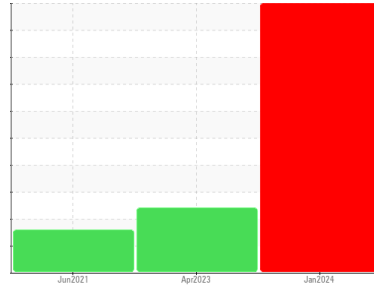


Machine Id
801234

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)



DIAGNOSIS

Recommendation

Nous vous recommandons de vérifier la possibilité d'une mauvaise combustion et d'une surchauffe possible. Nous vous recommandons de vidanger l'huile de ce composant si vous ne l'avez pas déjà fait. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

Wear

Usure de cylindre, de vilebrequin ou d'arbre à cames. Usure de segment. Usure de la soupape d'échappement. Usure de piston.

Contamination

Il n'y a aucun indice de contamination dans l'huile.

Fluid Condition

Il y a une légère oxydation de l'huile. l'huile n'est plus en état de service en raison d'une usure anormale et/ou sévère.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PC0083987	PC0067496	GFL0027346
Sample Date	Client Info		24 Jan 2024	06 Apr 2023	29 Jun 2021
Machine Age	kms	Client Info	248062	232890	12050
Oil Age	kms	Client Info	0	0	600
Oil Changed	Client Info		N/A	N/A	Changed
Sample Status			SEVERE	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	6	---
Iron	ppm	ASTM D5185(m) >50	88	67	35
Chromium	ppm	ASTM D5185(m) >4	6	5	5
Nickel	ppm	ASTM D5185(m) >2	2	1	<1
Titanium	ppm	ASTM D5185(m)	0	<1	2
Silver	ppm	ASTM D5185(m) >3	0	0	0
Aluminum	ppm	ASTM D5185(m) >9	28	19	18
Lead	ppm	ASTM D5185(m) >30	3	2	4
Copper	ppm	ASTM D5185(m) >35	2	2	2
Tin	ppm	ASTM D5185(m) >4	1	1	1
Antimony	ppm	ASTM D5185(m)	0	0	0
Vanadium	ppm	ASTM D5185(m)	0	0	<1
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) 50	6	4	5
Barium	ppm	ASTM D5185(m) 5	0	0	<1
Molybdenum	ppm	ASTM D5185(m) 50	64	58	69
Manganese	ppm	ASTM D5185(m) 0	2	2	1
Magnesium	ppm	ASTM D5185(m) 560	619	596	482
Calcium	ppm	ASTM D5185(m) 1510	1748	1718	1691
Phosphorus	ppm	ASTM D5185(m) 780	793	796	789
Zinc	ppm	ASTM D5185(m) 870	959	878	1009
Sulfur	ppm	ASTM D5185(m) 2040	2032	2005	2029
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >+100	35	20	12
Sodium	ppm	ASTM D5185(m)	16	12	10
Potassium	ppm	ASTM D5185(m) >20	4	1	2

INFRA-RED

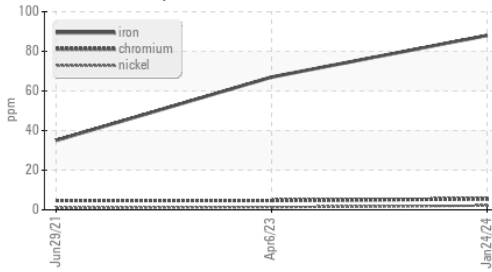
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0	0	0
Nitration	Abs/cm	ASTM D7624*	13.3	7.3	10.0
Sulfation	Abs/.1mm	ASTM D7415*	28.7	19.9	24.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	26.3	11.3	18.8

OIL ANALYSIS REPORT

Ferrous Alloys

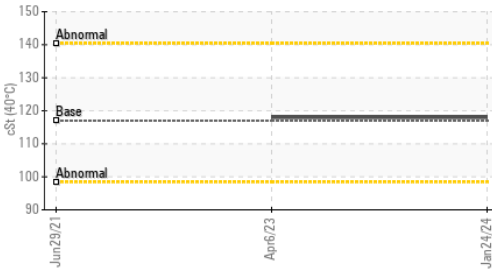


VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

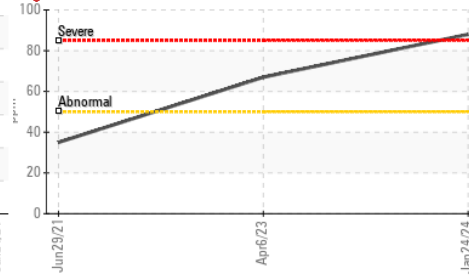
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	117.0	118	118	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	14.7	14.7	13.9
Viscosity Index (VI)	Scale	ASTM D2270*	134	127	127	---

