

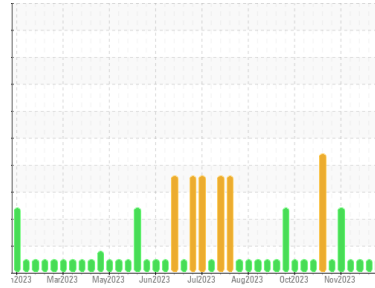


OIL ANALYSIS REPORT



Machine Id
LIDM04BE (S/N GZJ00279)
 Component
Biogas Engine
 Fluid
CHEVRON HDAX 6500 LFG GAS ENGINE OIL (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		WC0874378	WC0874394	WC0874386
Sample Date	Client Info		11 Dec 2023	04 Dec 2023	27 Nov 2023
Machine Age	hrs	Client Info	85251	47601	47541
Oil Age	hrs	Client Info	280	114	54
Oil Changed	Client Info		Not Changed	Not Changed	Not Changed
Sample Status			NORMAL	NORMAL	NORMAL

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	
Iron	ppm	ASTM D5185(m)	>15	4	5	4
Chromium	ppm	ASTM D5185(m)	>4	0	0	0
Nickel	ppm	ASTM D5185(m)	>2	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>5	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>6	2	2	2
Lead	ppm	ASTM D5185(m)	>9	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>6	2	1	<1
Tin	ppm	ASTM D5185(m)	>4	1	<1	<1
Antimony	ppm	ASTM D5185(m)		2	<1	<1
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)		5	6	6
Barium	ppm	ASTM D5185(m)		<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)		3	3	3
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		16	15	15
Calcium	ppm	ASTM D5185(m)		1767	1633	1696
Phosphorus	ppm	ASTM D5185(m)		256	236	239
Zinc	ppm	ASTM D5185(m)		317	291	283
Sulfur	ppm	ASTM D5185(m)		2779	2096	1716
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

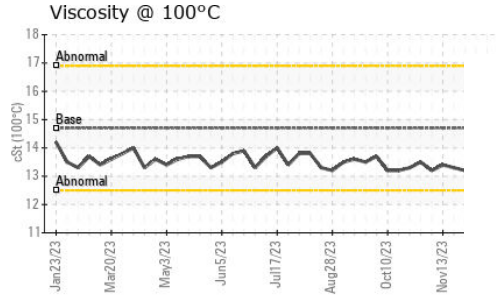
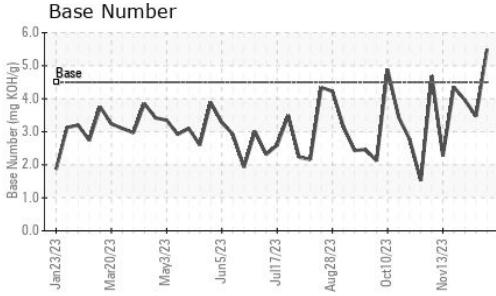
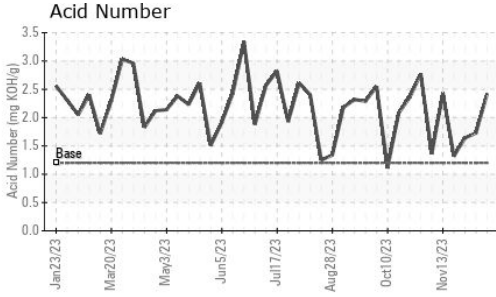
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>181	72	50	37
Sodium	ppm	ASTM D5185(m)		10	14	16
Potassium	ppm	ASTM D5185(m)	>20	<1	1	<1

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	5.8	5.4	5.3
Sulfation	Abs./1mm	ASTM D7415*	>30	22.3	18.9	17.2



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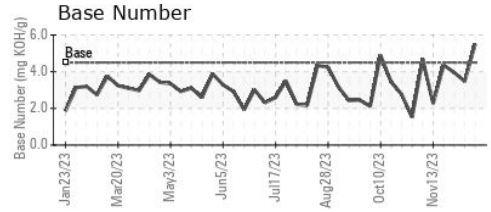
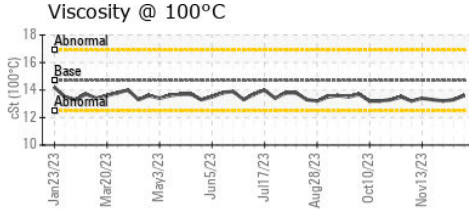
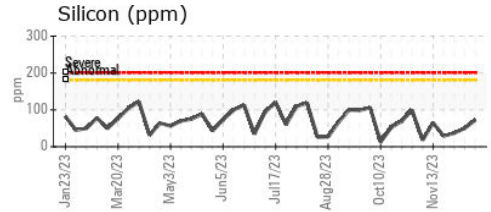
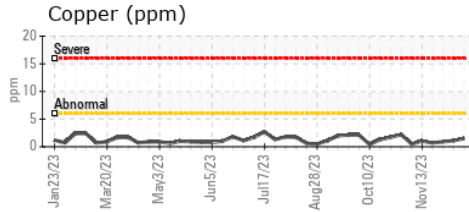
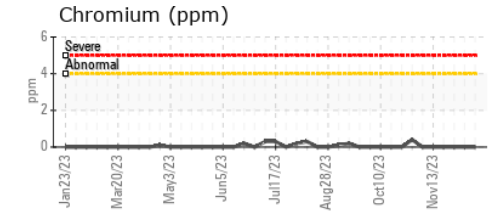
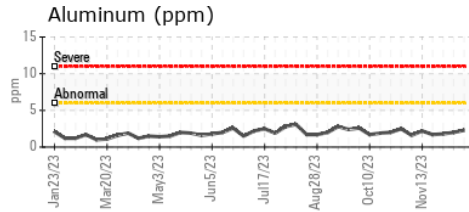
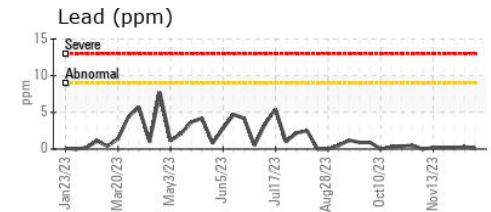
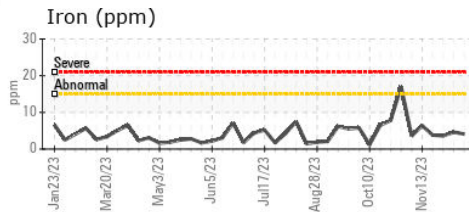


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	13.5	10.0	8.8
Acid Number (AN)	mg KOH/g	ASTM D974*	1.2	2.42	1.73	1.64
Base Number (BN)	mg KOH/g	ASTM D2896*	4.5	5.50	3.47	3.96
i-pH	Scale 0-14	ASTM D7946*	<4.5	4.93	5.64	6.36

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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)	14.7	13.6	13.3	13.2

GRAPHS



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0874378 **Received** : 14 Dec 2023
Lab Number : 02603167 **Diagnosed** : 20 Dec 2023
Unique Number : 5696252 **Diagnostician** : 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.