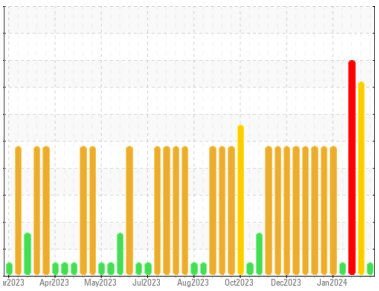
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
DECM02BE (S/N 4EK00128)
Component
Biogas Engine
Fluid
CHEVRON HDAX 9500 GAS ENGINE OIL 40 (100 GAL)

DIAGNOSIS

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0732894**	WC0732890	WC0732898
Sample Date		Client Info		**03 Apr 2024**	12 Mar 2024	23 Feb 2024
Machine Age	hrs	Client Info		**60557**	60043	59627
Oil Age	hrs	Client Info		**58088**	58088	58088
Oil Changed		Client Info		**Changed**	Oil Added	Oil Added
Sample Status				**NORMAL**	SEVERE	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	**<1.0**	<1.0	<1.0
Water		WC Method	>.11	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	▲ 0.20

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>15	**1**	4	8
Chromium	ppm	ASTM D5185m	>4	**0**	<1	0
Nickel	ppm	ASTM D5185m		**0**	<1	0
Titanium	ppm	ASTM D5185m		**0**	<1	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>6	**1**	2	0
Lead	ppm	ASTM D5185m	>9	**0**	4	5
Copper	ppm	ASTM D5185m	>6	**4**	▲ 31	▲ 22
Tin	ppm	ASTM D5185m	>4	**<1**	1	0
Vanadium	ppm	ASTM D5185m		**0**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**3**	9	32
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**6**	15	18
Manganese	ppm	ASTM D5185m		**0**	<1	0
Magnesium	ppm	ASTM D5185m		**6**	10	9
Calcium	ppm	ASTM D5185m		**1921**	1764	1793
Phosphorus	ppm	ASTM D5185m		**265**	284	294
Zinc	ppm	ASTM D5185m		**334**	371	380
Sulfur	ppm	ASTM D5185m		**2482**	2389	1806

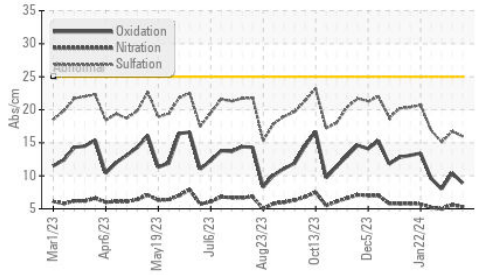
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>181	**89**	100	12
Sodium	ppm	ASTM D5185m	>21	**5**	● 66	● 101
Potassium	ppm	ASTM D5185m	>20	**0**	4	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		**0**	0	0.1
Nitration	Abs/cm	*ASTM D7624		**5.3**	5.6	5.0
Sulfation	Abs/.1mm	*ASTM D7415		**16.0**	16.7	15.1

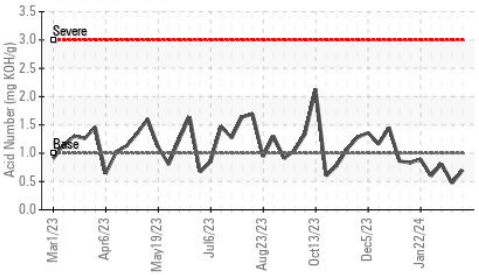
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414		**8.9**	10.4	8.0
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	**0.70**	0.47	0.81
Base Number (BN)	mg KOH/g	ASTM D2896	5.4	**4.76**	4.79	5.12

OIL ANALYSIS REPORT

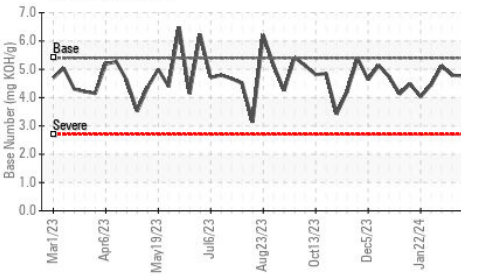
FT-IR (Direct Trend)



