

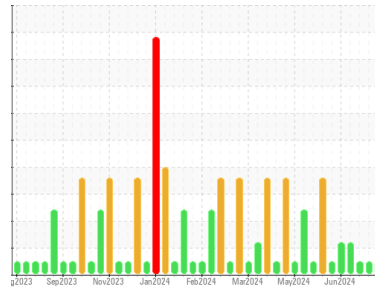


# OIL ANALYSIS REPORT



Machine Id  
**LIDM05BE (S/N GZJ00188A)**  
 Component  
**Biogas Engine**  
 Fluid  
**CHEVRON HDAX 9500 GAS ENGINE OIL 40 (540 LTR)**

Sample Rating Trend



**NORMAL**



## 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

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.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0954689</b>	WC0904263	WC0954716
Sample Date	Client Info		<b>08 Jul 2024</b>	02 Jul 2024	25 Jun 2024
Machine Age	hrs	Client Info	<b>32635</b>	32523	32354
Oil Age	hrs	Client Info	<b>68</b>	686	517
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >14	<b>2</b>	4	5
Chromium	ppm	ASTM D5185(m) >3	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >5	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m) >8	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m) >5	<b>&lt;1</b>	2	2
Tin	ppm	ASTM D5185(m) >3	<b>&lt;1</b>	2	2
Antimony	ppm	ASTM D5185(m)	<b>&lt;1</b>	2	3
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>4</b>	5	5
Barium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	<b>4</b>	5	4
Manganese	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	<b>10</b>	10	10
Calcium	ppm	ASTM D5185(m)	<b>1716</b>	1786	1735
Phosphorus	ppm	ASTM D5185(m)	<b>238</b>	234	242
Zinc	ppm	ASTM D5185(m)	<b>291</b>	304	299
Sulfur	ppm	ASTM D5185(m)	<b>1558</b>	2135	2335
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

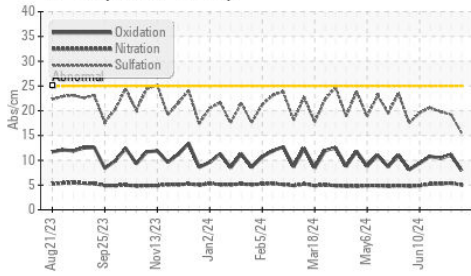
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >180	<b>34</b>	110	104
Sodium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185(m) >20	<b>1</b>	2	2

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	<b>5.0</b>	5.4	5.3
Sulfation	Abs./1mm	ASTM D7415*	<b>15.5</b>	19.2	19.8

### FT-IR (Direct Trend)



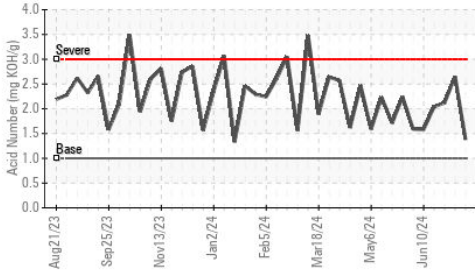
FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	<b>7.9</b>	11.1	10.4
Acid Number (AN)	mg KOH/g	ASTM D974*	<b>1.38</b>	2.65	2.12
Base Number (BN)	mg KOH/g	ASTM D2896*	<b>4.85</b>	3.59	3.14
i-pH	Scale 0-14	ASTM D7946*	<b>6.14</b>	5.06	4.88

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

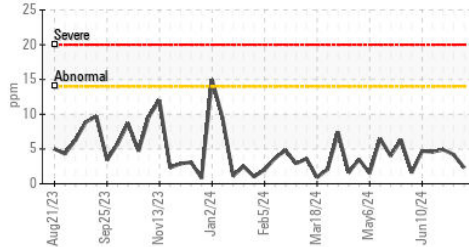
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	<b>13.1</b>	13.4	13.4

