



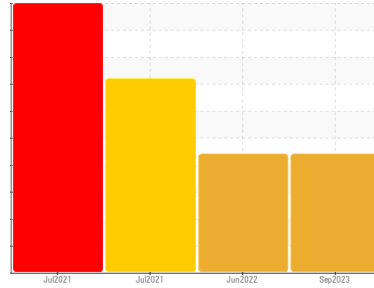
OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Machine Id
FREIGHTLINER 8321
 Component
Hydraulic System
 Fluid
PETRO CANADA HYDREX MV 32 (--- GAL)



DIAGNOSIS

Recommendation

Vérifier les scelles et/ou les filtres pour des points d'entrée des contaminants. Le reniflard d'air doit être réparé. S'il n'est pas classé, nous vous recommandons de le remplacer par un reniflard à air adapté au micron et / ou au dessicant. Si évalué, nous vous recommandons de réparer / remplacer le reniflard. Nous recommandons le remplacement des filtres de ce composant. Échantillonner de nouveau dans 30 à 45 jours afin de contrôler la situation.

Wear

Le taux de fer est anormal. Le bas indice ferreux (PQ) indique que l'usure ferreuse est due à de la corrosion.

Contamination

Il y a une grande quantité de limon (particules de 4 à 14 microns) dans l'huile. La teneur en eau est négligeable.

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		GFL0080977	GFL0043151	GFL0026831
Sample Date	Client Info		05 Sep 2023	01 Jun 2022	26 Jul 2021
Machine Age	hrs	Client Info	16037	14761	13824
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status			SEVERE	SEVERE	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*	>50	3	---	---
Iron	ppm	ASTM D5185(m)	>40	▲ 43	5
Chromium	ppm	ASTM D5185(m)	>5	1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	2
Silver	ppm	ASTM D5185(m)		0	<1
Aluminum	ppm	ASTM D5185(m)	>8	<1	0
Lead	ppm	ASTM D5185(m)	>5	0	0
Copper	ppm	ASTM D5185(m)	>20	<1	<1
Tin	ppm	ASTM D5185(m)	>2	0	0
Antimony	ppm	ASTM D5185(m)	>2	0	<1
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)	0	2	<1
Barium	ppm	ASTM D5185(m)	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	3	0
Manganese	ppm	ASTM D5185(m)	1	<1	0
Magnesium	ppm	ASTM D5185(m)	0	18	<1
Calcium	ppm	ASTM D5185(m)	50	87	53
Phosphorus	ppm	ASTM D5185(m)	330	374	352
Zinc	ppm	ASTM D5185(m)	430	444	422
Sulfur	ppm	ASTM D5185(m)	760	846	760
Lithium	ppm	ASTM D5185(m)		<1	0

CONTAMINANTS

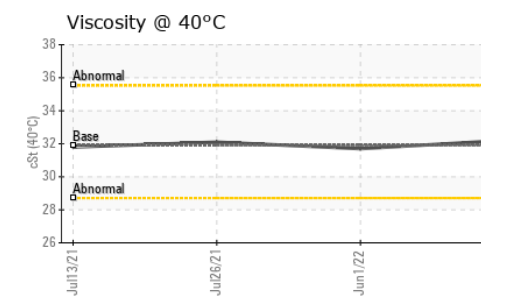
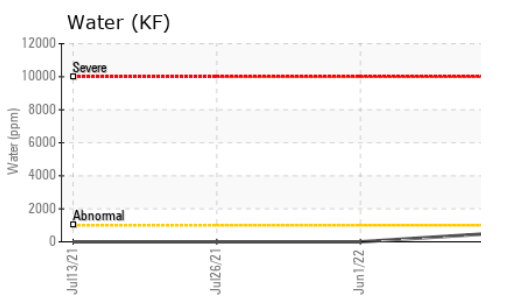
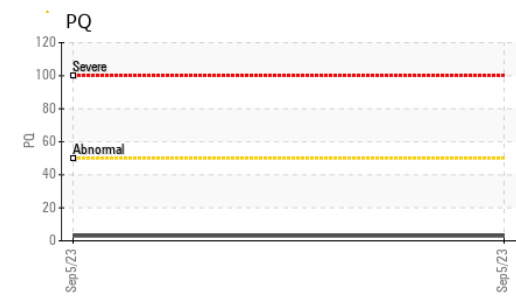
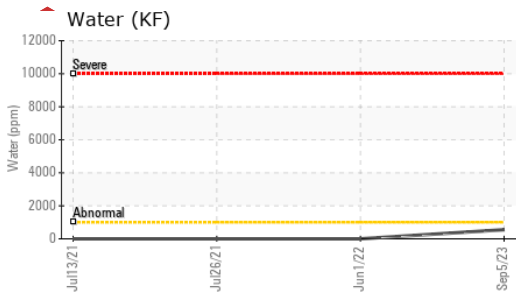
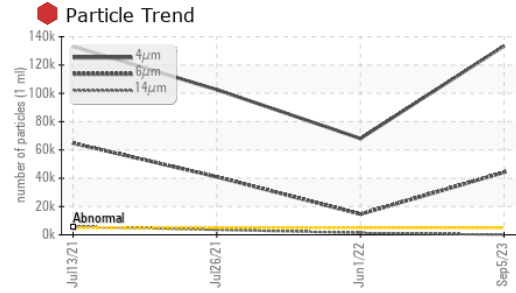
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	2	<1
Sodium	ppm	ASTM D5185(m)		8	0
Potassium	ppm	ASTM D5185(m)	>20	2	<1
Water	%	ASTM D6304*	>0.1	0.055	---
ppm Water	ppm	ASTM D6304*	>1000	552.1	---