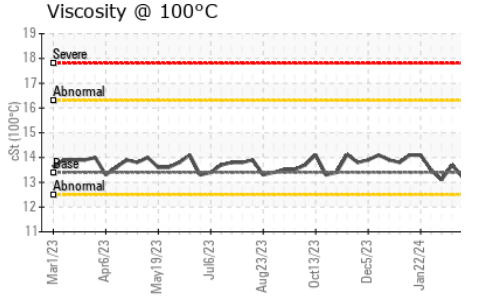
Acid Number



Base Number



Viscosity @ 100°C

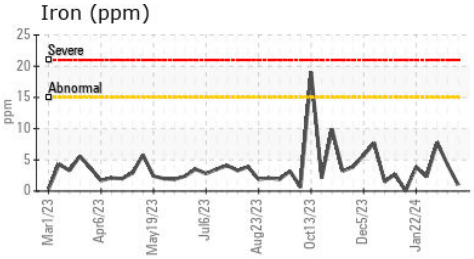


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>.11	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

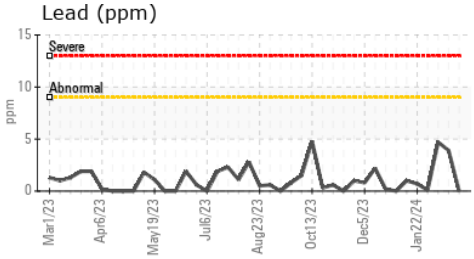
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	13.4	**13.2**	13.7	13.1

GRAPHS

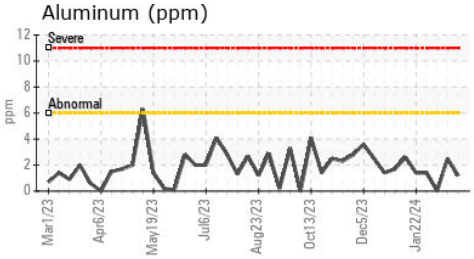
Iron (ppm)



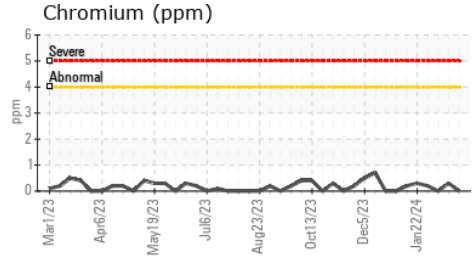
Lead (ppm)



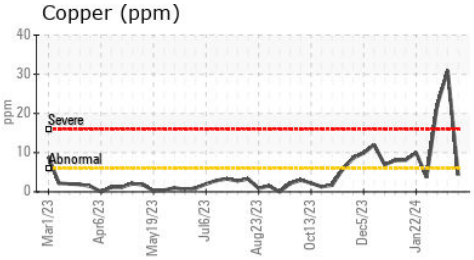
Aluminum (ppm)



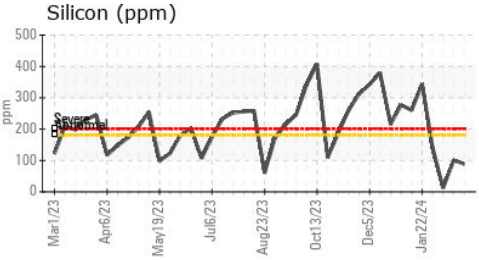
Chromium (ppm)



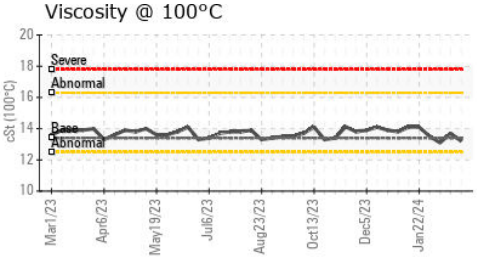
Copper (ppm)



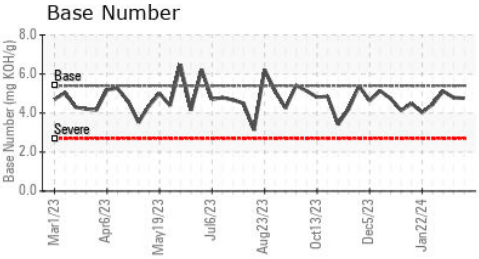
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0732894
Lab Number : 06141527
Unique Number : 10966335
Test Package : MOB 2

Received : 08 Apr 2024
Tested : 09 Apr 2024
Diagnosed : 10 Apr 2024 - Sean Felton

EDL NA Recips-Decatur
620 LANDFILL DRIVE
TRINITY, AL
US 35673
Contact: JEFF SUMMERS
jeff.summers@energydevelopments.com
T:
F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: ENETRI [WUSCAR] 06141527 (Generated: 04/10/2024 13:33:08) Rev: 1

Submitted By: JEFF SUMMERS