

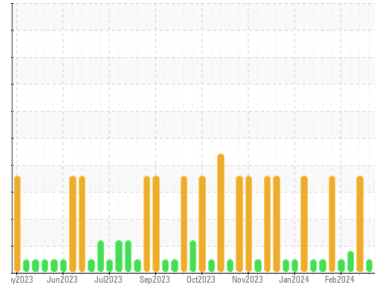


OIL ANALYSIS REPORT



Machine Id
LIDM03BE (S/N GZJ-00163)
 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		WC0904342	WC0904350	WC0904354
Sample Date	Client Info		18 Mar 2024	11 Mar 2024	04 Mar 2024
Machine Age	hrs	Client Info	43224	43055	42942
Oil Age	hrs	Client Info	205	36	430
Oil Changed	Client Info		Not Chngd	Changed	Not Chngd
Sample Status			ABNORMAL	NORMAL	ABNORMAL

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	6	3	10
Chromium	ppm	ASTM D5185(m)	>4	0	0	<1
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	0
Aluminum	ppm	ASTM D5185(m)	>6	2	2	3
Lead	ppm	ASTM D5185(m)	>9	0	<1	<1
Copper	ppm	ASTM D5185(m)	>6	1	<1	3
Tin	ppm	ASTM D5185(m)	>4	1	<1	2
Antimony	ppm	ASTM D5185(m)		2	0	3
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	3
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		1	1	2
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		13	12	13
Calcium	ppm	ASTM D5185(m)		1804	1661	1841
Phosphorus	ppm	ASTM D5185(m)		258	243	259
Zinc	ppm	ASTM D5185(m)		299	287	314
Sulfur	ppm	ASTM D5185(m)		3310	2060	3515
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>181	68	27	102
Sodium	ppm	ASTM D5185(m)		<1	<1	1
Potassium	ppm	ASTM D5185(m)	>20	2	3	2

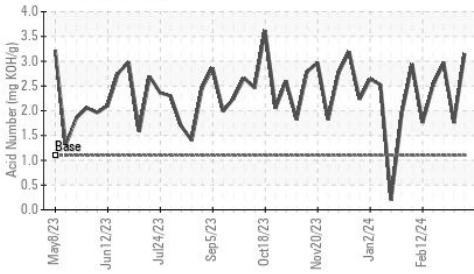
INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	5.1	4.7	5.5
Sulfation	Abs.1mm	ASTM D7415*	>30	22.8	16.5	25.6

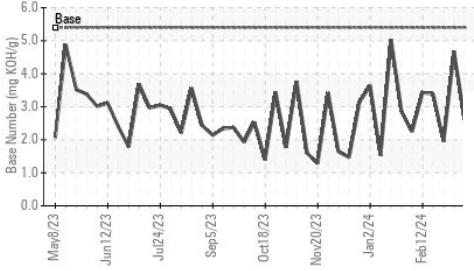


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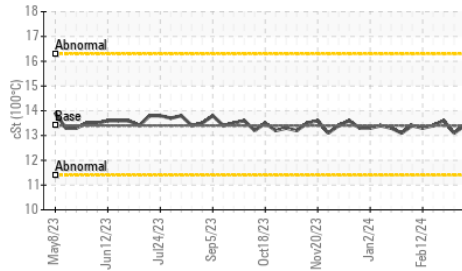
▲ Acid Number



▲ Base Number



Viscosity @ 100°C



FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	12.1	7.6	15.0
Acid Number (AN)	mg KOH/g	ASTM D974*	1.1	▲ 3.15	1.76	▲ 2.97
Base Number (BN)	mg KOH/g	ASTM D2896*	5.4	▲ 2.61	4.67	▲ 1.95
i-pH	Scale 0-14	ASTM D7946*	<4.5	▲ 4.13	5.43	▲ 3.97

VISUAL

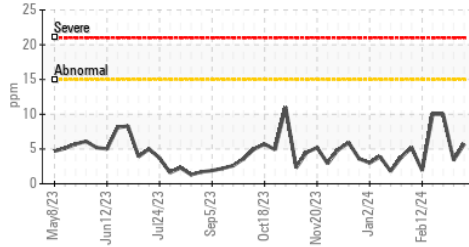
	method	limit/base	current	history1	history2	
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES

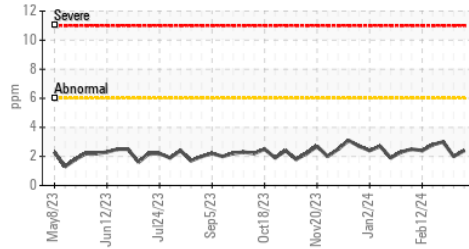
	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	13.4	13.4	13.1	13.6

GRAPHS

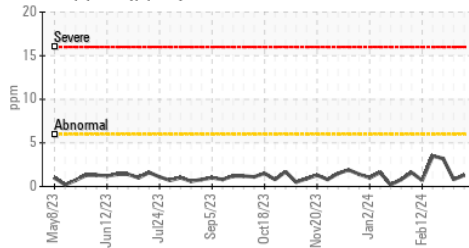
Iron (ppm)



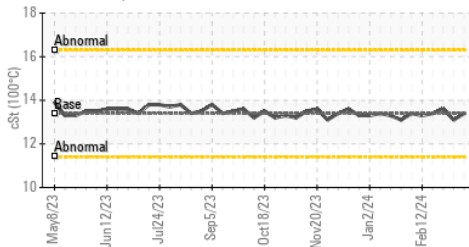
Aluminum (ppm)



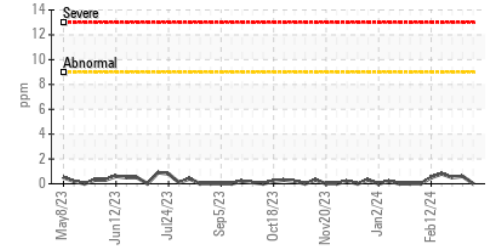
Copper (ppm)



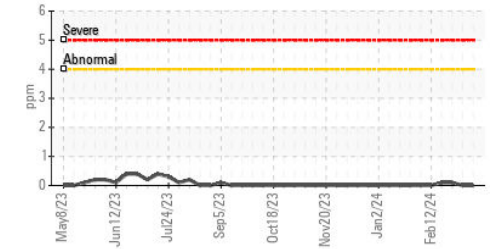
Viscosity @ 100°C



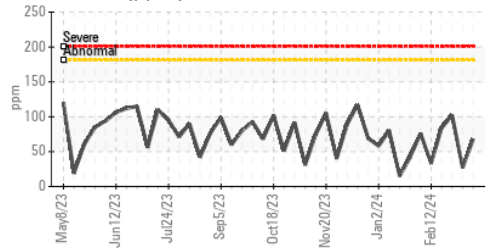
Lead (ppm)



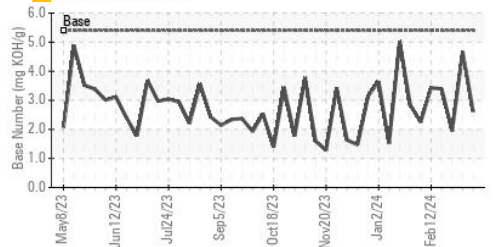
Chromium (ppm)



Silicon (ppm)



▲ Base Number



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0904342
Lab Number : 02623031
Unique Number : 5748150
Test Package : MOB 2 (Additional Tests: i-pH, TAN Auto, TAN Man)

Received : 19 Mar 2024
Tested : 20 Mar 2024
Diagnosed : 20 Mar 2024 - Kevin Marson

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.

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