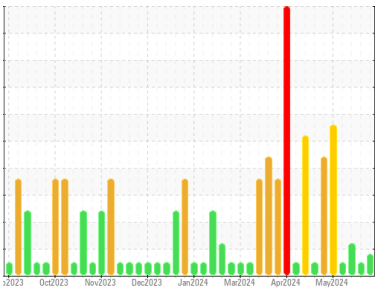
OIL ANALYSIS REPORT

Machine Id
LIDM07BE (S/N GZJ00166)
Component
Biogas Engine
Fluid
CHEVRON HDAX 9500 GAS ENGINE OIL 40 (540 LTR)

Sample Rating Trend



WEAR

DIAGNOSIS

Recommendation
Aucune mesure corrective n`est recommandée pour l`instant. Nous vous recommandons d`échantillonner de nouveau dès que possible afin de contrôler la situation.

Wear
Nous avons noté une forte hausse du niveau de fer. Le bas indice ferreux (PQ) indique que l'usure ferreuse est due à de la corrosion. Les taux d`usure de tous les autres 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		**WC0904265**	WC0954714	WC0904258
Sample Date		Client Info		**02 Jul 2024**	17 Jun 2024	10 Jun 2024
Machine Age	hrs	Client Info		**29974**	29760	29598
Oil Age	hrs	Client Info		**278**	64	281
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**ATTENTION**	NORMAL	ABNORMAL

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
PQ		ASTM D8184*		**0**	---	---
Iron	ppm	ASTM D5185(m)	>14	**10**	2	8
Chromium	ppm	ASTM D5185(m)	>3	**<1**	0	0
Nickel	ppm	ASTM D5185(m)		**<1**	<1	0
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>5	**3**	2	3
Lead	ppm	ASTM D5185(m)	>8	**0**	0	0
Copper	ppm	ASTM D5185(m)	>5	**2**	<1	2
Tin	ppm	ASTM D5185(m)	>3	**2**	<1	2
Antimony	ppm	ASTM D5185(m)		**2**	<1	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

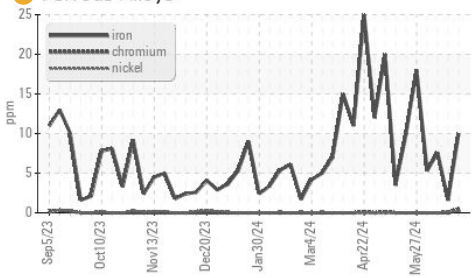
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**6**	6	4
Barium	ppm	ASTM D5185(m)		**0**	0	0
Molybdenum	ppm	ASTM D5185(m)		**5**	5	0
Manganese	ppm	ASTM D5185(m)		**<1**	<1	<1
Magnesium	ppm	ASTM D5185(m)		**9**	9	11
Calcium	ppm	ASTM D5185(m)		**1706**	1673	1718
Phosphorus	ppm	ASTM D5185(m)		**234**	234	237
Zinc	ppm	ASTM D5185(m)		**295**	287	294
Sulfur	ppm	ASTM D5185(m)		**2338**	1920	2986
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>180	**93**	30	98
Sodium	ppm	ASTM D5185(m)	>20	**1**	<1	1
Potassium	ppm	ASTM D5185(m)	>20	**3**	2	1

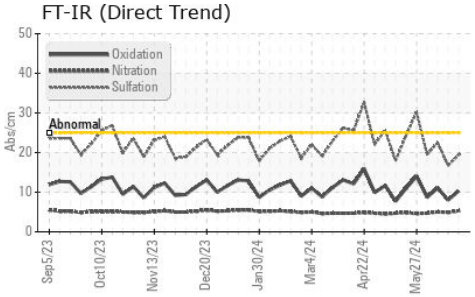
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*		**5.3**	4.9	5.0
Sulfation	Abs/.1mm	ASTM D7415*		**19.3**	16.8	22.5

OIL ANALYSIS REPORT

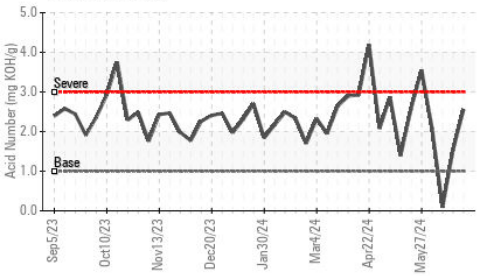
Ferrous Alloys



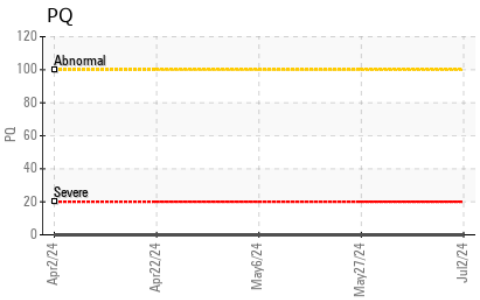
FT-IR (Direct Trend)



