



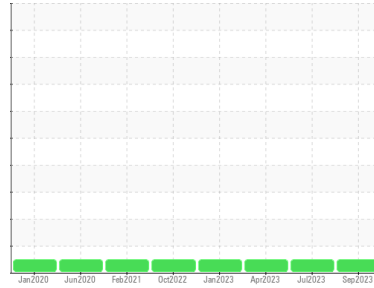
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
701109
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)



DIAGNOSIS

Recommendation

Aucune mesure corrective n'est recommandée pour l'instant. Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition.

Wear

Les taux d'usure de tous les composants sont normaux.

Contamination

La teneur en carburant est négligeable. Il n'y a aucun indice de contamination dans l'huile.

Fluid Condition

L'état de l'huile est acceptable pour la durée de service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0088889	GFL0084400	GFL0073374
Sample Date	Client Info		29 Sep 2023	07 Jul 2023	13 Apr 2023
Machine Age	hrs	Client Info	90228	9714	9133
Oil Age	hrs	Client Info	600	600	600
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>120	8	8	6
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	2	2
Lead	ppm	ASTM D5185(m)	>40	1	<1	<1
Copper	ppm	ASTM D5185(m)	>330	1	2	2
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
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)	2	2	2	2
Barium	ppm	ASTM D5185(m)	0	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	50	59	60	59
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	944	1013	958
Calcium	ppm	ASTM D5185(m)	1050	1154	1051	1105
Phosphorus	ppm	ASTM D5185(m)	995	973	1055	1058
Zinc	ppm	ASTM D5185(m)	1180	1197	1213	1192
Sulfur	ppm	ASTM D5185(m)	2600	2334	2271	2448
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	3	4	3
Sodium	ppm	ASTM D5185(m)		6	10	4
Potassium	ppm	ASTM D5185(m)	>20	11	1	0
Fuel	%	ASTM D7593*	>3.0	0.8	<1.0	<1.0
Glycol	%	ASTM D7922*		0.0	NEG	NEG

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>4	0.2	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	7.9	8.5	8.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.0	20.8	19.4

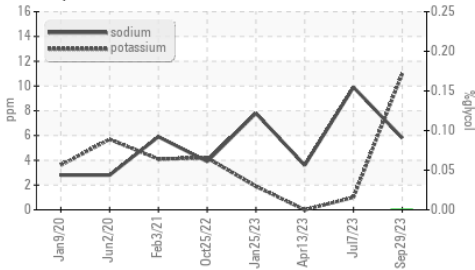
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.9	16.6	15.7



OIL ANALYSIS REPORT

Glycol Contamination

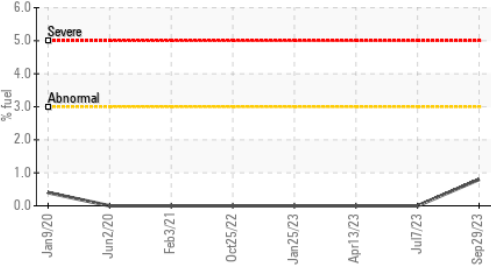


VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

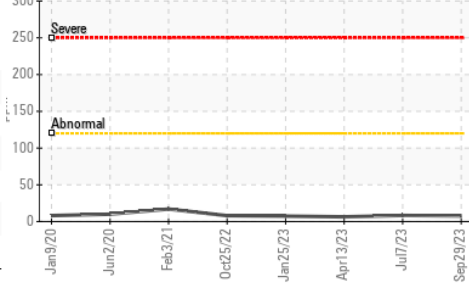
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.2	12.1

GRAPHS

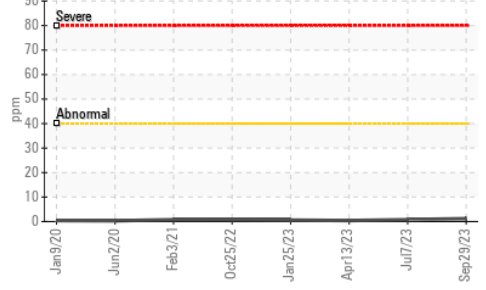
Fuel Dilution



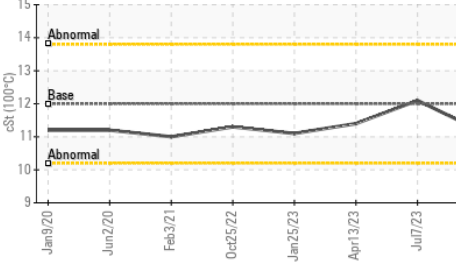
Iron (ppm)



