

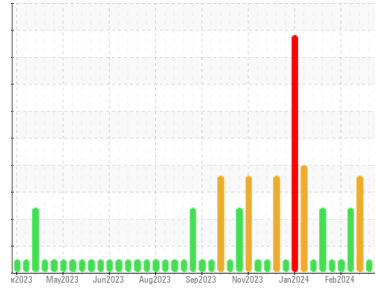


# OIL ANALYSIS REPORT



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

Sample Rating Trend



PH



## DIAGNOSIS

### ▲ Recommendation

Nous vous recommandons de vidanger l'huile de ce composant si vous ne l'avez pas déjà fait. 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>WC0904361</b>	WC0904356	WC0874436
Sample Date	Client Info		<b>11 Mar 2024</b>	04 Mar 2024	19 Feb 2024
Machine Age	hrs	Client Info	<b>30036</b>	29870	29675
Oil Age	hrs	Client Info	<b>239</b>	73	546
Oil Changed	Client Info		<b>Not Chngd</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	ABNORMAL

## 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>4</b>	3	5
Chromium	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
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>	2	3
Lead	ppm	ASTM D5185(m)	>9	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>6	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185(m)	>4	<b>1</b>	<1	2
Antimony	ppm	ASTM D5185(m)		<b>1</b>	<1	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>	4	3
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)		<b>1</b>	1	1
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>14</b>	13	13
Calcium	ppm	ASTM D5185(m)		<b>1773</b>	1708	1804
Phosphorus	ppm	ASTM D5185(m)		<b>255</b>	246	264
Zinc	ppm	ASTM D5185(m)		<b>295</b>	284	308
Sulfur	ppm	ASTM D5185(m)		<b>2823</b>	2061	3082
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>60</b>	29	100
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	1
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	2	3

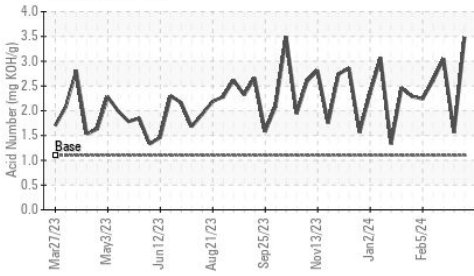
## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.2</b>	4.9	5.1
Sulfation	Abs.1mm	ASTM D7415*	>30	<b>22.7</b>	18.1	23.9

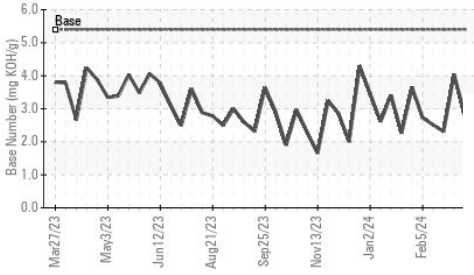


# OIL ANALYSIS REPORT

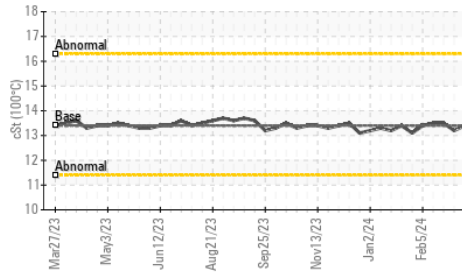
## ▲ Acid Number



## ▲ Base Number



## Viscosity @ 100°C



## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>12.4</b>	8.7	12.7
Acid Number (AN)	mg KOH/g	ASTM D974*	1.1	▲ <b>3.48</b>	1.56	▲ 3.05
Base Number (BN)	mg KOH/g	ASTM D2896*	5.4	▲ <b>2.83</b>	4.04	▲ 2.31
i-pH	Scale 0-14	ASTM D7946*	<4.5	▲ <b>4.41</b>	5.71	▲ 4.08

## VISUAL

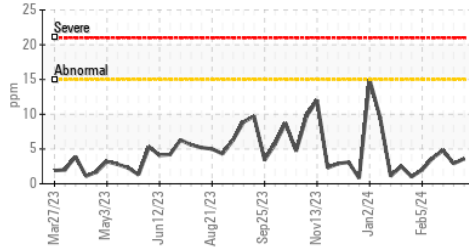
	method	limit/base	current	history1	history2	
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

## FLUID PROPERTIES

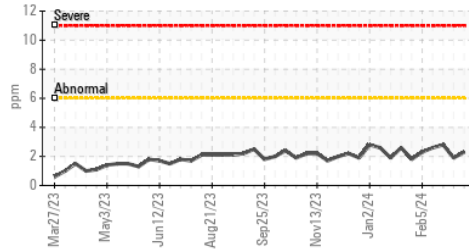
	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	13.4	<b>13.4</b>	13.2	13.5

## GRAPHS

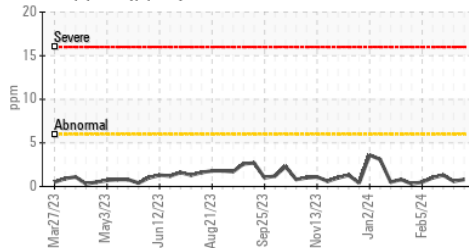
### Iron (ppm)



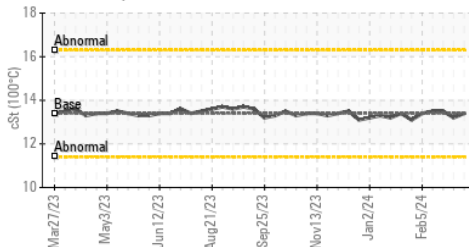
### Aluminum (ppm)



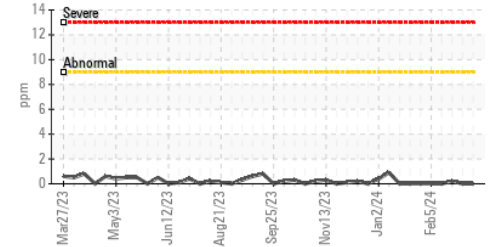
### Copper (ppm)



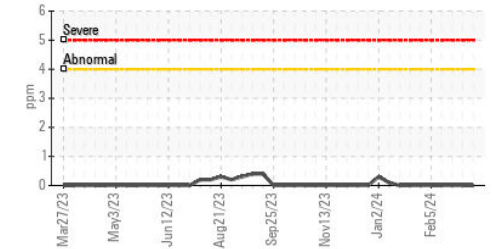
### Viscosity @ 100°C



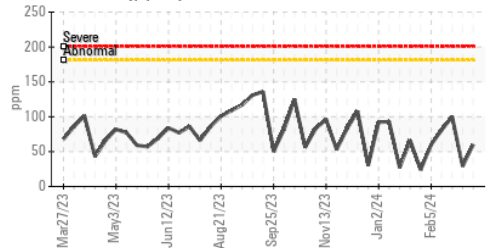
### Lead (ppm)



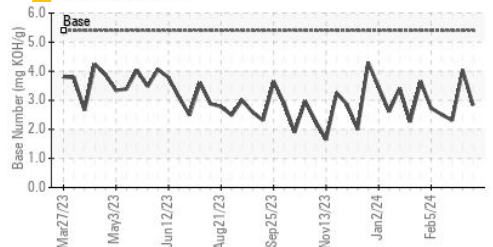
### Chromium (ppm)



### Silicon (ppm)



### ▲ Base Number



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0904361 **Received** : 13 Mar 2024  
**Lab Number** : **02621753** **Tested** : 13 Mar 2024  
**Unique Number** : 5746872 **Diagnosed** : 14 Mar 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.

**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: