

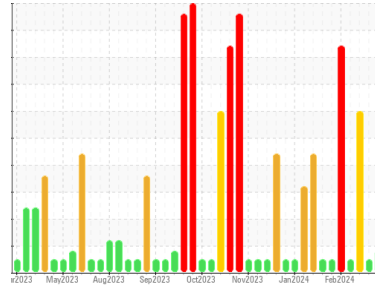


OIL ANALYSIS REPORT



Machine Id
LIDM01BE (S/N GZJ-00169)
 Component
Biogas Engine
 Fluid
CHEVRON HDAX 9500 GAS ENGINE OIL 40 (540 LTR)

Sample Rating Trend



WEAR



DIAGNOSIS

Recommendation

Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

Wear

Usure de cylindre, de vilebrequin ou d'arbre à cames.

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		WC0904348	WC0904360	WC0874440
Sample Date	Client Info		11 Mar 2024	04 Mar 2024	26 Feb 2024
Machine Age	hrs	Client Info	5123	97579	4808
Oil Age	hrs	Client Info	259	97579	231
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status			ABNORMAL	NORMAL	SEVERE

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	<1.0	<1.0
Water	WC Method	>0.1	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	---	0
Iron	ppm	ASTM D5185(m) >15	▲ 16	4	▲ 22
Chromium	ppm	ASTM D5185(m) >4	0	0	0
Nickel	ppm	ASTM D5185(m) >2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m) >5	0	0	<1
Aluminum	ppm	ASTM D5185(m) >6	2	2	2
Lead	ppm	ASTM D5185(m) >9	<1	0	<1
Copper	ppm	ASTM D5185(m) >6	1	<1	2
Tin	ppm	ASTM D5185(m) >4	2	<1	2
Antimony	ppm	ASTM D5185(m)	1	<1	2
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	4	4	4
Barium	ppm	ASTM D5185(m)	0	0	0
Molybdenum	ppm	ASTM D5185(m)	2	1	2
Manganese	ppm	ASTM D5185(m)	0	0	0
Magnesium	ppm	ASTM D5185(m)	13	13	13
Calcium	ppm	ASTM D5185(m)	1683	1668	1777
Phosphorus	ppm	ASTM D5185(m)	244	243	251
Zinc	ppm	ASTM D5185(m)	290	285	296
Sulfur	ppm	ASTM D5185(m)	2504	1935	2713
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >181	76	34	94
Sodium	ppm	ASTM D5185(m)	<1	<1	<1
Potassium	ppm	ASTM D5185(m) >20	2	1	2

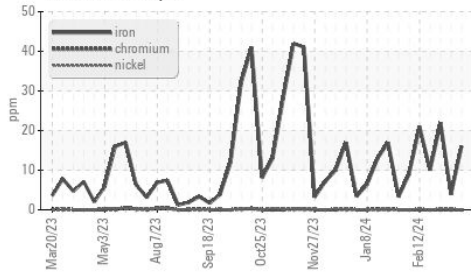
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0	0	0
Nitration	Abs/cm	ASTM D7624* >20	4.6	4.6	4.7
Sulfation	Abs./1mm	ASTM D7415* >30	20.1	17.3	21.1

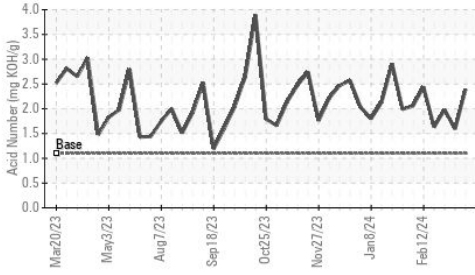


OIL ANALYSIS REPORT

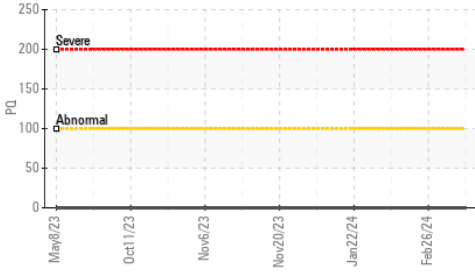
▲ Ferrous Alloys



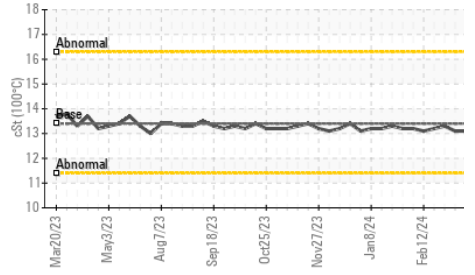
Acid Number



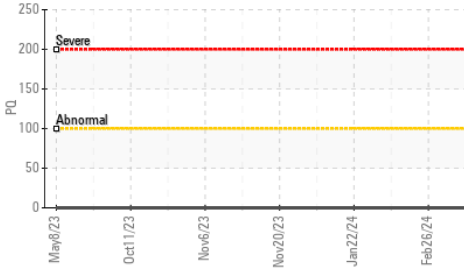
PQ



Viscosity @ 100°C



PQ



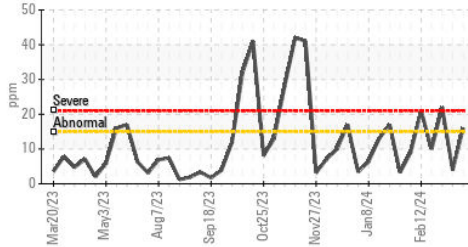
FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	8.9	7.7	9.7
Acid Number (AN)	mg KOH/g	ASTM D974*	1.1	2.39	1.59	1.98
Base Number (BN)	mg KOH/g	ASTM D2896*	5.4	3.28	4.17	3.05
i-pH	Scale 0-14	ASTM D7946*	<4.5	4.65	5.78	4.86

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

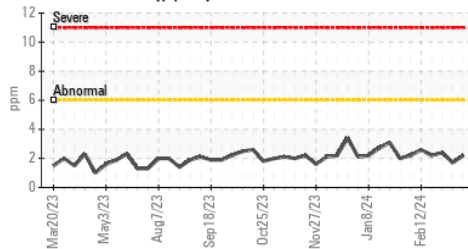
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	13.4	13.1	13.1	13.3

GRAPHS

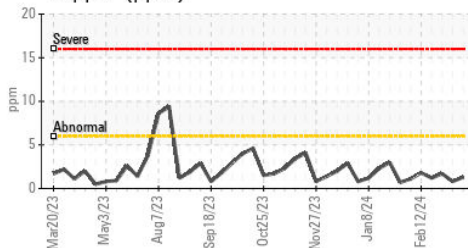
▲ Iron (ppm)



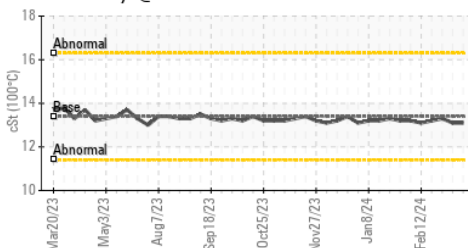
Aluminum (ppm)



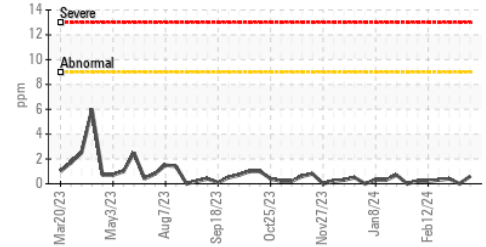
Copper (ppm)



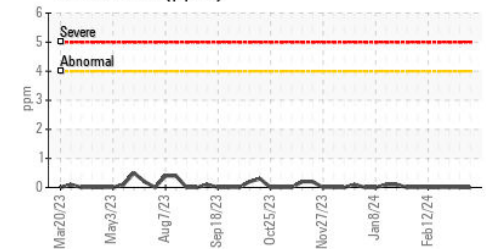
Viscosity @ 100°C



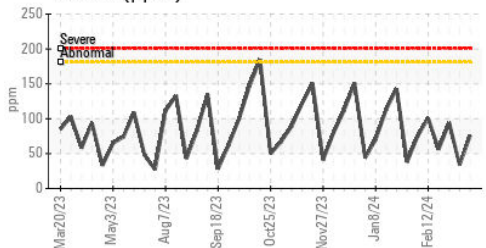
Lead (ppm)



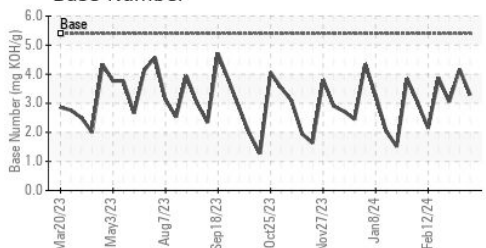
Chromium (ppm)



Silicon (ppm)



Base Number



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0904348 **Received** : 13 Mar 2024
Lab Number : **02621750** **Tested** : 13 Mar 2024
Unique Number : 5746869 **Diagnosed** : 14 Mar 2024 - Kevin Marson
Test Package : MOB 2 (Additional Tests: i-pH, PQ, 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: