

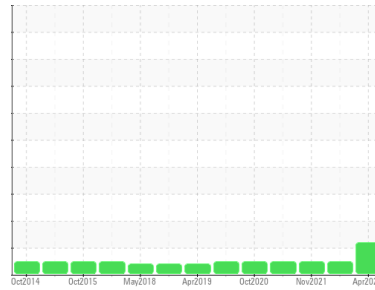
# PROBLEM SUMMARY

## Sample Rating Trend

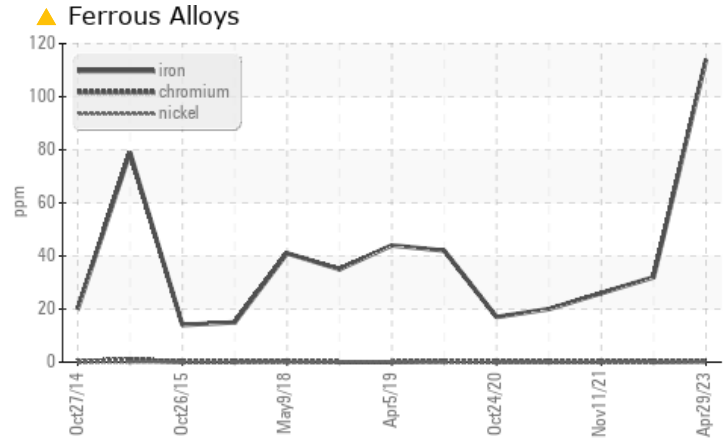
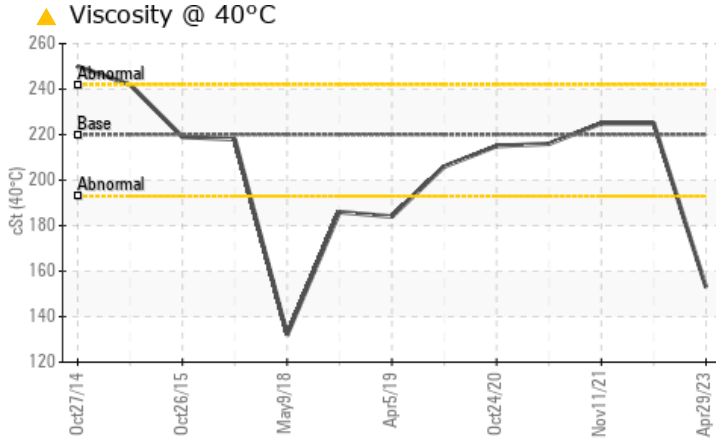
**WEAR**



Area  
**[6092452]**  
Machine Id  
**5001-PR32-GRAN20 FIXED ROLLER**  
Component  
**Gearbox**  
Fluid  
**PETRO CANADA ENDURATEX EP 220 (--- GAL)**



## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

Resample at the next service interval to monitor.  
NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

## PROBLEMATIC TEST RESULTS

Sample Status		ABNORMAL	NORMAL	NORMAL
Iron	ppm ASTM D5185(m) >200	▲ 114	32	26
Visc @ 40°C	cSt ASTM D7279(m) 220	▲ 153	225	225

Customer Id: APOETO  
Sample No.: CB0031270  
Lab Number: 02556704  
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](mailto:Kevin.Marson@wearcheck.com)

To change component or sample information:  
Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Information Required	---	---	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

## HISTORICAL DIAGNOSIS

### 01 May 2022 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. 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



### 11 Nov 2021 Diag: Wes Davis

NORMAL



Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. 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



### 28 Apr 2021 Diag: Wes Davis

NORMAL



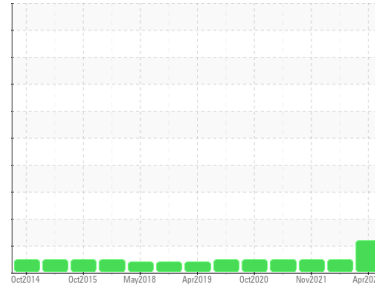
Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. 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



**WEAR**



Area  
**[6092452]**  
 Machine Id  
**5001-PR32-GRAN20 FIXED ROLLER**  
 Component  
**Gearbox**  
 Fluid  
**PETRO CANADA ENDURATEX EP 220 (--- GAL)**

**DIAGNOSIS**

▲ **Recommendation**

Resample at the next service interval to monitor.  
 NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

▲ **Wear**

Iron ppm levels are noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. All other component wear rates are normal.

