

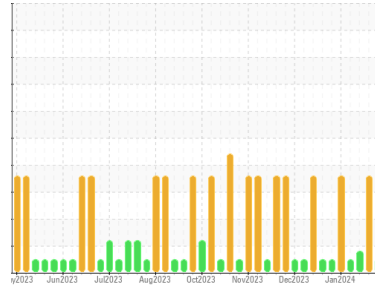


# OIL ANALYSIS REPORT



Machine Id  
**LIDM03BE (S/N GZJ-00163)**  
 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>WC0904350</b>	WC0904354	WC0874442
Sample Date	Client Info		<b>11 Mar 2024</b>	04 Mar 2024	26 Feb 2024
Machine Age	hrs	Client Info	<b>43055</b>	42942	42774
Oil Age	hrs	Client Info	<b>36</b>	430	262
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status			<b>NORMAL</b>	ABNORMAL	ATTENTION

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.1	<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)	>15	<b>3</b>	10	10
Chromium	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>6	<b>2</b>	3	3
Lead	ppm	ASTM D5185(m)	>9	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>6	<b>&lt;1</b>	3	4
Tin	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	2	2
Antimony	ppm	ASTM D5185(m)		<b>0</b>	3	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>	3	4
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>1</b>	2	2
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>12</b>	13	12
Calcium	ppm	ASTM D5185(m)		<b>1661</b>	1841	1824
Phosphorus	ppm	ASTM D5185(m)		<b>243</b>	259	259
Zinc	ppm	ASTM D5185(m)		<b>287</b>	314	305
Sulfur	ppm	ASTM D5185(m)		<b>2060</b>	3515	3153
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

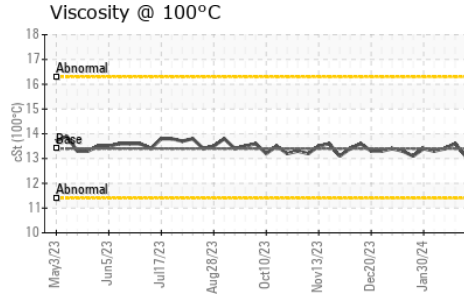
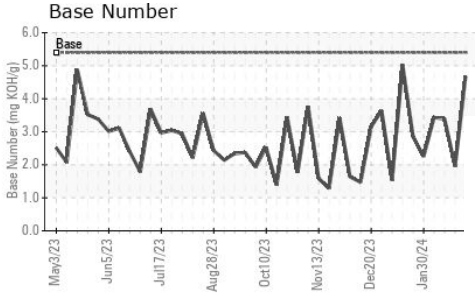
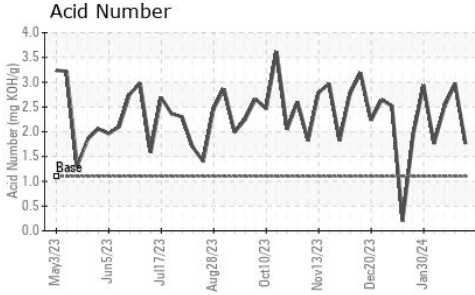
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>181	<b>27</b>	102	84
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	2	2

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>4.7</b>	5.5	5.4
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>16.5</b>	25.6	22.9



# OIL ANALYSIS REPORT

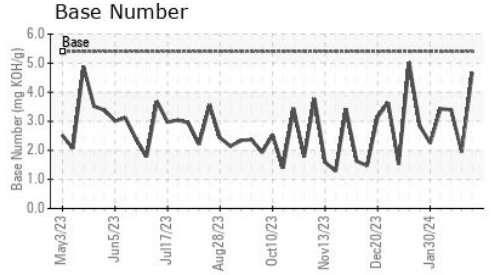
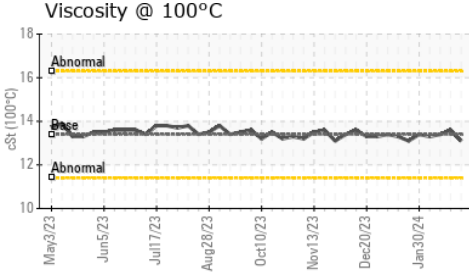
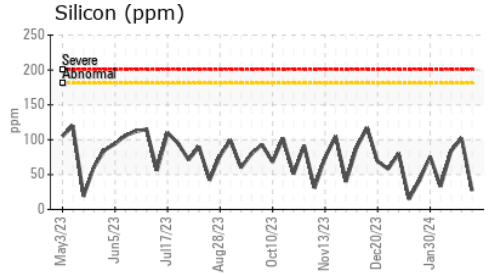
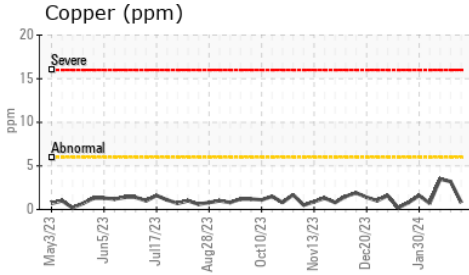
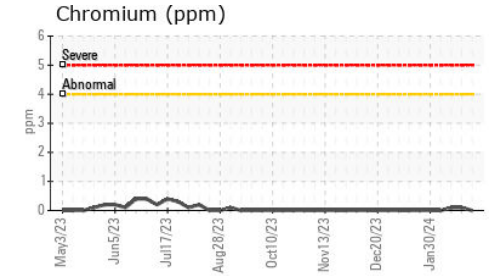
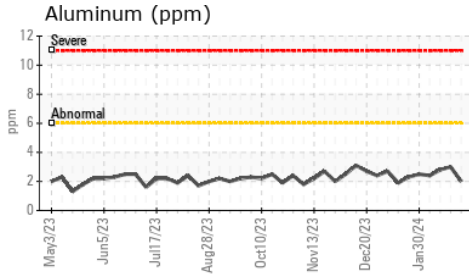
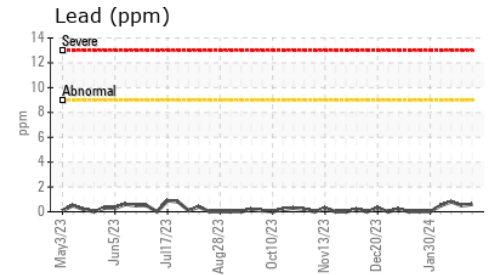
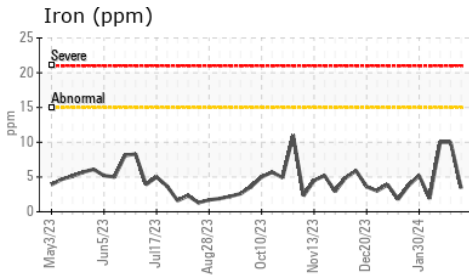


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>7.6</b>	15.0	12.7
Acid Number (AN)	mg KOH/g	ASTM D974*	1.1	<b>1.76</b>	▲ 2.97	2.51
Base Number (BN)	mg KOH/g	ASTM D2896*	5.4	<b>4.67</b>	▲ 1.95	3.39
i-pH	Scale 0-14	ASTM D7946*	<4.5	<b>5.43</b>	▲ 3.97	4.56

VISUAL	method	limit/base	current	history1	history2	
Emulsified Water	scalar	Visual*	>0.1	<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)	13.4	<b>13.1</b>	13.6	13.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0904350 **Received** : 13 Mar 2024  
**Lab Number** : **02621751** **Tested** : 13 Mar 2024  
**Unique Number** : 5746870 **Diagnosed** : 14 Mar 2024 - Kevin Marson  
**Test Package** : MOB 2 ( Additional Tests: i-pH, TAN Auto, TAN Man )

**EDL NA Recips-Lydia**  
 6985 CHEMIN DES SOURCES  
 LACHUTE, QC  
 CA J8H 2C5  
 Contact: Eloi Legault  
 eloi.legault@energydi.com  
 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.