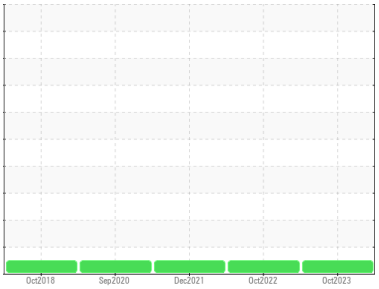
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
LAB CHARLES RIVER PM4097 [328696]
Machine Id
30368851
Component
Diesel Engine
Fluid
VALVOLINE 15W40 (--- GAL)

DIAGNOSIS

Recommendation
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
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		**CU0022038**	CU0020290	CU0018265
Sample Date		Client Info		**02 Oct 2023**	25 Oct 2022	22 Dec 2021
Machine Age	hrs	Client Info		**0**	302	167
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	**<1.0**	<1.0	<1.0
Glycol		WC Method		**NEG**	0.0	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	**4**	5	5
Chromium	ppm	ASTM D5185(m)	>20	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>2	**0**	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	**0**	0	0
Silver	ppm	ASTM D5185(m)	>2	**<1**	0	0
Aluminum	ppm	ASTM D5185(m)	>20	**<1**	<1	1
Lead	ppm	ASTM D5185(m)	>40	**<1**	<1	<1
Copper	ppm	ASTM D5185(m)	>330	**<1**	<1	<1
Tin	ppm	ASTM D5185(m)	>15	**0**	<1	<1
Antimony	ppm	ASTM D5185(m)		**0**	<1	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

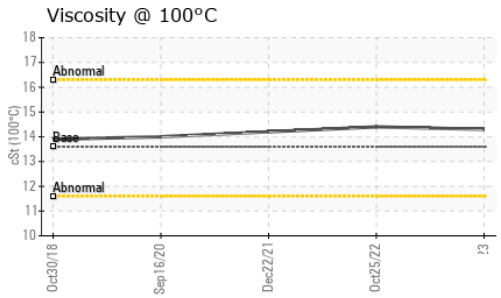
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	39	**77**	176	71
Barium	ppm	ASTM D5185(m)	1	**<1**	0	0
Molybdenum	ppm	ASTM D5185(m)	49	**34**	4	37
Manganese	ppm	ASTM D5185(m)	1	**0**	<1	<1
Magnesium	ppm	ASTM D5185(m)	616	**579**	57	591
Calcium	ppm	ASTM D5185(m)	1554	**1428**	2155	1600
Phosphorus	ppm	ASTM D5185(m)	899	**773**	1080	1123
Zinc	ppm	ASTM D5185(m)	1069	**908**	1140	1232
Sulfur	ppm	ASTM D5185(m)	2624	**2232**	3063	2779
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**4**	2	4
Sodium	ppm	ASTM D5185(m)		**3**	2	3
Potassium	ppm	ASTM D5185(m)	>20	**<1**	5	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	**0.1**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**6.2**	5.3	6.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	**20.0**	19.8	21.5