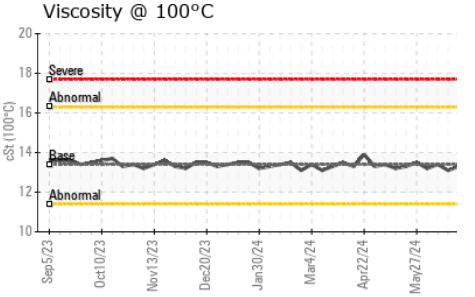
Acid Number



PQ



Viscosity @ 100°C



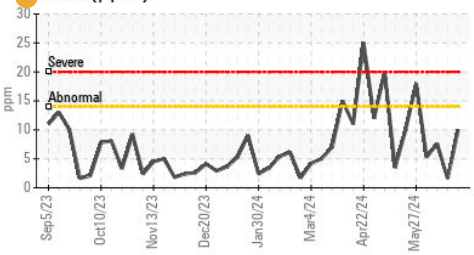
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*		**10.3**	8.0	11.1
Acid Number (AN)	mg KOH/g	ASTM D974*	1.0	**2.56**	1.54	0.09
Base Number (BN)	mg KOH/g	ASTM D2896*	5.4	**3.55**	4.05	2.03
i-pH	Scale 0-14	ASTM D7946*	<4.5	**4.99**	5.88	▲ 4.26

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

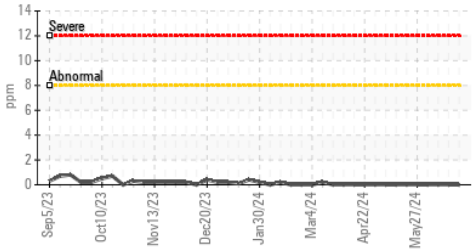
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	13.4	**13.3**	13.1	13.4

GRAPHS

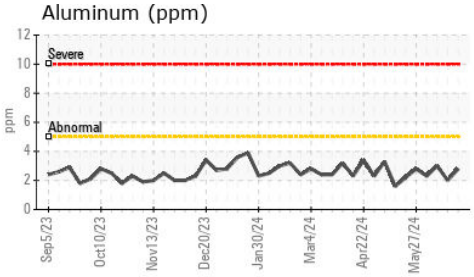
Iron (ppm)



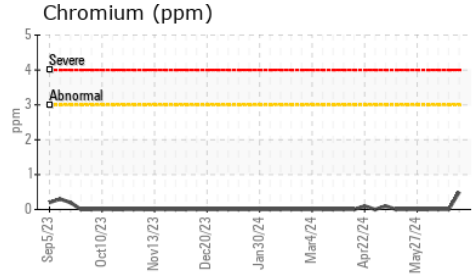
Lead (ppm)



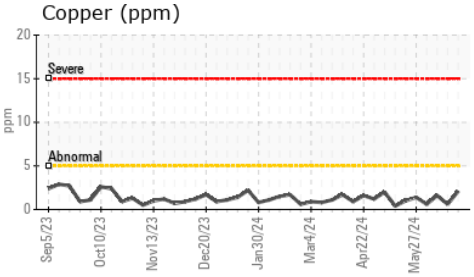
Aluminum (ppm)



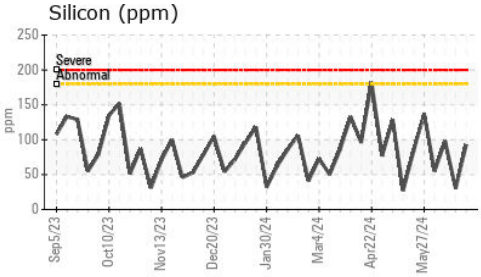
Chromium (ppm)



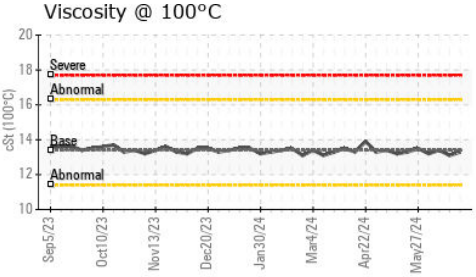
Copper (ppm)



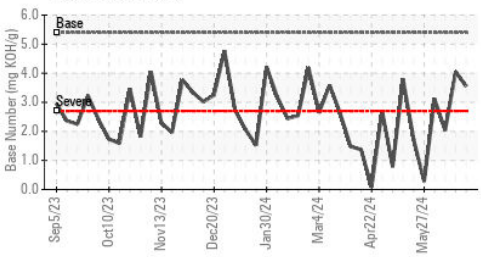
Silicon (ppm)



Viscosity @ 100°C



Base Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0904265 **Received** : 03 Jul 2024
Lab Number : 02645247 **Tested** : 09 Jul 2024
Unique Number : 5802786 **Diagnosed** : 09 Jul 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.

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