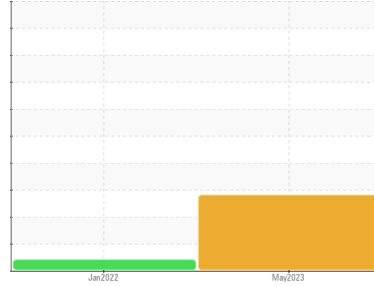


Area
EBI DE COSTA RICA
Machine Id
FREIGHTLINER 1043
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 68 (45 GAL)



DIAGNOSIS

Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

Fluid Condition

The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC0073938	PC0058371	---
Sample Date	Client Info	27 May 2023	26 Jan 2022	---
Machine Age	hrs	11026	8224	---
Oil Age	hrs	3477	572	---
Oil Changed	Client Info	Not Chngd	N/A	---
Sample Status		SEVERE	ABNORMAL	---

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >20	7	5	---
Chromium	ppm	ASTM D5185(m) >10	<1	<1	---
Nickel	ppm	ASTM D5185(m) >10	<1	<1	---
Titanium	ppm	ASTM D5185(m)	0	0	---
Silver	ppm	ASTM D5185(m)	0	<1	---
Aluminum	ppm	ASTM D5185(m) >10	1	<1	---
Lead	ppm	ASTM D5185(m) >10	0	<1	---
Copper	ppm	ASTM D5185(m) >75	<1	4	---
Tin	ppm	ASTM D5185(m) >10	0	0	---
Antimony	ppm	ASTM D5185(m)	0	<1	---
Vanadium	ppm	ASTM D5185(m)	0	0	---
Beryllium	ppm	ASTM D5185(m)	0	0	---
Cadmium	ppm	ASTM D5185(m)	0	<1	---

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m) 0	2	4	---
Barium	ppm	ASTM D5185(m) 0	0	0	---
Molybdenum	ppm	ASTM D5185(m) 0	<1	<1	---
Manganese	ppm	ASTM D5185(m) 0	0	0	---
Magnesium	ppm	ASTM D5185(m) 0	2	3	---
Calcium	ppm	ASTM D5185(m) 50	88	140	---
Phosphorus	ppm	ASTM D5185(m) 330	329	335	---
Zinc	ppm	ASTM D5185(m) 430	389	336	---
Sulfur	ppm	ASTM D5185(m) 760	783	850	---
Lithium	ppm	ASTM D5185(m)	<1	<1	---

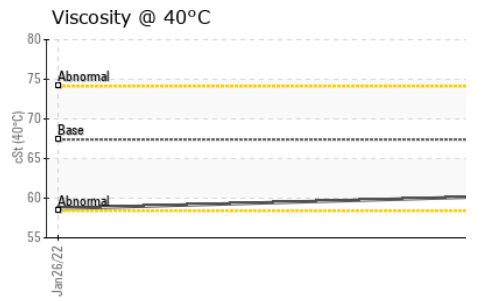
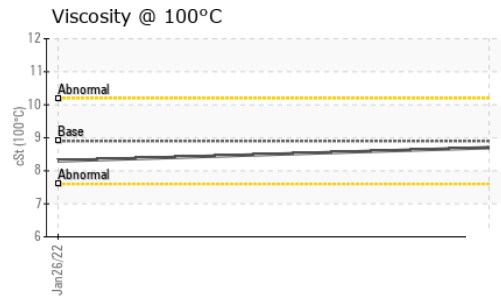
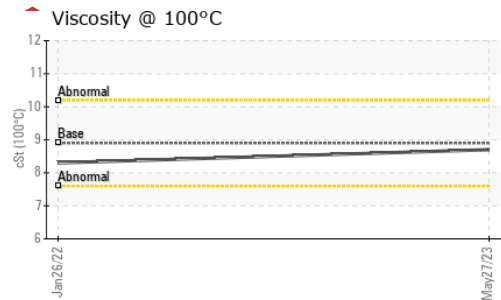
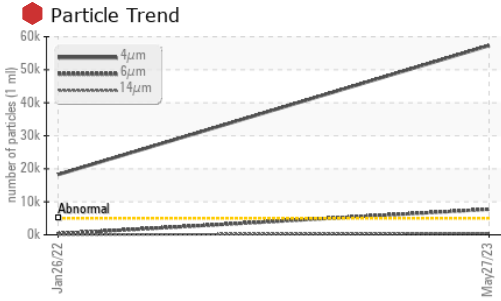
CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >20	3	2	---
Sodium	ppm	ASTM D5185(m)	<1	1	---
Potassium	ppm	ASTM D5185(m) >20	1	2	---

