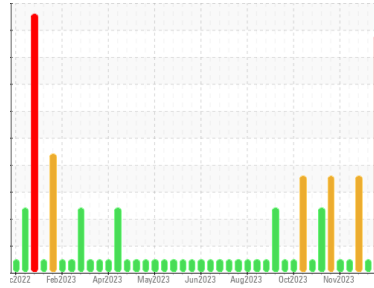




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
LIDM05BE (S/N GZJ00188A)

Component
Biogas Engine

Fluid
CHEVRON HDAX 6500 LFG GAS ENGINE OIL (540 LTR)

DIAGNOSIS

Recommendation

Nous vous recommandons de vérifier la source de la fuite de fluide de refroidissement. Nous vous recommandons de vidanger l'huile de ce composant si vous ne l'avez pas déjà fait. Nous vous recommandons de rincer complètement le composant avant de le remplir l'huile. 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 palier. Une usure du palier de glissement est indiquée.

Contamination

Le test de glycol est positif. Concentration élevée de glycol dans l'huile. La teneur en eau est négligeable.

Fluid Condition

Le résultat pour le BN indique que la réserve d'alcalinité est acceptable pour l'huile. Le AN est acceptable pour ce fluide. l'huile ne peut plus être utilisée en raison de la présence de contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0874472	WC0874377	WC0874374
Sample Date	Client Info		02 Jan 2024	11 Dec 2023	04 Dec 2023
Machine Age	hrs	Client Info	28574	37337	28045
Oil Age	hrs	Client Info	263	72	462
Oil Changed	Client Info		Not Chngd	Changed	Not Chngd
Sample Status			SEVERE	NORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	<1.0	<1.0

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	---	---
Iron	ppm	ASTM D5185(m) >15	▲ 15	<1	3
Chromium	ppm	ASTM D5185(m) >4	<1	0	0
Nickel	ppm	ASTM D5185(m) >2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m) >5	0	<1	<1
Aluminum	ppm	ASTM D5185(m) >6	3	2	2
Lead	ppm	ASTM D5185(m) >9	<1	0	<1
Copper	ppm	ASTM D5185(m) >6	▲ 4	<1	1
Tin	ppm	ASTM D5185(m) >4	▲ 2	0	2
Antimony	ppm	ASTM D5185(m)	▲ 3	0	3
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)	7	4	4
Barium	ppm	ASTM D5185(m)	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)	3	3	2
Manganese	ppm	ASTM D5185(m)	0	0	0
Magnesium	ppm	ASTM D5185(m)	12	15	18
Calcium	ppm	ASTM D5185(m)	1730	1714	1757
Phosphorus	ppm	ASTM D5185(m)	258	246	248
Zinc	ppm	ASTM D5185(m)	308	295	310
Sulfur	ppm	ASTM D5185(m)	2510	1788	2910
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >181	92	30	108
Sodium	ppm	ASTM D5185(m)	11	<1	1
Potassium	ppm	ASTM D5185(m) >20	5	<1	2
Water	%	ASTM D6304* >0.1	0.07	---	---
ppm Water	ppm	ASTM D6304* >1000	700	---	---
Glycol	%	ASTM D7922*	● 0.128	NEG	NEG

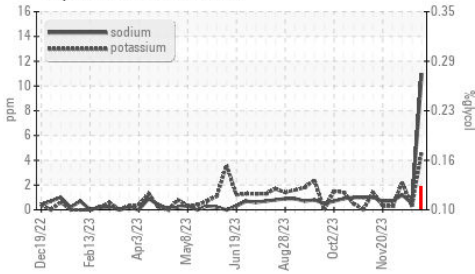
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0	0	0
Nitration	Abs/cm	ASTM D7624* >20	5.3	5.0	5.2
Sulfation	Abs./1mm	ASTM D7415* >30	20.5	17.4	24.1



OIL ANALYSIS REPORT

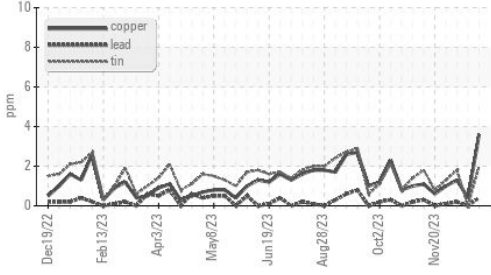
Glycol Contamination



FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	9.6	8.6 13.4
Acid Number (AN)	mg KOH/g	ASTM D974*	1.2	2.35	1.56 2.86
Base Number (BN)	mg KOH/g	ASTM D2896*	4.5	3.46	4.30 2.00
i-pH	Scale 0-14	ASTM D7946*	<4.5	5.26	6.11 4.36

VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	.2%	NEG NEG
Free Water	scalar	Visual*		NEG	NEG NEG

