

## **OIL ANALYSIS REPORT**

Sample Rating Trend



PITCH ACTUATOR CYLINDER

Component Gearbox Fluid

PETRO CANADA ENDURATEX EP 220 (--- GAL)

### DIAGNOSIS

#### Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

#### Wear

All component wear rates are normal.

#### Contamination

Moderate concentration of visible dirt/debris present in the oil.

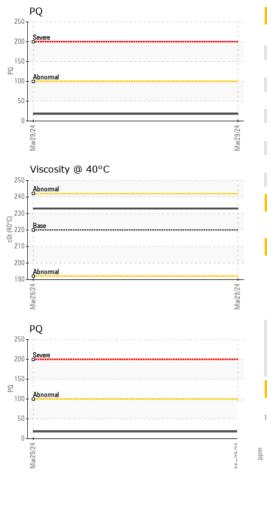
#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PE0001866		
Sample Date		Client Info		29 Mar 2024		
Machine Age	mths	Client Info		2		
Oil Age	mths	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		18		
Iron	ppm	ASTM D5185m	>200	10		
Chromium	ppm	ASTM D5185m	>15	<1		
Nickel	ppm	ASTM D5185m	>15	0		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	18		
Lead	ppm	ASTM D5185m	>100	12		
Copper	ppm	ASTM D5185m	>200	125		
Tin	ppm	ASTM D5185m	>25	10		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	60	65		
Barium	ppm	ASTM D5185m	0	0		
Molybdenum	ppm	ASTM D5185m	0	0		
Manganese	ppm	ASTM D5185m	0	0		
Magnesium	ppm	ASTM D5185m	0	1		
Calcium	ppm	ASTM D5185m	0	2		
Phosphorus	ppm	ASTM D5185m	270	223		
Zinc	ppm	ASTM D5185m	0	5		
Sulfur	ppm	ASTM D5185m	11200	7170		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	4		
Sodium	ppm	ASTM D5185m		3		
Potassium	ppm	ASTM D5185m	>20	0		
Water	%	ASTM D6304	>0.2	NEG		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.40	0.42		



# **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	A MODER		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
Mar29/24	Appearance	scalar	*Visual	NORML	HAZY		
Ma	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
	Free Water	scalar	*Visual		NEG		
	FLUID PROPERT	IES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	220	233		
	SAMPLE IMAGES	6	method	limit/base	current	history1	history2
Mar29/24	Color					no image	no image
	Bottom					no image	no image
	GRAPHS						
	Ferrous Alloys						
м.—м	Non-ferrous Metals						
	Mar29/24			Mar29/24			
	Viscosity @ 40°C				Acid Number		
	250 240 Abnormal			(B)			
	ç 230			.0. (B/HO) 0. 0.	40 + 0		
	€ 220 Base <sup>3</sup> 210 -			<u>د</u> 0. م	20		
	200			.0 Acid Number (	10-		
	190 Abnormal						
	Mar29/24			Mar29/24	Mar29/24		Mar29/24
Laboratory Sample No. Lab Number Unique Number Test Package To discuss this sample report,	: WearCheck USA - 50 : PE0001866 : 06155775 : 10991198 : PLANT ( Additional Te	Rece Teste Diagr ests: FT-	ived : 22 ed : 24 nosed : 24 IR, ICP, KF,	r, NC 27513 2 Apr 2024 4 Apr 2024 Apr 2024 - Jona KV40, PQ, F	FRERES	N) Contact:	OOD PRODUCTS 141 14TH ST LYONS, OF US 97358 GERRITT LAW rereswood.com
- Denotes test methods that Statements of conformity to sp	are outside of the ISO 1	7025 sco	ope of accred	litation.	n rule (JCGM 106.	-	T: F:

Contact/Location: GERRITT LAW - FRELYO