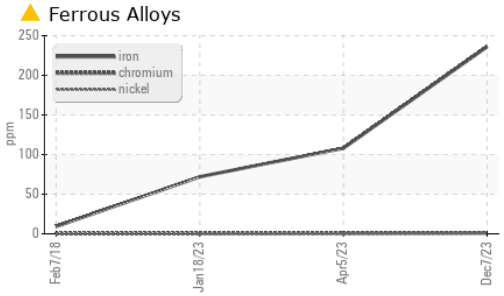
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.75	**0.51**	0.71	0.64

OIL ANALYSIS REPORT

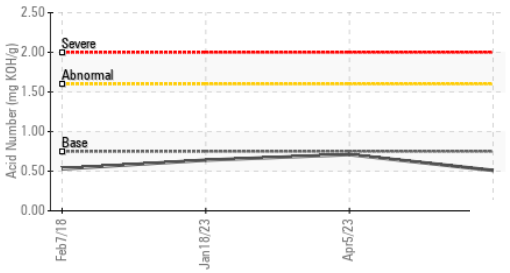
Water (KF)



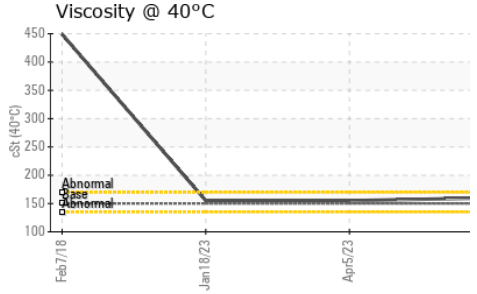
Ferrous Alloys



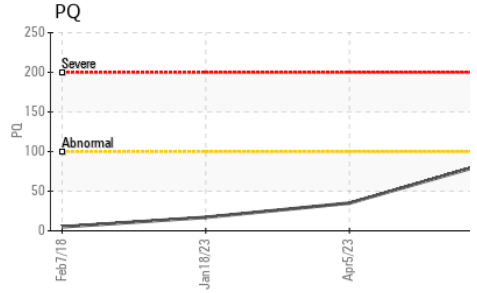
Acid Number



Viscosity @ 40°C



PQ



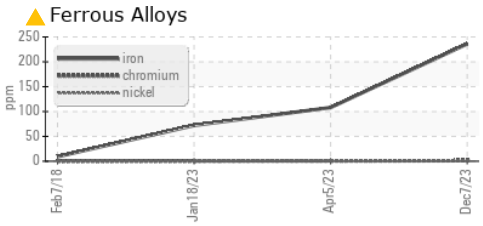
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	VLITE	VLITE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	▲ **.5%**	NEG	NEG
Free Water	scalar	Visual*		▲ **5%**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	150	**160**	155	155

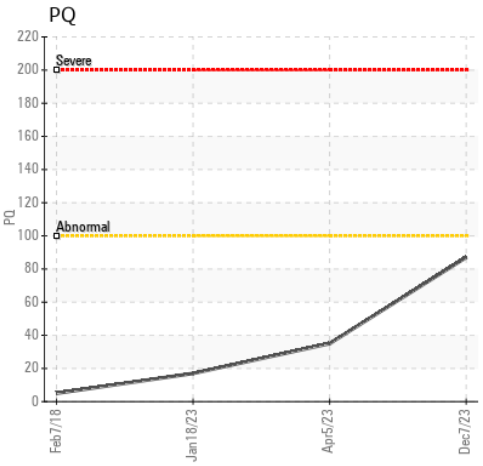
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

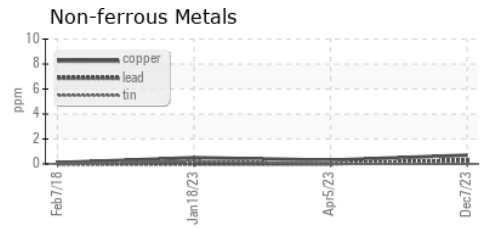
Ferrous Alloys



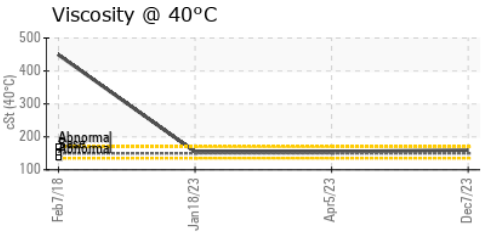
PQ



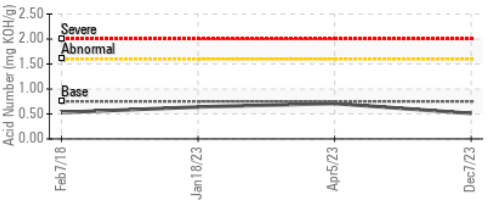
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0870409 **Recieved** : 14 Dec 2023
Lab Number : 02603335 **Diagnosed** : 18 Dec 2023
Unique Number : 5696420 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: KF)

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.

ARAUCO - St. Stephen
151 Church Street
St. Stephen, NB
CA E3L 3A6
Contact: Jim Sears
Jim.Sears@arauco.com
T: (506)465-2858
F: (506)465-2831