PROBLEM SUMMARY

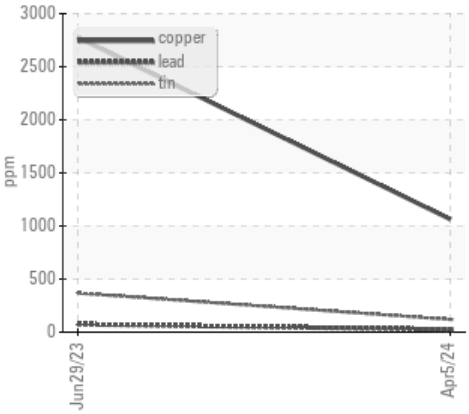
Sample Rating Trend

WEAR

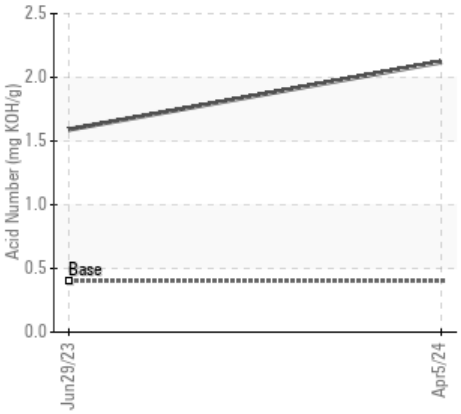
Machine Id
1501-PR11-FC03 (S/N 3311)
Component
Reduction Gear
Fluid
PETRO CANADA ENDURATEX EP 220 (--- GAL)

COMPONENT CONDITION SUMMARY

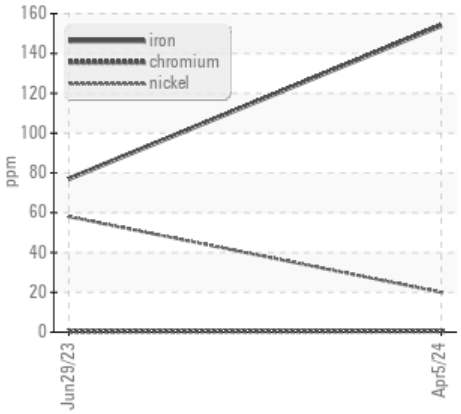
▲ Non-ferrous Metals



▲ Acid Number



▲ Ferrous Alloys



RECOMMENDATION

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. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	SEVERE	---
Nickel	ppm	ASTM D5185(m)	>15	▲ **20**	▲ 58	---
Copper	ppm	ASTM D5185(m)	>200	▲ **1064**	▲ 2776	---
Tin	ppm	ASTM D5185(m)	>25	▲ **119**	▲ 368	---
Acid Number (AN)	mg KOH/g	ASTM D974*	0.40	▲ **2.12**	▲ 1.59	---

Customer Id: APO150TOR
Sample No.: CB0030285
Lab Number: 02629347
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.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

HISTORICAL DIAGNOSIS

WEAR

29 Jun 2023 Diag: Kevin Marson

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. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please note that this is a corrected copy for data entry updates.Copper, nickel and tin ppm levels are severe. Bearing and/or bushing wear is indicated. There is no indication of any contamination in the oil. The AN level is above the recommended limit. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report

OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

Machine Id
1501-PR11-FC03 (S/N 3311)
Component
Reduction Gear
Fluid
PETRO CANADA ENDURATEX EP 220 (--- GAL)

DIAGNOSIS

▲ Recommendation
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. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

▲ Wear
Copper and tin ppm levels are severe. Nickel ppm levels are abnormal. Bearing and/or bushing wear is indicated.

Contamination
There is no indication of any contamination in the oil.

