

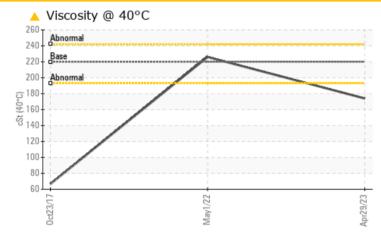
PROBLEM SUMMARY

Area [6092452] Machine Id 5001-PR32-GRAN20 FLOATING 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
Visc @ 40°C	cSt	ASTM D7279(m)	220	🔺 174	226	66.7

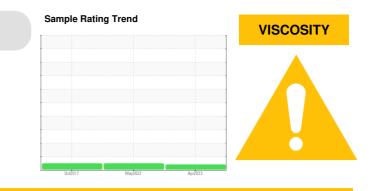
Customer Id: APOETO Sample No.: CB0031269 Lab Number: 02556703 Test Package: IND 2



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 <u>gloria.gonzalez@wearcheck.com</u>



RECOMMENDED A	CTIONS			
Action	Status	Date	Done By	Description
Information Required			?	NOTE: Please provide information and micron rating with next sample.

HISTORICAL DIAGNOSIS



01 May 2022 Diag: Wes Davis

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.

23 Oct 2017 Diag: Kevin Marson

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.





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



OIL ANALYSIS REPORT

Area [6092452] Machine Id 5001-PR32-GRAN20 FLOATING Component

Gearbox

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

All 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.

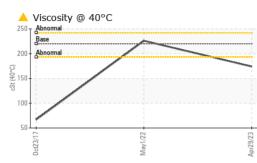
JAL)		00	12017	May2022 Apr20	23	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		CB0031269	CB0030683	CB0027081
Sample Date		Client Info		29 Apr 2023	01 May 2022	23 Oct 2017
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		45	0	14
Iron	ppm	ASTM D5185(m)	>200	91	21	22
Chromium	ppm	ASTM D5185(m)	>15	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>15	<1	0	0
Titanium	ppm	ASTM D5185(m)		<1	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<1	<1	0
Lead	ppm	ASTM D5185(m)	>100	0	0	0
Copper	ppm	ASTM D5185(m)	>200	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>25	<1	<1	<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)	60	19	48	2
Barium	ppm	ASTM D5185(m)	0	43	4	9
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)	0	1	<1	0
Magnesium	ppm	ASTM D5185(m)	0	<1	<1	<1
Calcium	ppm	ASTM D5185(m)	0	13	5	<1
Phosphorus	ppm	ASTM D5185(m)	270	212	270	70
Zinc	ppm	ASTM D5185(m)	0	16	8	4
Sulfur	ppm	ASTM D5185(m)	11200	5844	6864	5143
Lithium	ppm	ASTM D5185(m)		11	2	<1
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	4	2	1
Sodium	ppm	ASTM D5185(m)		2	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	2	<1
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.40	0.45	0.54	0.275

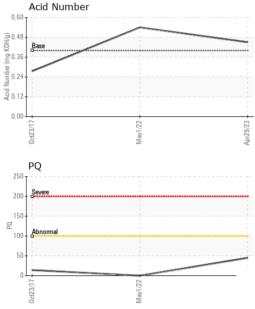
Sample Rating Trend

VISCOSITY



OIL ANALYSIS REPORT

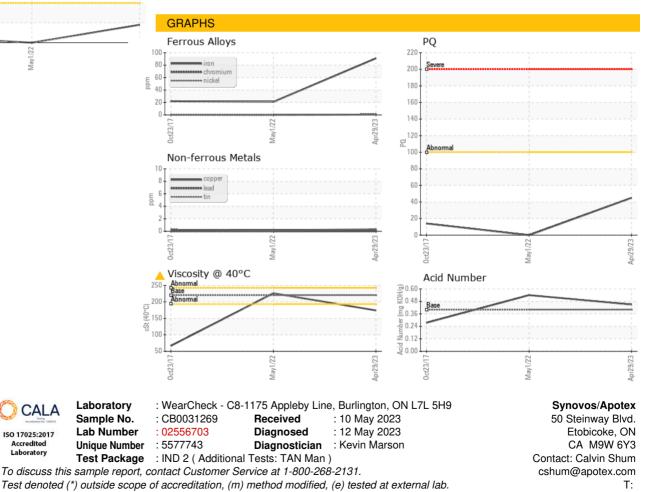




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	LIGHT
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220	1 74	226	66.7
SAMPLE IMAGES	5	method	limit/base	current	history1	history2
Color						
Bottom						



Validity of results and interpretation are based on the sample and information as supplied.



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