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	● 133511	● 68045	● 102580
Particles >6µm	ASTM D7647	>1300	● 44175	● 14573	● 40962
Particles >14µm	ASTM D7647	>160	38	▲ 1288	● 3563
Particles >21µm	ASTM D7647	>40	6	▲ 270	● 787
Particles >38µm	ASTM D7647	>10	1	6	▲ 27
Particles >71µm	ASTM D7647	>3	0	0	1
Oil Cleanliness	ISO 4406 (c)	>19/17/14	● 24/23/12	● 23/21/17	● 24/23/19



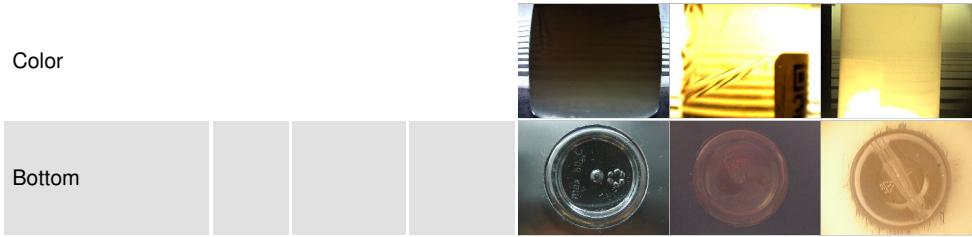
OIL ANALYSIS REPORT



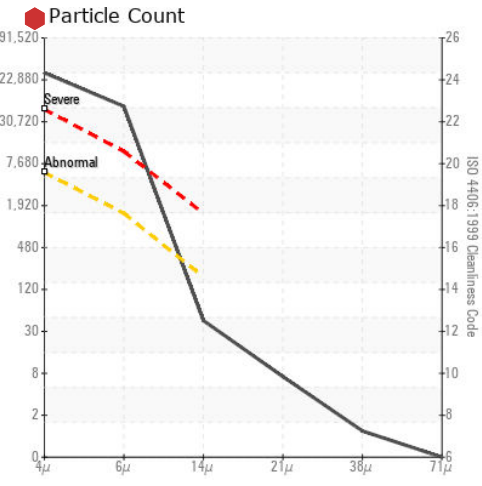
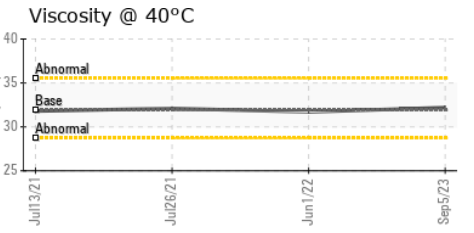
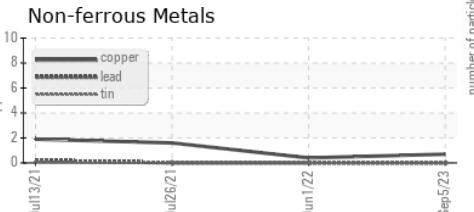
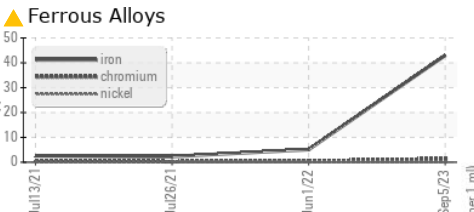
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	.2%	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	31.9	32.2	31.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental 791MAT - Matane**
Sample No. : GFL0080977 **Received** : 11 Sep 2023
Lab Number : 02581447 **Diagnosed** : 13 Sep 2023
Unique Number : 5642512 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: KF, PQ, PrtCount)

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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