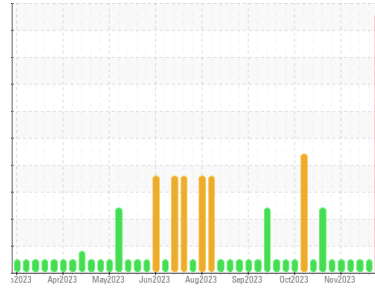




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
LIDM04BE (S/N GZJ00279)

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 surveiller la baisse de pression anormale et le bruit. 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. Confirm the source of the lubricant being utilized for top-up/fill. Nous vous suggérons de confirmer les résultats de l'analyse avant toute action importante de maintenance soit entreprise. Indiquez sur le formulaire d'échantillonnage (SIF-sample information form) qu'il s'agit d'un ré-échantillonnage. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

Wear

Usure de palier.

Contamination

Le test de glycol est positif. Il y a une légère concentration de glycol dans le l'huile.

Fluid Condition

Les niveaux d'additifs indiquent l'ajout d'une autre marque ou d'un autre type d'huile. Le résultat pour le BN indique que la réserve d'alcalinité est acceptable pour l'huile. Le AN est acceptable pour ce fluide. L'état de l'huile permet d'en prolonger l'utilisation. 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		WC0874471	WC0874481	WC0874378
Sample Date	Client Info		02 Jan 2024	20 Dec 2023	11 Dec 2023
Machine Age	hrs	Client Info	48151	85415	85251
Oil Age	hrs	Client Info	159	444	280
Oil Changed	Client Info		Not Chngd	Changed	Not Chngd
Sample Status			SEVERE	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	<1.0	<1.0
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>15	9	6	4
Chromium	ppm	ASTM D5185(m)	>4	<1	<1	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	0	<1
Aluminum	ppm	ASTM D5185(m)	>6	3	3	2
Lead	ppm	ASTM D5185(m)	>9	14	<1	<1
Copper	ppm	ASTM D5185(m)	>6	4	2	2
Tin	ppm	ASTM D5185(m)	>4	2	2	1
Antimony	ppm	ASTM D5185(m)		<1	2	2
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)		23	5	5
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		16	3	3
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		18	14	16
Calcium	ppm	ASTM D5185(m)		1737	1863	1767
Phosphorus	ppm	ASTM D5185(m)		265	267	256
Zinc	ppm	ASTM D5185(m)		314	320	317
Sulfur	ppm	ASTM D5185(m)		2768	3141	2779
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>181	54	94	72
Sodium	ppm	ASTM D5185(m)		111	6	10
Potassium	ppm	ASTM D5185(m)	>20	4	3	<1
Glycol	%	ASTM D7922*		0.013	NEG	NEG

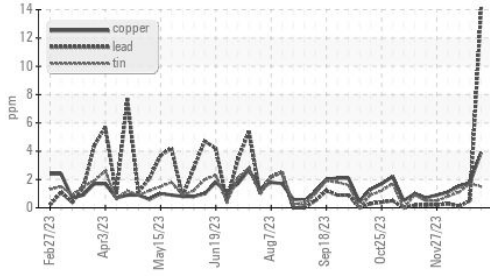
INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	5.7	6.0	5.8
Sulfation	Abs./1mm	ASTM D7415*	>30	20.3	24.2	22.3