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	57337	18252	---
Particles >6µm	ASTM D7647 >1300	7744	329	---
Particles >14µm	ASTM D7647 >160	451	14	---
Particles >21µm	ASTM D7647 >40	149	5	---
Particles >38µm	ASTM D7647 >10	5	0	---
Particles >71µm	ASTM D7647 >3	0	0	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	23/20/16	21/16/11	---

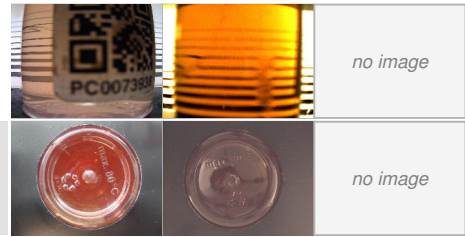
OIL ANALYSIS REPORT



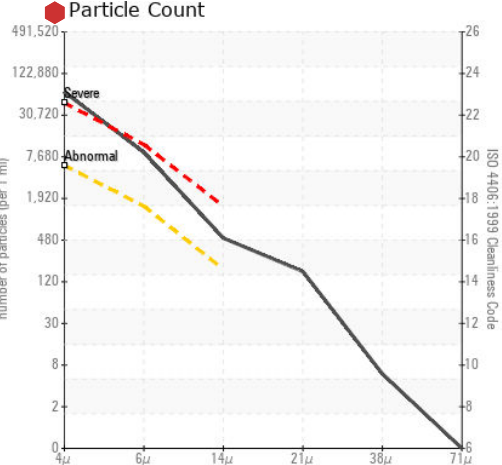
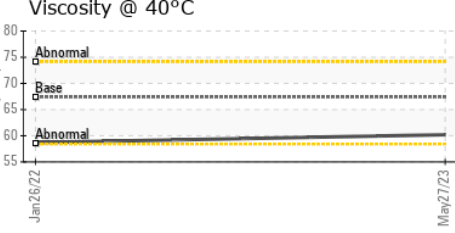
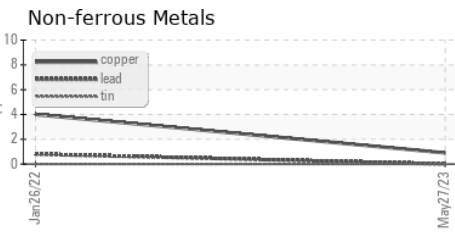
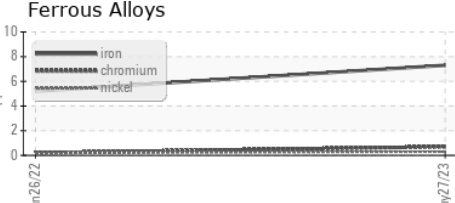
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	67.4	60.2	58.7
Visc @ 100°C	cSt	ASTM D7279(m)	8.9	8.7	8.3
Viscosity Index (VI)	Scale	ASTM D2270*	105	118	111

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **INDUSTRIAS del PETROLEO CANAD. SA**
Sample No. : PC0073938 **Received** : 06 Jul 2023 Contiguo FANAL, frente a la Autopista Bernardo Soto
Lab Number : 02568272 **Diagnosed** : 07 Jul 2023 Grecia, A
Unique Number : 5605318 **Diagnostician** : Wes Davis CR
Test Package : MOB 2 (Additional Tests: KV100, VI)

To discuss this sample report, contact Customer Service at 1-800-268-2131. **Contact: Erick Bogantes**
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. **cotizaciones@lubricantescanada.com**
 Validity of results and interpretation are based on the sample and information as supplied. **T: 1(115)062-1598**
F: 1(115)062-2870