▲ Fluid Condition
The AN level is above the recommended limit. 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		**CB0030285**	CB0030281	---
Sample Date		Client Info		**05 Apr 2024**	29 Jun 2023	---
Machine Age	mths	Client Info		**0**	0	---
Oil Age	mths	Client Info		**10**	48	---
Oil Changed		Client Info		**Not Changd**	N/A	---
Sample Status				**SEVERE**	SEVERE	---

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	**NEG**	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**7**	0	---
Iron	ppm	ASTM D5185(m)	>200	**154**	77	---
Chromium	ppm	ASTM D5185(m)	>15	**<1**	<1	---
Nickel	ppm	ASTM D5185(m)	>15	▲ **20**	▲ 58	---
Titanium	ppm	ASTM D5185(m)		**0**	<1	---
Silver	ppm	ASTM D5185(m)		**0**	<1	---
Aluminum	ppm	ASTM D5185(m)	>25	**0**	<1	---
Lead	ppm	ASTM D5185(m)	>100	**24**	74	---
Copper	ppm	ASTM D5185(m)	>200	▲ **1064**	▲ 2776	---
Tin	ppm	ASTM D5185(m)	>25	▲ **119**	▲ 368	---
Antimony	ppm	ASTM D5185(m)	>5	**0**	0	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
Beryllium	ppm	ASTM D5185(m)		**0**	0	---
Cadmium	ppm	ASTM D5185(m)		**0**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	60	**48**	45	---
Barium	ppm	ASTM D5185(m)	0	**<1**	3	---
Molybdenum	ppm	ASTM D5185(m)	0	**0**	0	---
Manganese	ppm	ASTM D5185(m)	0	**2**	1	---
Magnesium	ppm	ASTM D5185(m)	0	**2**	2	---
Calcium	ppm	ASTM D5185(m)	0	**1**	3	---
Phosphorus	ppm	ASTM D5185(m)	270	**258**	265	---
Zinc	ppm	ASTM D5185(m)	0	**9**	5	---
Sulfur	ppm	ASTM D5185(m)	11200	**5444**	5412	---
Lithium	ppm	ASTM D5185(m)		**<1**	<1	---

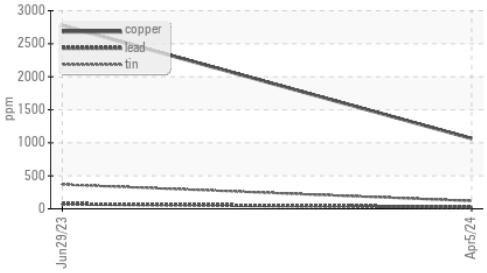
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	**13**	3	---
Sodium	ppm	ASTM D5185(m)		**2**	5	---
Potassium	ppm	ASTM D5185(m)	>20	**1**	0	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.40	▲ **2.12**	▲ 1.59	---

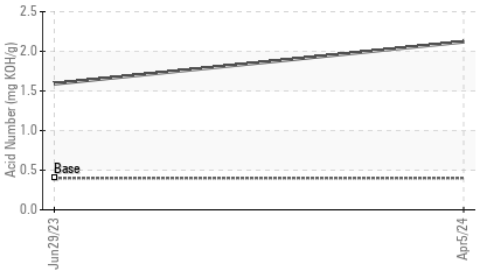
OIL ANALYSIS REPORT

Safety Reliability Efficiency Sustainability for Industry.

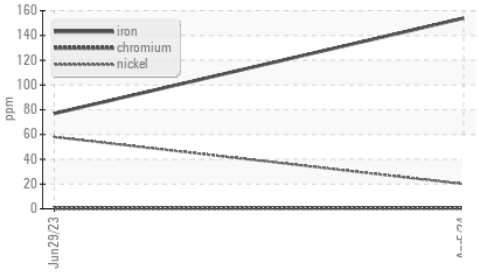
Non-ferrous Metals



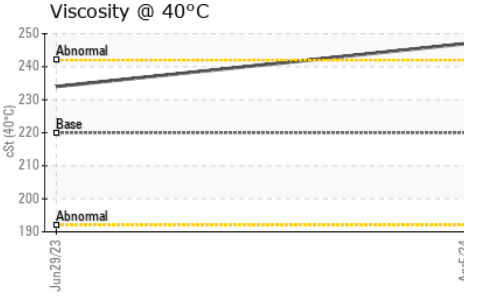
Acid Number



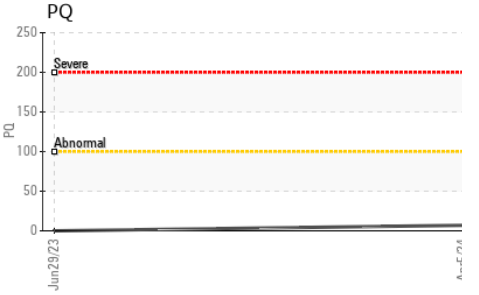
Ferrous Alloys



Viscosity @ 40°C

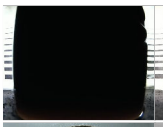


PQ



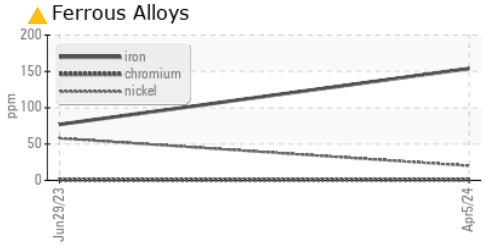
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	---
Silt	scalar	Visual*	NONE	**NONE**	NONE	---
Debris	scalar	Visual*	NONE	**VLITE**	NONE	---
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220	**247**	234	---

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

GRAPHS

Ferrous Alloys



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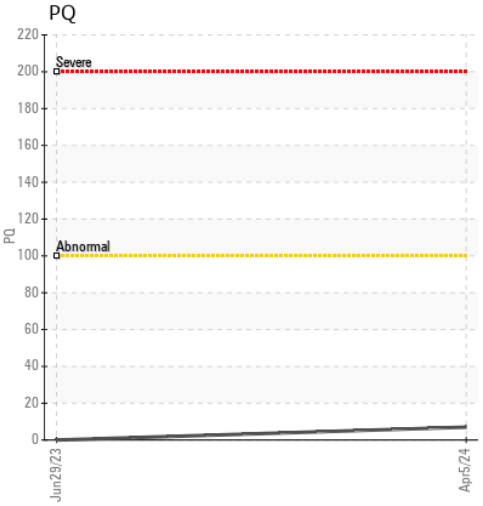
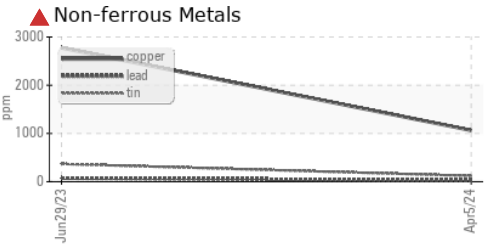
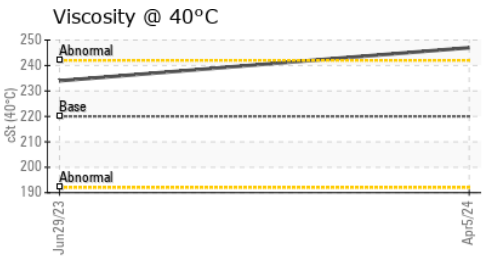


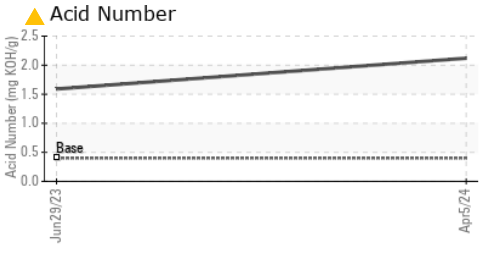
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CB0030285 **Received** : 16 Apr 2024
Lab Number : 02629347 **Tested** : 17 Apr 2024
Unique Number : 5762479 **Diagnosed** : 17 Apr 2024 - Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

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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