### GRAPHS

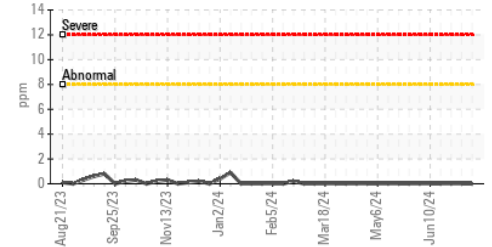
#### Acid Number



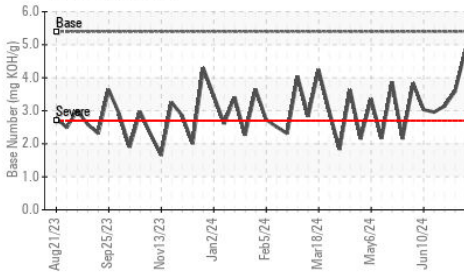
#### Iron (ppm)



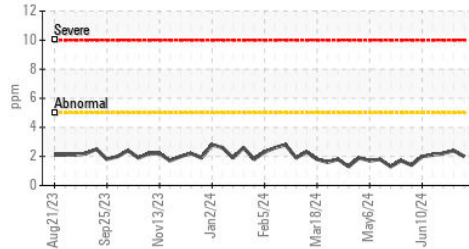
#### Lead (ppm)



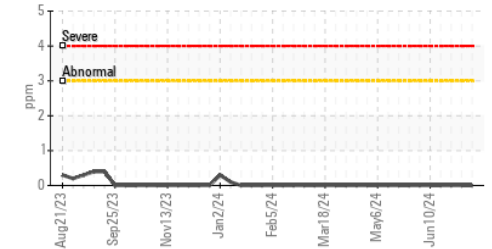
#### Base Number



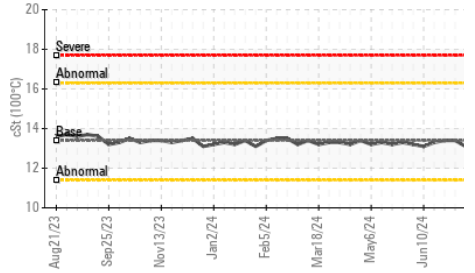
#### Aluminum (ppm)



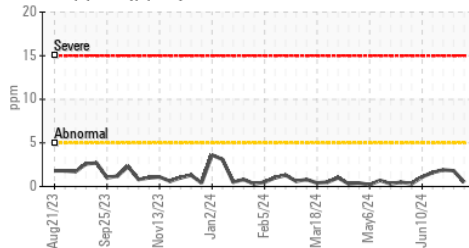
#### Chromium (ppm)



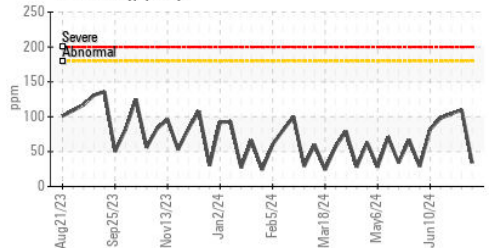
#### Viscosity @ 100°C



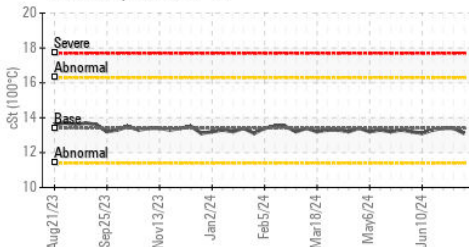
#### Copper (ppm)



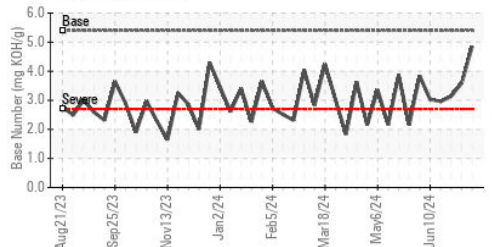
#### Silicon (ppm)



#### Viscosity @ 100°C



#### Base Number



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0954689 **Received** : 10 Jul 2024  
**Lab Number** : **02646969** **Tested** : 16 Jul 2024  
**Unique Number** : 5812521 **Diagnosed** : 16 Jul 2024 - 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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