



OIL ANALYSIS REPORT

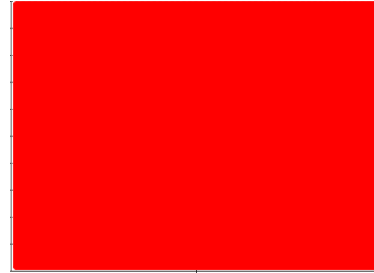
Sample Rating Trend

WEAR

Area
CAPLAN
Machine Id
#8330

Component
Front Diesel Engine
Fluid

PETRO CANADA DURON SHP 10W30 (30 LTR)



DIAGNOSIS

Recommendation

Nous vous recommandons de vérifier le filtre à air, le système d'induction d'air et tout endroit où la saleté peut entrer dans le composant. Nous vous recommandons de vidanger l'huile de ce composant si vous ne l'avez pas déjà fait. Nous avons pris note que l'huile a été vidangée et le filtre remplacé au moment de l'échantillonnage. 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 la soupape d'échappement. Usure de piston.

Contamination

Concentration modérée de saleté dans l'huile. Une grande quantité de saleté a provoqué une usure abrasive du composant.

Fluid Condition

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		GFL0079096	---	---
Sample Date	Client Info		07 Sep 2023	---	---
Machine Age	hrs	Client Info	15383	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		24	---	---
Iron	ppm	ASTM D5185(m) >90	196	---	---
Chromium	ppm	ASTM D5185(m) >20	8	---	---
Nickel	ppm	ASTM D5185(m) >2	6	---	---
Titanium	ppm	ASTM D5185(m) >2	<1	---	---
Silver	ppm	ASTM D5185(m) >2	<1	---	---
Aluminum	ppm	ASTM D5185(m) >20	42	---	---
Lead	ppm	ASTM D5185(m) >40	15	---	---
Copper	ppm	ASTM D5185(m) >330	16	---	---
Tin	ppm	ASTM D5185(m) >15	2	---	---
Antimony	ppm	ASTM D5185(m)	0	---	---
Vanadium	ppm	ASTM D5185(m)	<1	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 2	10	---	---
Barium	ppm	ASTM D5185(m) 0	0	---	---
Molybdenum	ppm	ASTM D5185(m) 50	62	---	---
Manganese	ppm	ASTM D5185(m) 0	2	---	---
Magnesium	ppm	ASTM D5185(m) 950	979	---	---
Calcium	ppm	ASTM D5185(m) 1050	1543	---	---
Phosphorus	ppm	ASTM D5185(m) 995	1208	---	---
Zinc	ppm	ASTM D5185(m) 1180	1402	---	---
Sulfur	ppm	ASTM D5185(m) 2600	2684	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

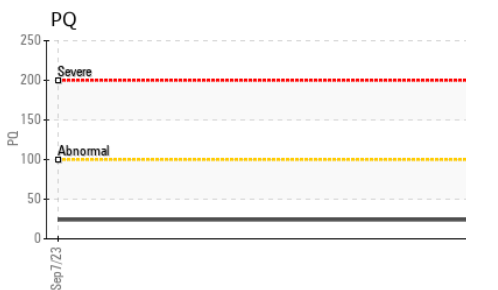
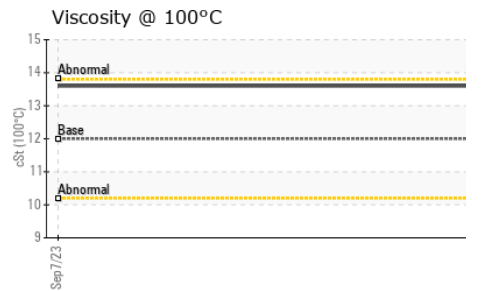
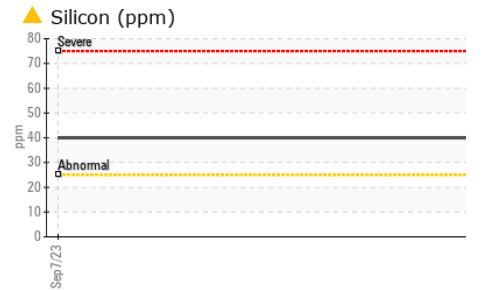
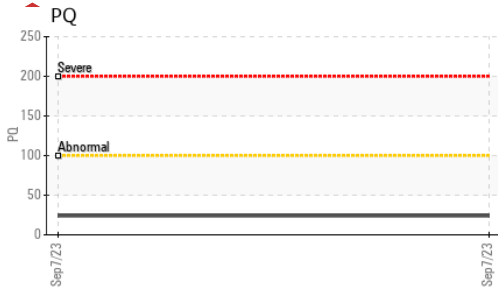
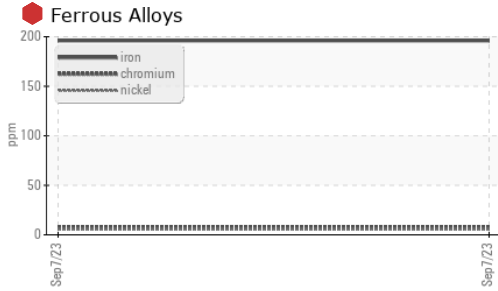
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	40	---	---
Sodium	ppm	ASTM D5185(m)	10	---	---
Potassium	ppm	ASTM D5185(m) >20	4	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >6	0.5	---	---
Nitration	Abs/cm	ASTM D7624* >20	14.7	---	---
Sulfation	Abs./1mm	ASTM D7415* >30	28.3	---	---



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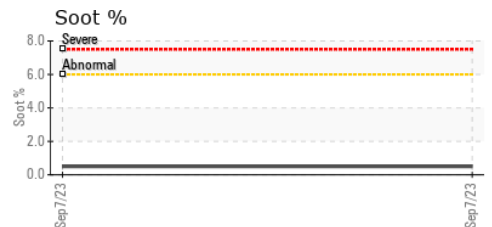
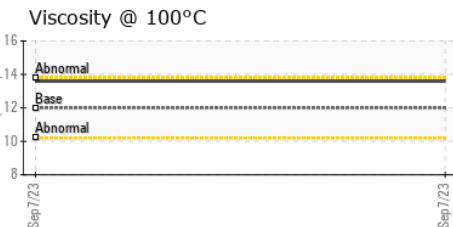
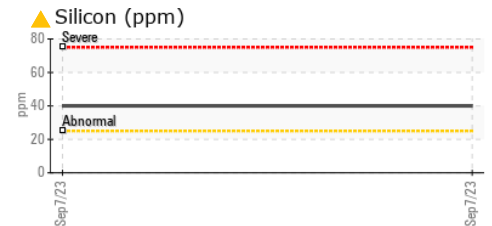
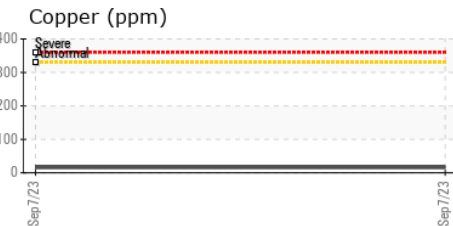
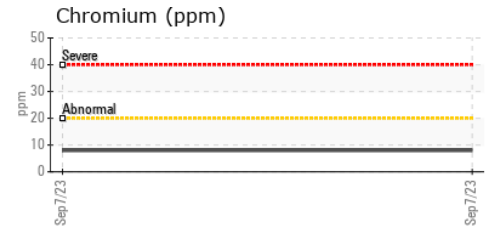
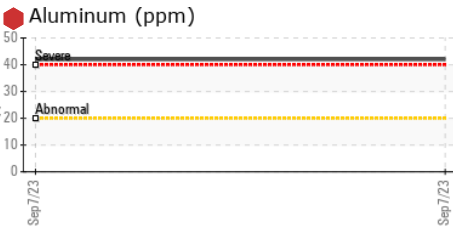
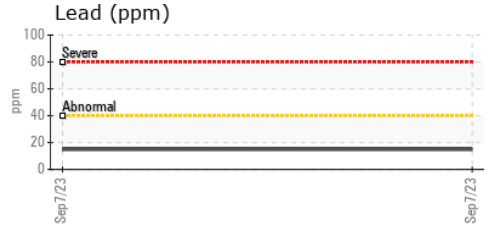
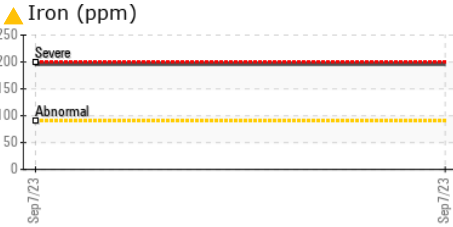


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	28.5	---	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---
Free Water	scalar	Visual*		NEG	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	13.6	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0079096 **Received** : 12 Sep 2023
Lab Number : **02581692** **Diagnosed** : 13 Sep 2023
Unique Number : 5642757 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: PQ, Visual)

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.

Matrec - 791 - Rimouski
 350 Avenue de L'Industrie
 Rimouski, QC
 CA G5M 1W4
 Contact: Vincent Maltais
 info@foretsstar.com
 T: 4(18)388-2626
 F: (418)388-2038