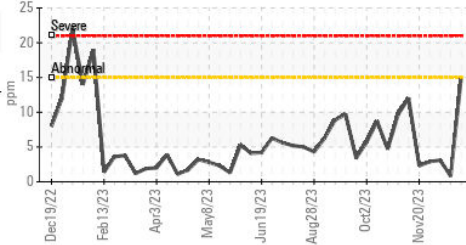
Non-ferrous Metals



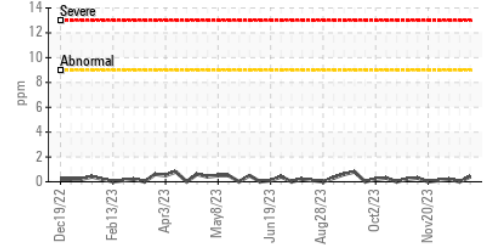
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.7	13.2	13.1 13.5

GRAPHS

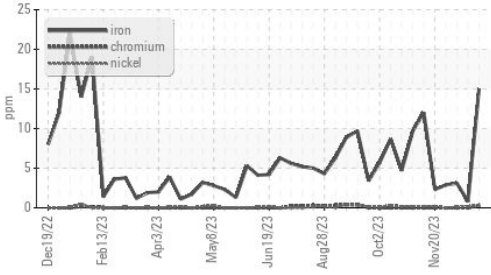
Iron (ppm)



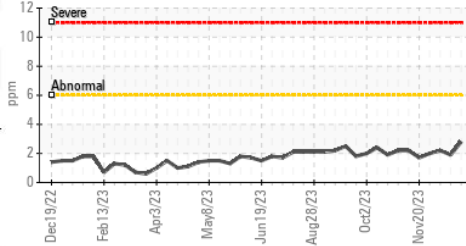
Lead (ppm)



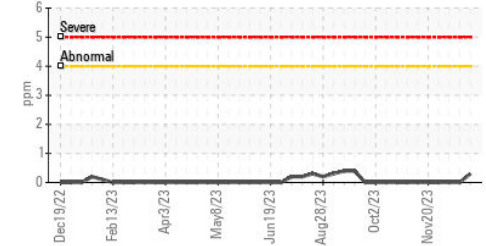
Ferrous Alloys



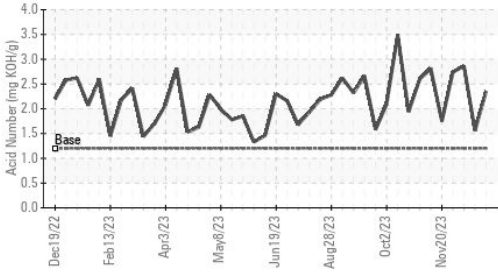
Aluminum (ppm)



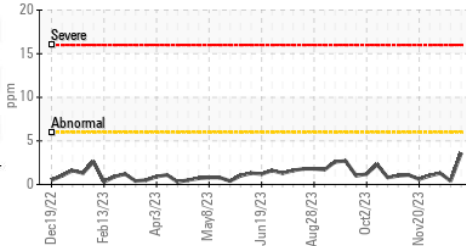
Chromium (ppm)



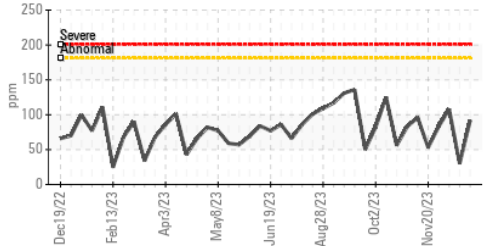
Acid Number



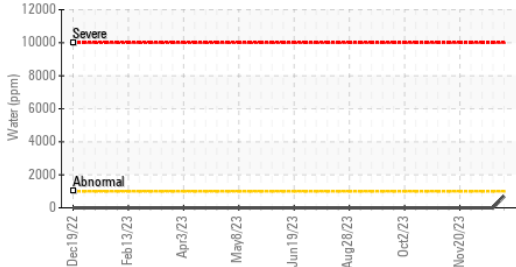
Copper (ppm)



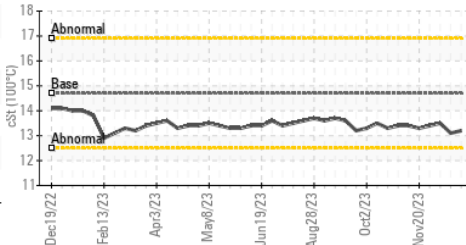
Silicon (ppm)



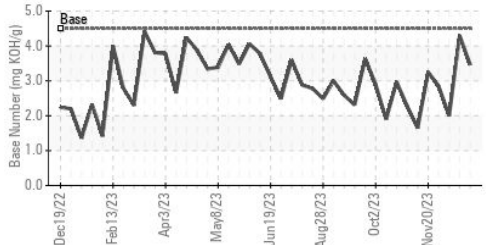
Water (KF)



Viscosity @ 100°C



Base Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0874472 **Received** : 05 Jan 2024
Lab Number : 02606770 **Diagnosed** : 09 Jan 2024
Unique Number : 5707856 **Diagnostician** : Kevin Marson
Test Package : MOB 2 (Additional Tests: Glycol, i-pH, KF, PQ, TAN Auto, TAN Man)

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 LACHUTE, QC
 CA J8H 2C5
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 T: (450)526-4001
 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.