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**16.0**	13.9	16.5

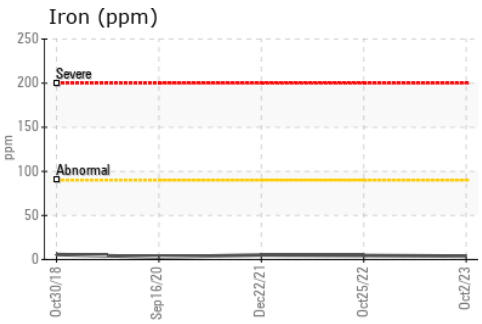
OIL ANALYSIS REPORT

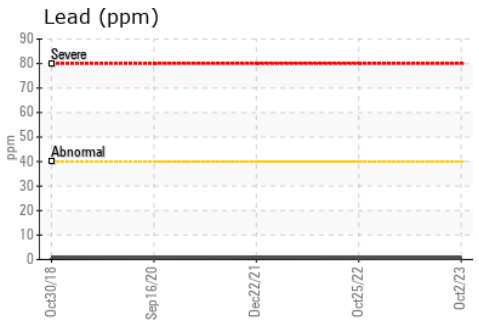


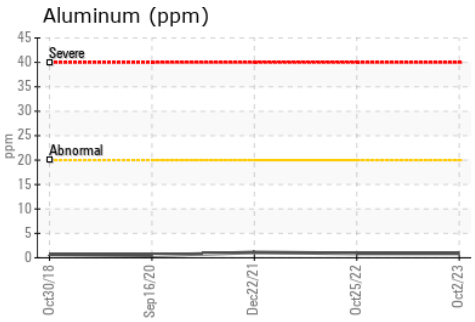
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

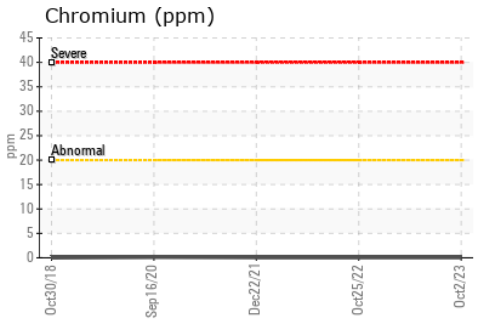
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	13.6	**14.3**	14.4	14.2

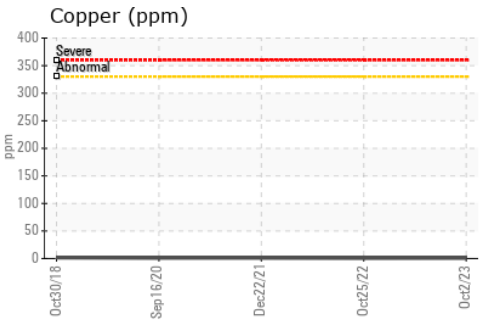
GRAPHS

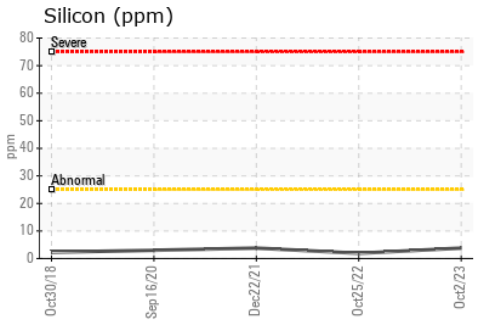


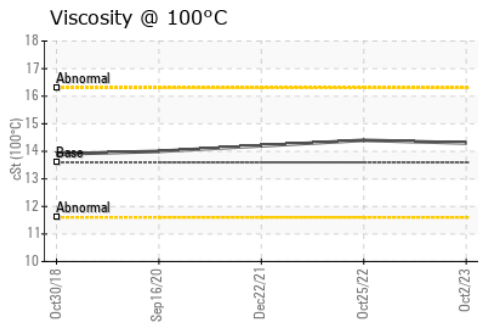


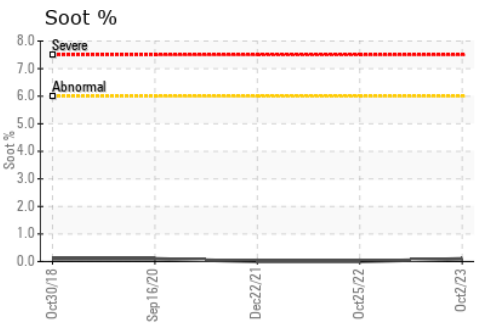












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0022038
Lab Number : 02588240
Unique Number : 5657306
Test Package : MOB 1

Received : 11 Oct 2023
Diagnosed : 11 Oct 2023
Diagnostician : Wes Davis

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.

CUMMINS EASTERN CANADA LP
315 AV LIBERTE
CANDIAC, QC
CA J5R 6Z7
Contact: Thomas Owens
is275@cummins.com
T: (450)638-6863
F: (450)638-1202