

OIL ANALYSIS REPORT

Sample Rating Trend





Component

Gearbox Fluic

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.

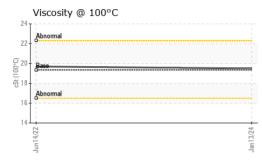
Fluid Condition

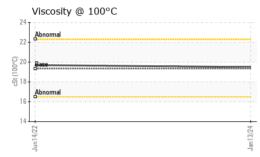
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

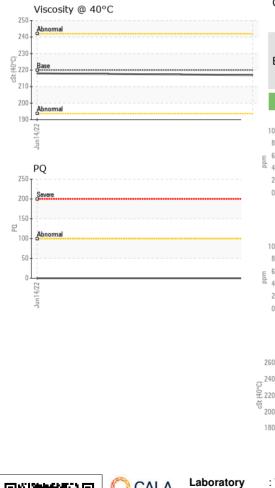
GAL)			Jun2022	Jan2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC0077088	PC0058301	
Sample Date		Client Info		13 Jan 2024	14 Jun 2022	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	0	
Iron	ppm	ASTM D5185(m)	>200	5	4	
Chromium	ppm	ASTM D5185(m)	>15	0	0	
Nickel	ppm	ASTM D5185(m)	>15	<1	<1	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)		0	0	
Aluminum	ppm	ASTM D5185(m)	>25	<1	0	
Lead	ppm	ASTM D5185(m)	>100	<1	<1	
Copper	ppm	ASTM D5185(m)	>200	<1	2	
Tin	ppm	ASTM D5185(m)	>25	0	0	
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	58	62	
Barium	ppm	ASTM D5185(m)	0	0	0	
Molybdenum	ppm	ASTM D5185(m)	0	0	0	
Manganese	ppm	ASTM D5185(m)	0	0	0	
Magnesium	ppm	ASTM D5185(m)	0	0	<1	
Calcium	ppm	ASTM D5185(m)	0	2	4	
Phosphorus	ppm	ASTM D5185(m)	270	249	257	
Zinc	ppm	ASTM D5185(m)	0	2	4	
Sulfur	ppm	ASTM D5185(m)	11200	5833	5656	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	11	18	
Sodium	ppm	ASTM D5185(m)		0	0	
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.40	0.46	0.35	



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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	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 PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220	217	218	
Visc @ 100°C	cSt	ASTM D7279(m)	19.35	19.5	19.7	
Viscosity Index (VI)	Scale	ASTM D2270*	99	102	103	
SAMPLE IMAG	iES	method	limit/base	current	history1	history2
Color						no image
Bottom						no image
GRAPHS	•					
Ferrous Alloys				PQ		
8 iron				20 Severe		
6 - chromium						_
4				80 -		
2				60 -		
Jun14/22.			3/2	40 -		
Jun1			· L	20 - Abnormal		
Non-ferrous Metals	s					-
copper				BO -		
6 - tin				60 -		
4				40		
2				20 -		
4/22			3/24	22		24 +
Junl			Jan 13/2 ⁴	Jun 14/22		Jan 13/24
Viscosity @ 40°C			_	Acid Number		2
Abnormal			B/HON	40 Base		
Base			Ĕ 0.:	30 -		
00 - Abnormal			1.0 m	20		
			1.0 KOH(g) 4 5.0 Mumber (mg KOH(g) 1.0 KOH(g) 1.0 KOH(g)	00		
n14/22			Jan 13/24	Jun 14/22 -		Jan13/24 -
٦r			Ja	٦L		L L
: 02610984 [: 5720079 [: IND 2 (Additional Te	Recieved Diagnos Diagnost Diagnost	d : 24 . ed : 25 . ician : Wes 100, TAN Ma	Jan 2024 Jan 2024 s Davis n, VI)	L7L 5H9	Contact: Adebul	
ntact Customer Servi				rpallab		drydenfibre.ca

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.

CALA

ISO 17025:2017 Accredited Laboratory

Sample No. Lab Number

Unique Number Test Package

T: (807)223-9950

F: (807)223-9176