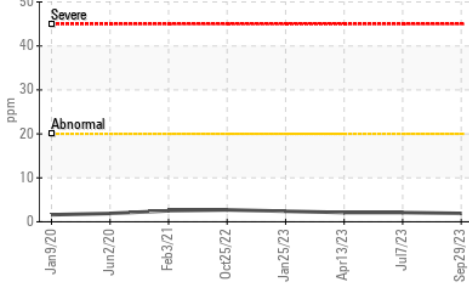
Lead (ppm)



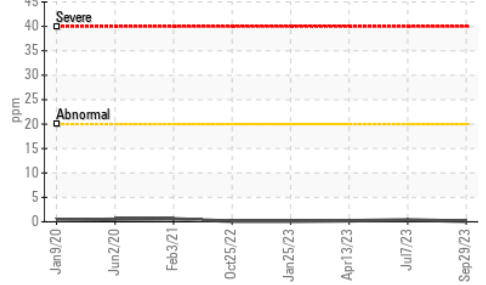
Viscosity @ 100°C



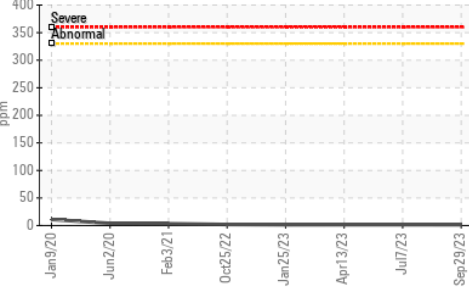
Aluminum (ppm)



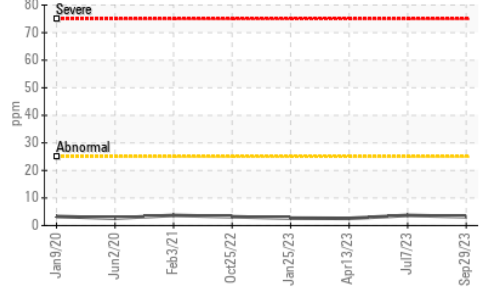
Chromium (ppm)



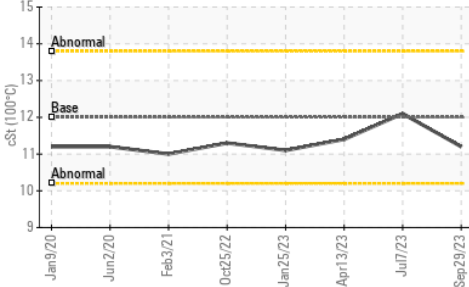
Copper (ppm)



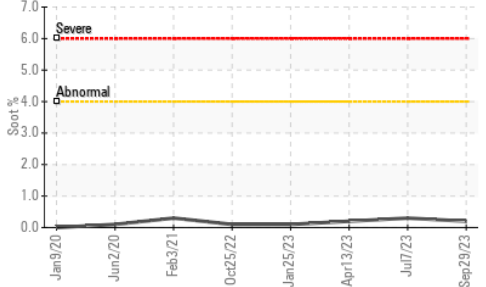
Silicon (ppm)



Viscosity @ 100°C



Soot %



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 780 - GMA - ICI - Solid Waste
Sample No. : GFL0088889 **Received** : 12 Oct 2023 4365 boul. St-Elzear Ouest, Laval, QC
Lab Number : 02588573 **Diagnosed** : 13 Oct 2023 CA H7P 4J3
Unique Number : 5657639 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, PercentFuel)
 Contact: Pieces Laval
 pieces.laval@gflenv.com
 T: (450)687-3838
 F:

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.