

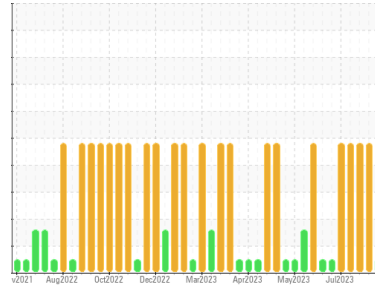


OIL ANALYSIS REPORT



Machine Id
DECM02BE (S/N 4EK00128)
 Component
Biogas Engine
 Fluid
CHEVRON HDAX 6500 LFG GAS ENGINE OIL (100 GAL)

Sample Rating Trend



NORMAL



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0732967	WC0732968	WC0732920
Sample Date	Client Info		23 Aug 2023	02 Aug 2023	24 Jul 2023
Machine Age	hrs	Client Info	55739	0	55086
Oil Age	hrs	Client Info	2	0	605
Oil Changed	Client Info		Changed	N/A	Not Changd
Sample Status			NORMAL	SEVERE	SEVERE

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>15	2	4	3
Chromium	ppm	ASTM D5185m	>4	0	0	0
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>6	1	3	1
Lead	ppm	ASTM D5185m	>9	<1	3	1
Copper	ppm	ASTM D5185m	>14	<1	3	3
Tin	ppm	ASTM D5185m	>4	<1	2	1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		9	3	2
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		4	3	3
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		16	10	14
Calcium	ppm	ASTM D5185m		1688	2149	2178
Phosphorus	ppm	ASTM D5185m		289	296	317
Zinc	ppm	ASTM D5185m		364	397	387
Sulfur	ppm	ASTM D5185m		2023	2961	3137

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>181	60	258	256
Sodium	ppm	ASTM D5185m		0	0	2
Potassium	ppm	ASTM D5185m	>20	2	2	0

INFRA-RED

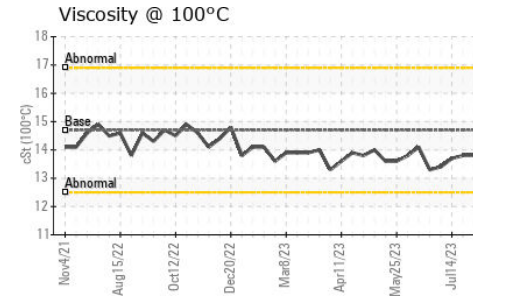
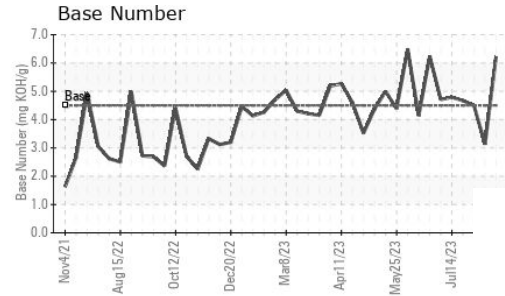
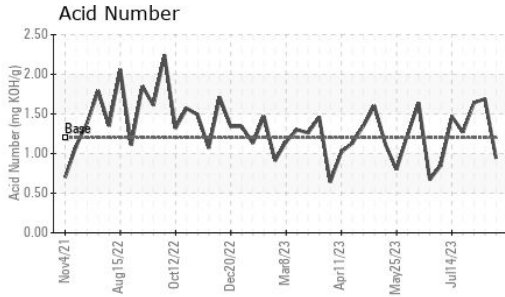
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	5.0	6.8	6.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.3	21.8	21.7

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	8.3	14.3	14.4
Acid Number (AN)	mg KOH/g	ASTM D8045	1.2	0.94	1.69	1.64
Base Number (BN)	mg KOH/g	ASTM D2896	4.5	6.22	3.13	4.50



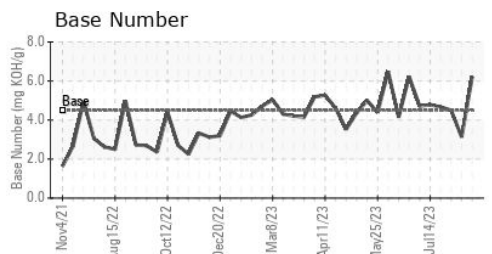
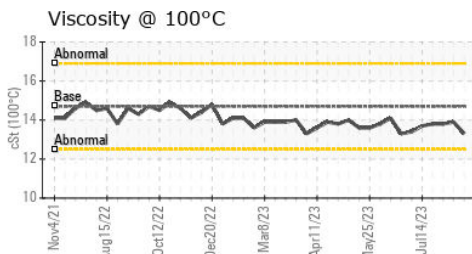
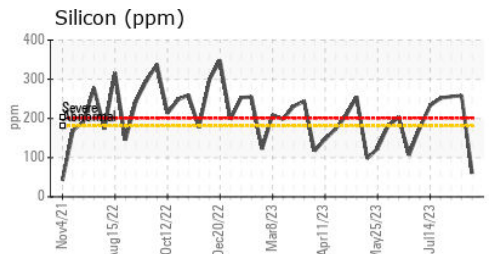
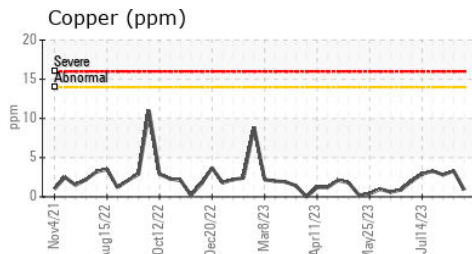
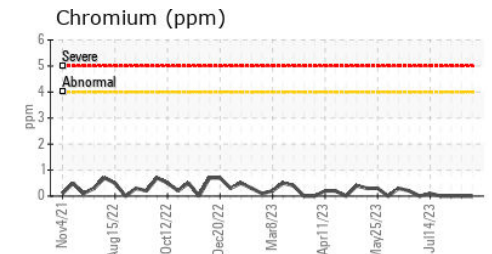
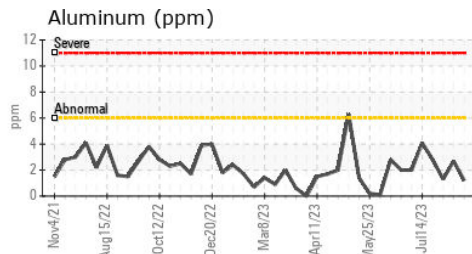
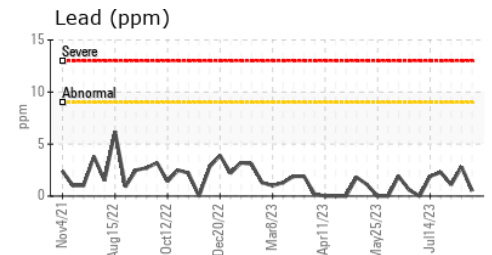
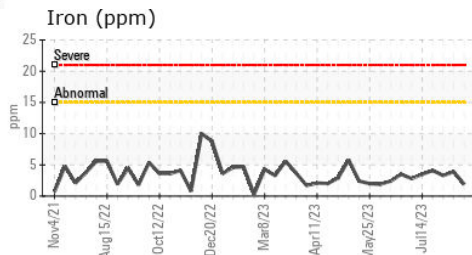
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.7	13.3	13.9	13.8

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0732967 **Received** : 25 Aug 2023
Lab Number : 05934947 **Diagnosed** : 28 Aug 2023
Unique Number : 10620218 **Diagnostician** : Sean Felton
Test Package : MOB 2

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

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)

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