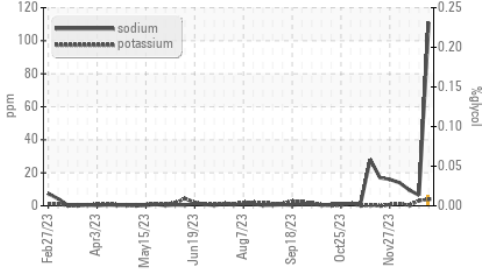


OIL ANALYSIS REPORT

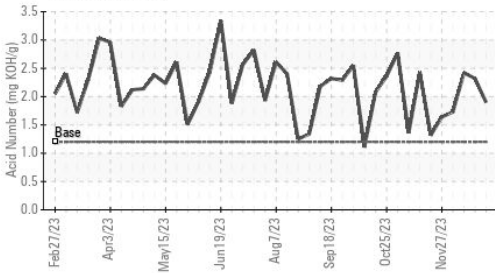
Non-ferrous Metals



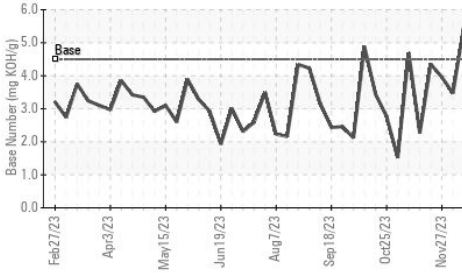
Glycol Contamination



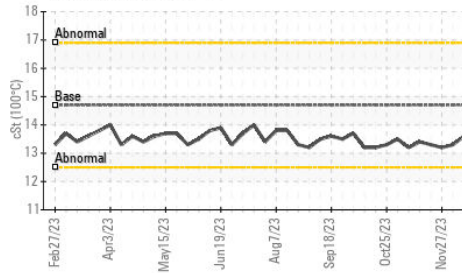
Acid Number



Base Number



Viscosity @ 100°C



FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	10.5	15.0	13.5
Acid Number (AN)	mg KOH/g	ASTM D974*	1.2	1.90	2.32	2.42
Base Number (BN)	mg KOH/g	ASTM D2896*	4.5	4.58	2.73	5.50
i-pH	Scale 0-14	ASTM D7946*	<4.5	5.41	5.26	4.93

VISUAL

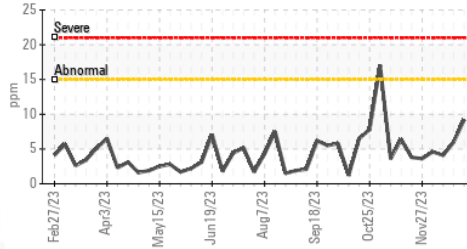
	method	limit/base	current	history1	history2	
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES

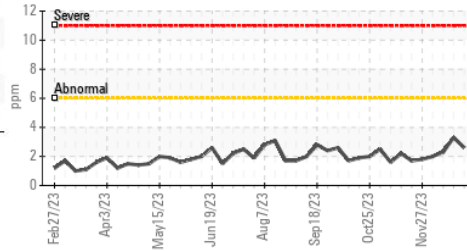
	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	14.7	13.3	13.6	13.6

GRAPHS

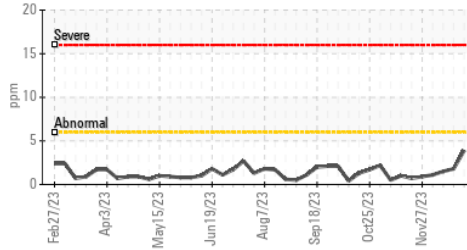
Iron (ppm)



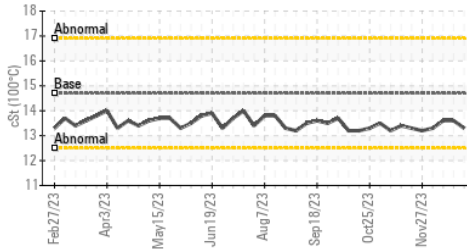
Aluminum (ppm)



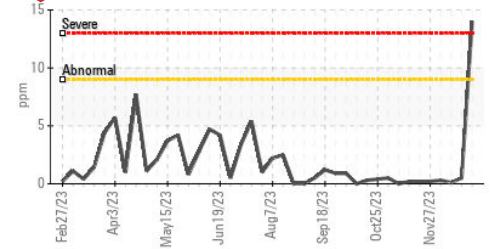
Copper (ppm)



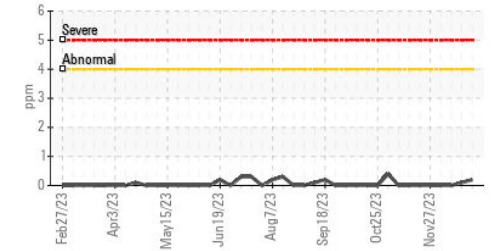
Viscosity @ 100°C



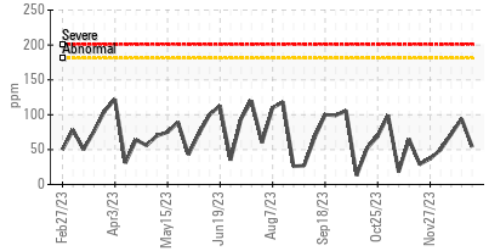
Lead (ppm)



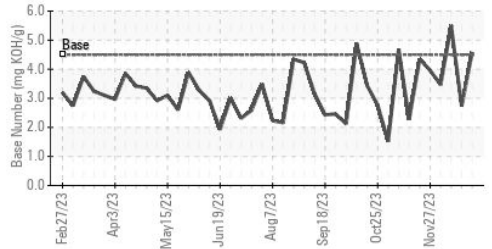
Chromium (ppm)



Silicon (ppm)



Base Number



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0874471 **Received** : 05 Jan 2024
Lab Number : 02606771 **Diagnosed** : 09 Jan 2024
Unique Number : 5707857 **Diagnostician** : Kevin Marson
Test Package : MOB 2 (Additional Tests: GLYCOL, i-pH, TAN Auto, TAN Man)

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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