GRAPHS

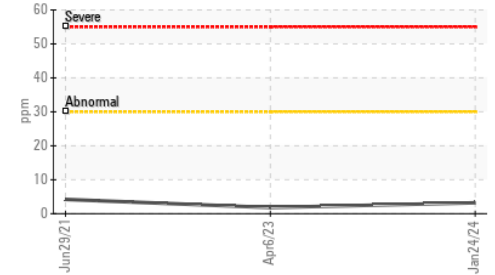
Viscosity @ 40°C



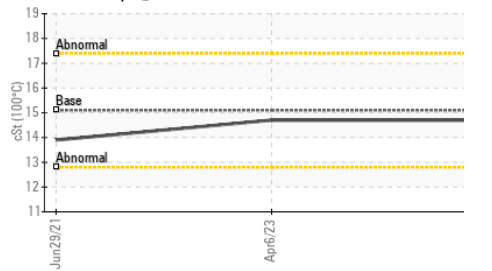
Iron (ppm)



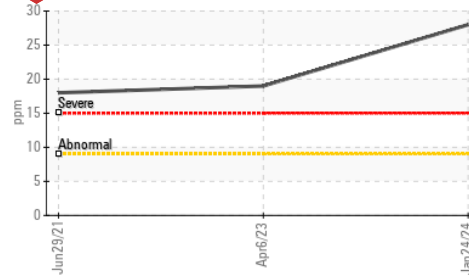
Lead (ppm)



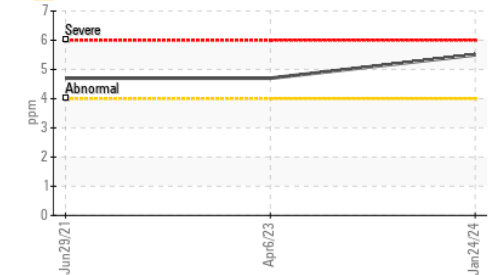
Viscosity @ 100°C



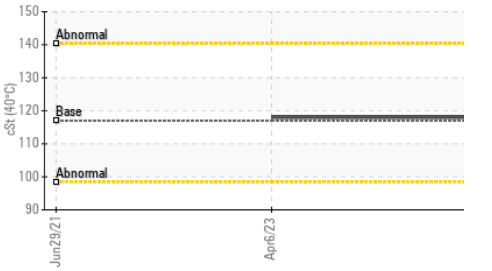
Aluminum (ppm)



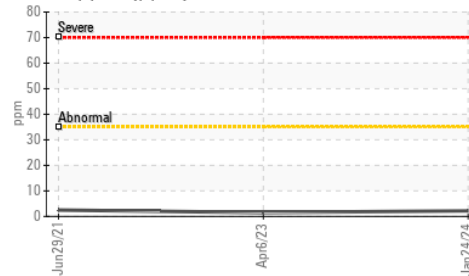
Chromium (ppm)



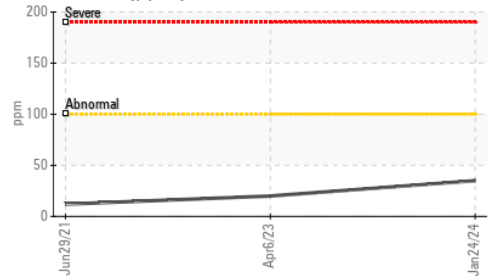
Viscosity @ 40°C



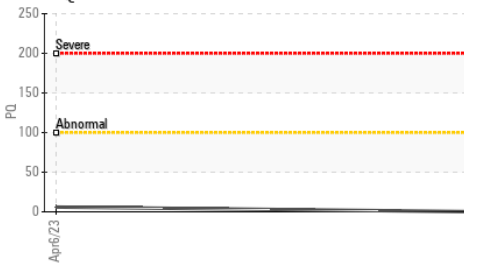
Copper (ppm)



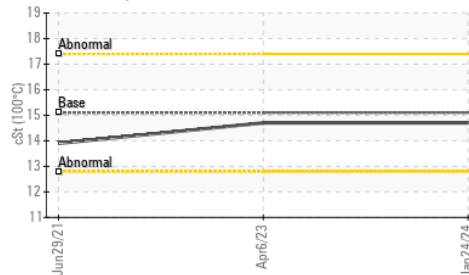
Silicon (ppm)



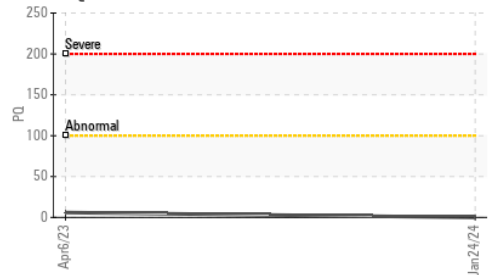
PQ



Viscosity @ 100°C



PQ



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 742 - Quebec City Solid Waste
Sample No. : PC0083987 **Received** : 30 Jan 2024 5160 Jean-Talon Pierre-Bertrand Bou
Lab Number : 02612108 **Diagnosed** : 30 Jan 2024 Quebec City, QC
Unique Number : 5721203 **Diagnostician** : Bill Quesnel CA G2J 1B7
Test Package : MOB 1 (Additional Tests: KV40, PQ, VI)
 Contact: Jean Audet

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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 F: