

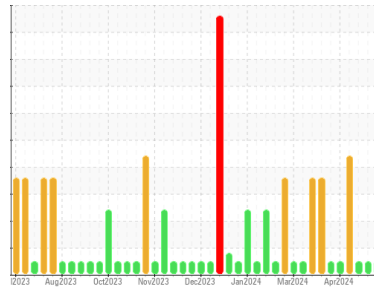


OIL ANALYSIS REPORT



Machine Id
LIDM04BE (S/N GZJ00279)
 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		WC0904255	WC0904270	WC0904304
Sample Date	Client Info		10 Jun 2024	03 Jun 2024	13 May 2024
Machine Age	hrs	Client Info	50928	50763	50549
Oil Age	hrs	Client Info	269	104	81
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
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		NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >14	5	7	6
Chromium	ppm	ASTM D5185(m) >3	0	<1	0
Nickel	ppm	ASTM D5185(m)	<1	0	0
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >5	3	4	2
Lead	ppm	ASTM D5185(m) >8	0	0	0
Copper	ppm	ASTM D5185(m) >5	2	2	<1
Tin	ppm	ASTM D5185(m) >3	<1	<1	<1
Antimony	ppm	ASTM D5185(m)	<1	<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)	6	4	5
Barium	ppm	ASTM D5185(m)	0	0	0
Molybdenum	ppm	ASTM D5185(m)	4	<1	<1
Manganese	ppm	ASTM D5185(m)	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	10	12	12
Calcium	ppm	ASTM D5185(m)	1731	1688	1657
Phosphorus	ppm	ASTM D5185(m)	242	248	239
Zinc	ppm	ASTM D5185(m)	297	287	288
Sulfur	ppm	ASTM D5185(m)	2203	2334	2365
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >180	46	34	35
Sodium	ppm	ASTM D5185(m) >20	<1	2	<1
Potassium	ppm	ASTM D5185(m) >20	2	1	1

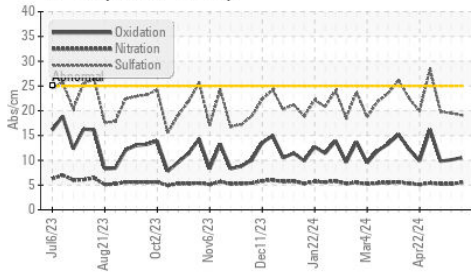
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0	0	0
Nitration	Abs/cm	ASTM D7624*	5.5	5.2	5.2
Sulfation	Abs./1mm	ASTM D7415*	19.1	19.5	19.8

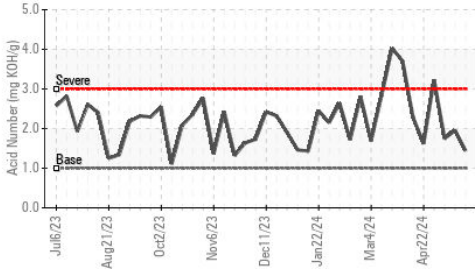


OIL ANALYSIS REPORT

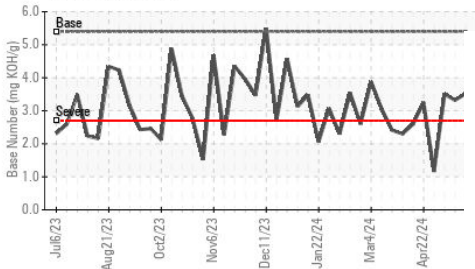
FT-IR (Direct Trend)



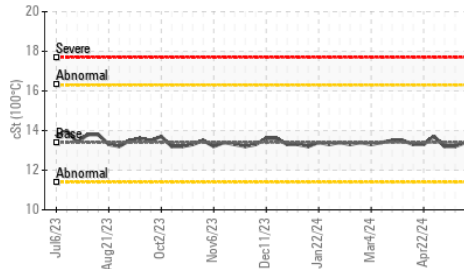
Acid Number



Base Number



Viscosity @ 100°C

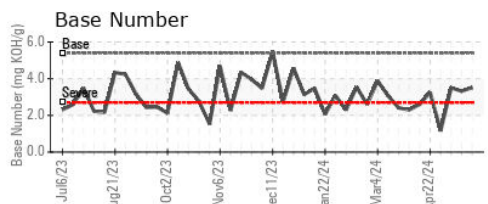
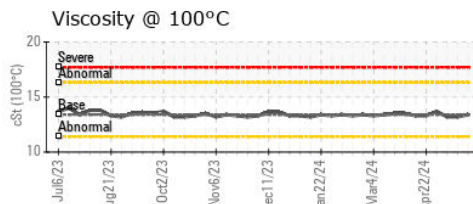
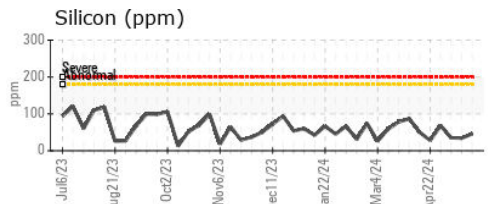
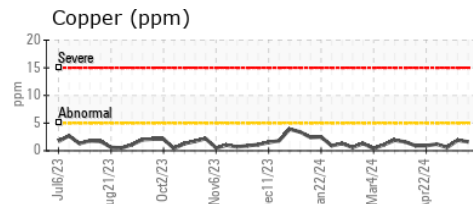
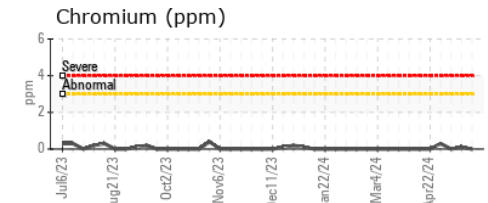
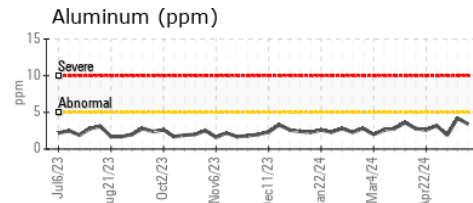
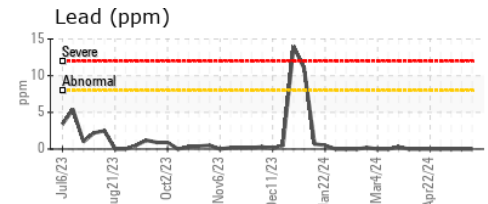
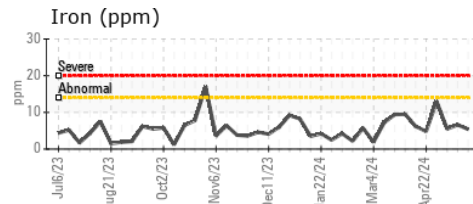


FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	10.5	10.1	9.8
Acid Number (AN)	mg KOH/g	ASTM D974*	1.44	1.95	1.75
Base Number (BN)	mg KOH/g	ASTM D2896*	3.52	3.32	3.50
i-pH	Scale 0-14	ASTM D7946*	5.33	4.90	5.42

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	VLITE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	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)	13.4	13.2	13.2

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0904255 **Received** : 11 Jun 2024
Lab Number : **02641100** **Tested** : 12 Jun 2024
Unique Number : 5798639 **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.