**Contamination**

There is no indication of any contamination in the oil.

▲ **Fluid Condition**

Viscosity of sample indicates oil is within ISO 150 range, advise investigate. 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		<b>CB0031270</b>	CB0030681	CB0030452
Sample Date	Client Info		<b>29 Apr 2023</b>	01 May 2022	11 Nov 2021
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed		Client Info	<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL

**WEAR METALS**    method    limit/base    current    history1    history2

PQ		ASTM D8184*		<b>94</b>	13	1
Iron	ppm	ASTM D5185(m)	>200	<b>▲ 114</b>	32	26
Chromium	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	1	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185(m)	>100	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>200	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>25	<b>0</b>	<1	0
Antimony	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**ADDITIVES**    method    limit/base    current    history1    history2

Boron	ppm	ASTM D5185(m)	60	<b>15</b>	51	53
Barium	ppm	ASTM D5185(m)	0	<b>9</b>	3	3
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	0	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	0	<b>7</b>	5	4
Phosphorus	ppm	ASTM D5185(m)	270	<b>208</b>	275	273
Zinc	ppm	ASTM D5185(m)	0	<b>12</b>	8	7
Sulfur	ppm	ASTM D5185(m)	11200	<b>5688</b>	7666	7844
Lithium	ppm	ASTM D5185(m)		<b>9</b>	2	2

**CONTAMINANTS**    method    limit/base    current    history1    history2

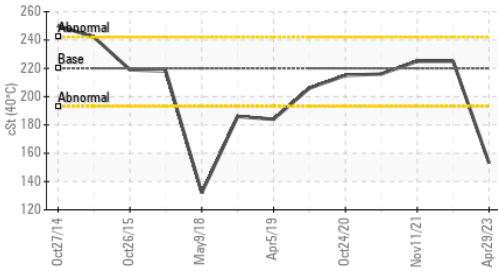
Silicon	ppm	ASTM D5185(m)	>50	<b>4</b>	3	2
Sodium	ppm	ASTM D5185(m)		<b>2</b>	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>6</b>	2	2

**FLUID DEGRADATION**    method    limit/base    current    history1    history2

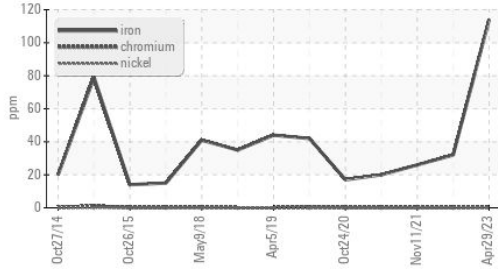
Acid Number (AN)	mg KOH/g	ASTM D974*	0.40	<b>0.40</b>	0.45	0.47
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# OIL ANALYSIS REPORT

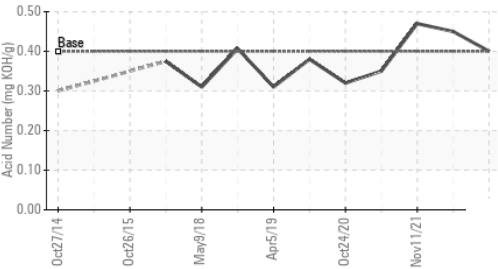
## ▲ Viscosity @ 40°C



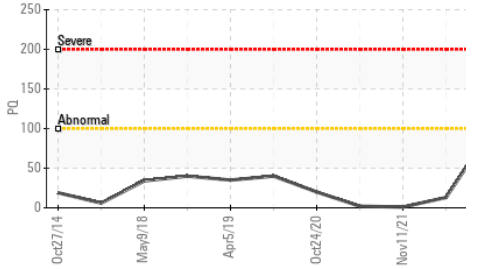
## ▲ Ferrous Alloys



## Acid Number



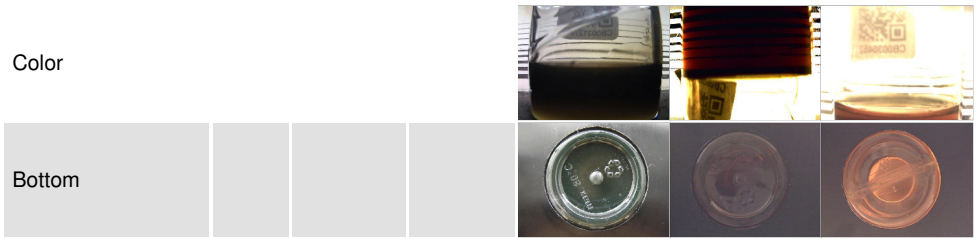
## PQ



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	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	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

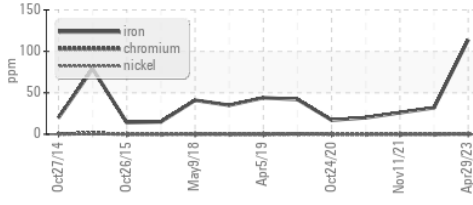
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220 ▲ 153	225	225

SAMPLE IMAGES	method	limit/base	current	history1	history2
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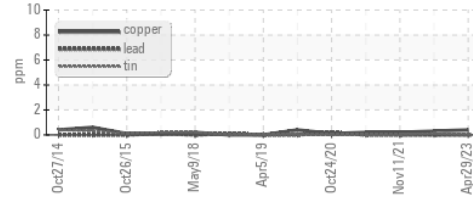


## GRAPHS

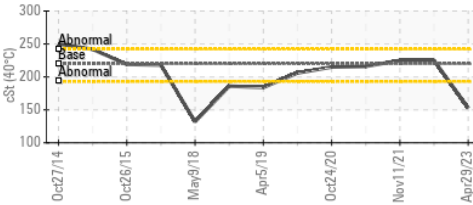
### ▲ Ferrous Alloys



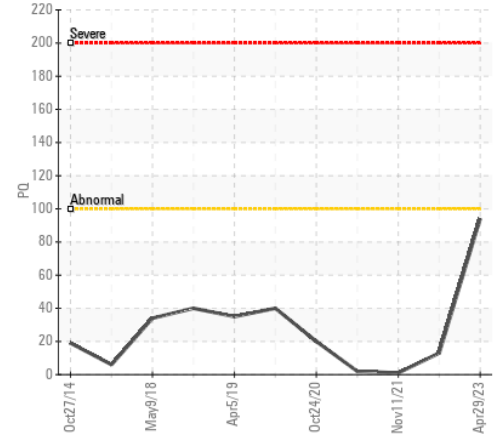
### Non-ferrous Metals



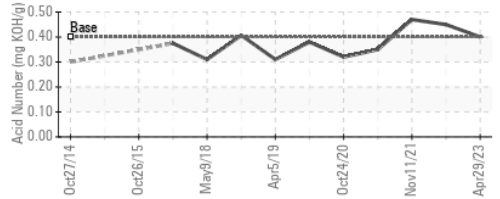
### ▲ Viscosity @ 40°C



### PQ



### Acid Number



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : CB0031270 **Received** : 10 May 2023  
**Lab Number** : 02556704 **Diagnosed** : 12 May 2023  
**Unique Number** : 5577744 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

**Synovos/Apotex**  
 50 Steinway Blvd.  
 Etobicoke, ON  
 CA M9W 6Y3  
 Contact: Calvin Shum  
 cshum@apotex.com

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.

T:  
F: