

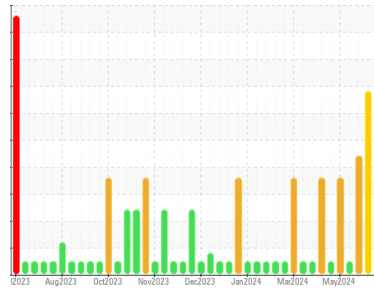


# OIL ANALYSIS REPORT



Machine Id  
**LIDM06BE (S/N G2J-00165)**  
 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>WC0904257</b>	WC0904272	WC0904316
Sample Date	Client Info	<b>10 Jun 2024</b>	27 May 2024	21 May 2024
Machine Age	hrs	<b>28907</b>	28623	28478
Oil Age	hrs	<b>261</b>	401	256
Oil Changed	Client Info	<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status		<b>ABNORMAL</b>	SEVERE	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	<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>9</b>	▲ 17	● 8
Chromium	ppm ASTM D5185(m) >3	<b>0</b>	0	0
Nickel	ppm ASTM D5185(m)	<b>0</b>	0	0
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>2</b>	1	<1
Tin	ppm ASTM D5185(m) >3	<b>2</b>	3	2
Antimony	ppm ASTM D5185(m)	<b>3</b>	6	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	5
Barium	ppm ASTM D5185(m)	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Manganese	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185(m)	<b>10</b>	12	13
Calcium	ppm ASTM D5185(m)	<b>1753</b>	1806	1743
Phosphorus	ppm ASTM D5185(m)	<b>245</b>	238	239
Zinc	ppm ASTM D5185(m)	<b>298</b>	317	298
Sulfur	ppm ASTM D5185(m)	<b>2807</b>	3348	3088
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

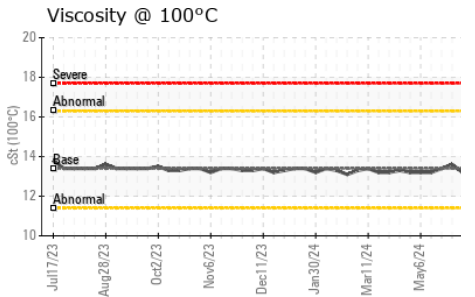
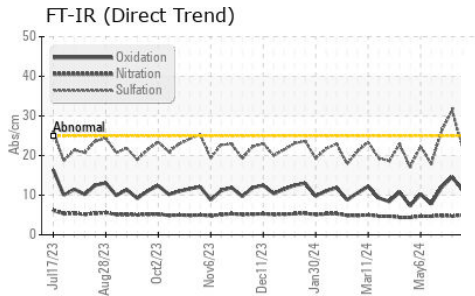
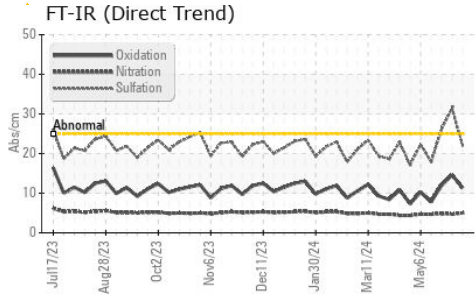
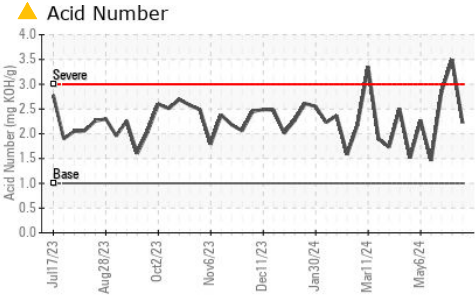
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >180	<b>102</b>	151	97
Sodium	ppm ASTM D5185(m) >20	<b>2</b>	2	1
Potassium	ppm ASTM D5185(m) >20	<b>2</b>	2	1

## 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>	4.7	4.8
Sulfation	Abs./1mm ASTM D7415*	<b>22.0</b>	▲ 31.5	26.2



# OIL ANALYSIS REPORT

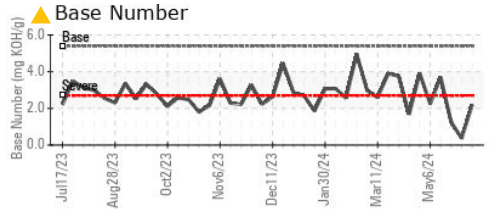
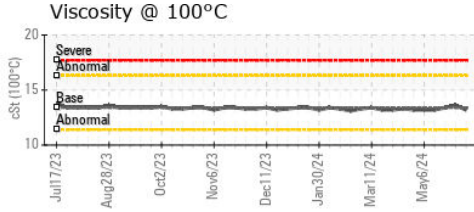
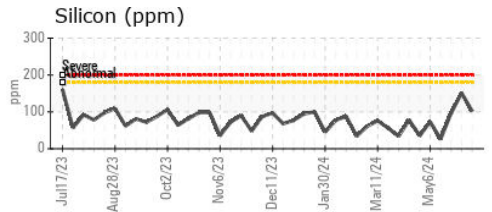
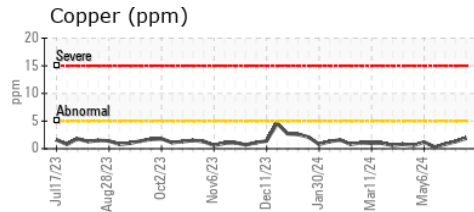
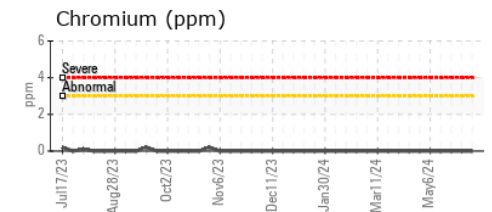
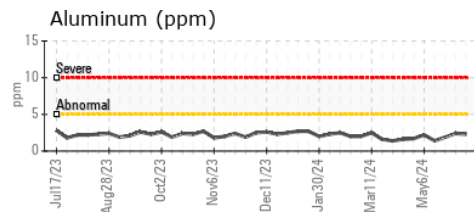
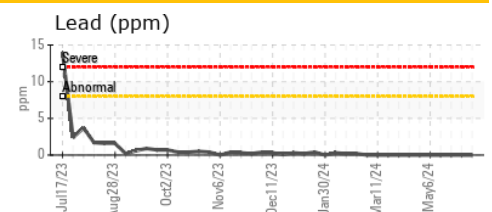
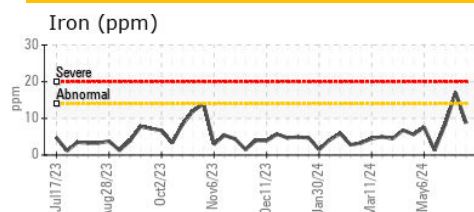


FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	<b>11.3</b>	14.6	12.0
Acid Number (AN)	mg KOH/g	ASTM D974*	<b>2.22</b>	3.50	2.85
Base Number (BN)	mg KOH/g	ASTM D2896*	<b>2.19</b>	0.37	1.25
i-pH	Scale 0-14	ASTM D7946*	<b>4.45</b>	1.60	3.52

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	---	---
Precipitate	scalar	Visual*	NONE	---	---
Silt	scalar	Visual*	NONE	---	---
Debris	scalar	Visual*	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	---	---
Appearance	scalar	Visual*	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	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)	<b>13.2</b>	13.6	13.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0904257 **Received** : 11 Jun 2024  
**Lab Number** : **02641098** **Tested** : 12 Jun 2024  
**Unique Number** : 5798637 **Diagnosed** : 12 Jun 2024 - Kevin Marson  
**Test Package** : MOB 2 ( Additional Tests: i-pH, TAN Auto, TAN Man, Visual )

**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.