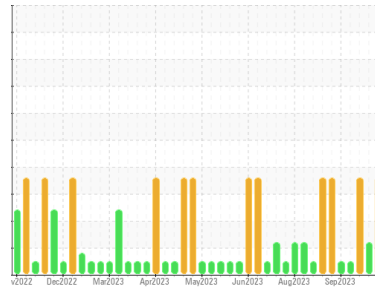




# OIL ANALYSIS REPORT

Sample Rating Trend



PH



Machine Id  
**LIDM03BE (S/N GZJ-00163)**

Component  
**Biogas Engine**  
Fluid  
**CHEVRON HDAX 6500 LFG GAS ENGINE OIL (540 LTR)**

## DIAGNOSIS

### Recommendation

Nous avons pris note que la vidange d'huile a été effectuée au moment de l'échantillonnage. 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

Le niveau de i-pH est anormalement bas. Le niveau de AN est supérieur à la limite recommandée. Le niveau de BN est inférieur à la normale. l'huile ne peut plus être utilisée.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0817909</b>	WC0817904	WC0772230
Sample Date	Client Info		<b>18 Oct 2023</b>	10 Oct 2023	25 Sep 2023
Machine Age	hrs	Client Info	<b>40299</b>	40106	39853
Oil Age	hrs	Client Info	<b>383</b>	190	469
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>15	<b>6</b>	5	4
Chromium	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>6	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m)	>9	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185(m)	>6	<b>2</b>	1	1
Tin	ppm	ASTM D5185(m)	>4	<b>2</b>	<1	1
Antimony	ppm	ASTM D5185(m)		<b>3</b>	2	2
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		<b>3</b>	3	3
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)		<b>2</b>	3	3
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>10</b>	8	9
Calcium	ppm	ASTM D5185(m)		<b>1820</b>	1793	1877
Phosphorus	ppm	ASTM D5185(m)		<b>247</b>	244	254
Zinc	ppm	ASTM D5185(m)		<b>301</b>	291	309
Sulfur	ppm	ASTM D5185(m)		<b>3209</b>	2722	2892
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>181	<b>102</b>	68	93
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	2

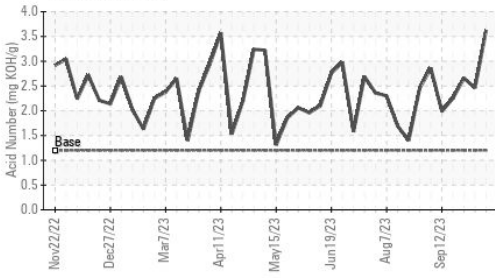
## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.3</b>	5.3	5.6
Sulfation	Abs/1mm	ASTM D7415*	>30	<b>26.0</b>	21.6	24.0

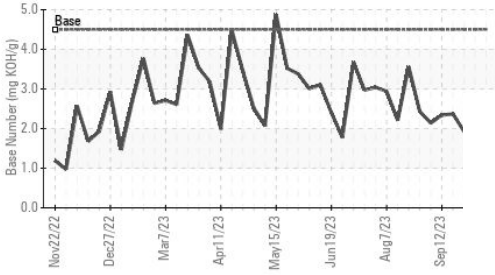


# OIL ANALYSIS REPORT

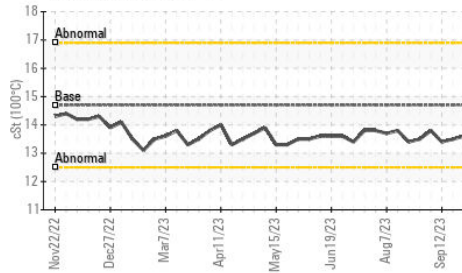
## ▲ Acid Number



## ▲ Base Number



## Viscosity @ 100°C



## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	14.4	11.4	13.7
Acid Number (AN)	mg KOH/g	ASTM D974*	1.2	▲ 3.62	2.46	▲ 2.66
Base Number (BN)	mg KOH/g	ASTM D2896*	4.5	▲ 1.39	2.53	▲ 1.93
i-pH	Scale 0-14	ASTM D7946*	<4.5	▲ 3.45	▲ 4.40	▲ 4.39

## VISUAL

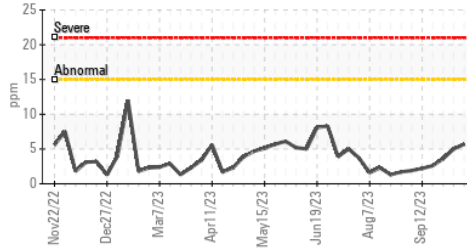
	method	limit/base	current	history1	history2	
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

## FLUID PROPERTIES

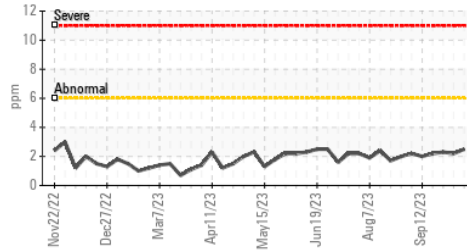
	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	14.7	13.5	13.2	13.6

## GRAPHS

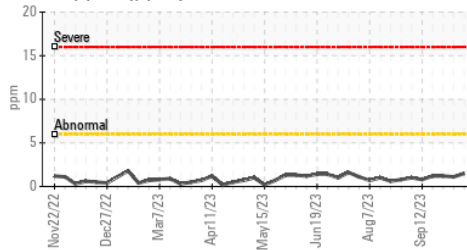
### Iron (ppm)



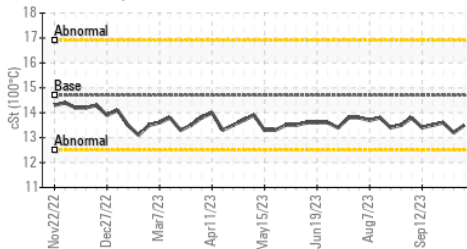
### Aluminum (ppm)



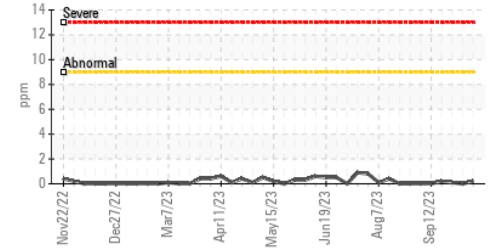
### Copper (ppm)



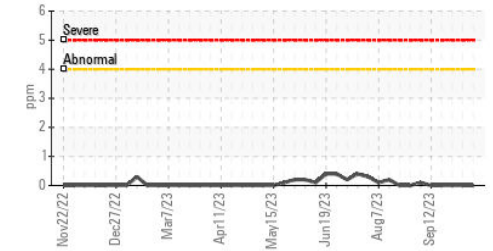
### Viscosity @ 100°C



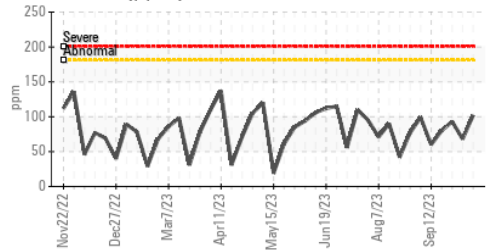
### Lead (ppm)



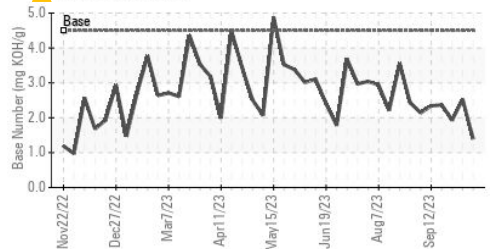
### Chromium (ppm)



### Silicon (ppm)



### ▲ Base Number



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0817909 **Received** : 20 Oct 2023  
**Lab Number** : 02590608 **Diagnosed** : 24 Oct 2023  
**Unique Number** : 5659674 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 2 ( Additional Tests: 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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