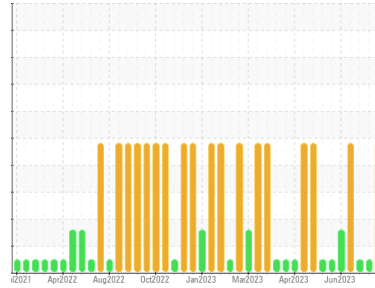




# OIL ANALYSIS REPORT

Sample Rating Trend



**DIRT**



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

## DIAGNOSIS

### Recommendation

We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

Elemental level of silicon (Si) above normal.

### Fluid Condition

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0732925</b>	WC0732928	WC0732943
Sample Date	Client Info		<b>14 Jul 2023</b>	06 Jul 2023	29 Jun 2023
Machine Age	hrs	Client Info	<b>54856</b>	54663	54500
Oil Age	hrs	Client Info	<b>375</b>	182	19
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Changed
Sample Status			<b>SEVERE</b>	NORMAL	NORMAL

## CONTAMINATION

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

## WEAR METALS

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

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>2</b>	<1	2
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	2	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>18</b>	14	6
Calcium	ppm	ASTM D5185m		<b>2016</b>	1736	1798
Phosphorus	ppm	ASTM D5185m		<b>297</b>	267	267
Zinc	ppm	ASTM D5185m		<b>392</b>	330	340
Sulfur	ppm	ASTM D5185m		<b>2874</b>	2450	2019

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>181	<b>233</b>	175	107
Sodium	ppm	ASTM D5185m		<b>0</b>	2	0
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	1

## INFRA-RED

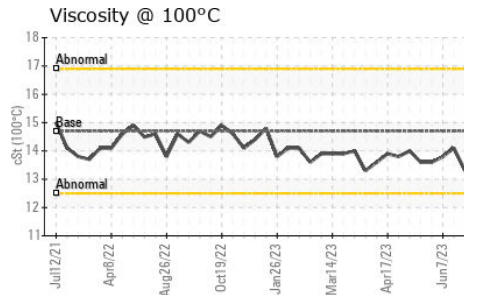
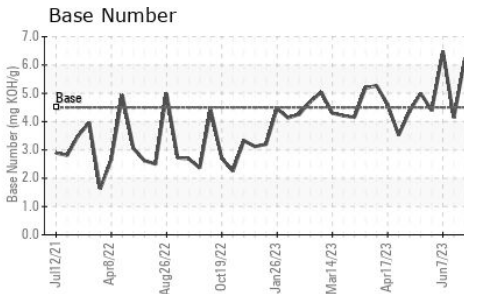
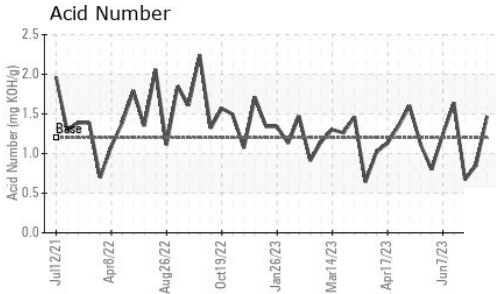
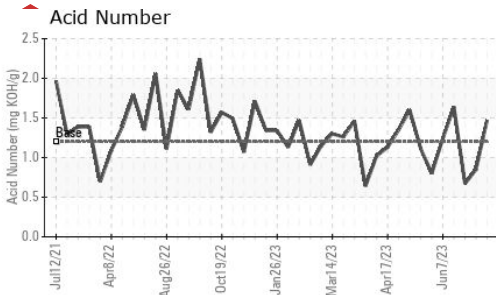
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.8</b>	6.1	5.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.6</b>	19.5	17.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.8</b>	12.3	11.0
Acid Number (AN)	mg KOH/g	ASTM D8045	1.2	<b>1.47</b>	0.85	0.67
Base Number (BN)	mg KOH/g	ASTM D2896	4.5	<b>4.79</b>	4.71	6.23



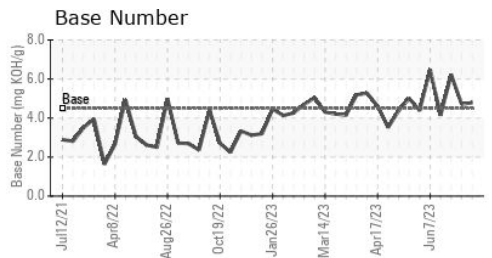
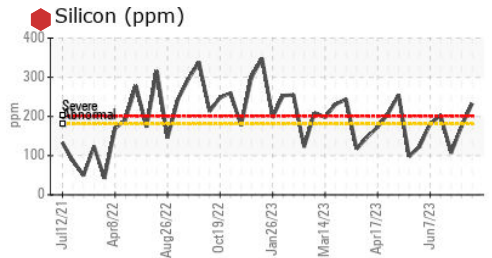
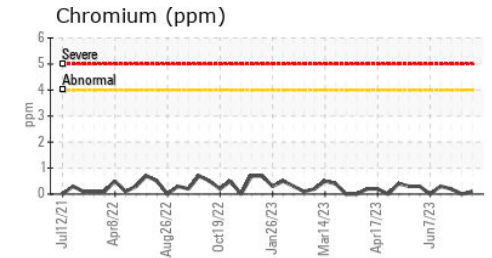
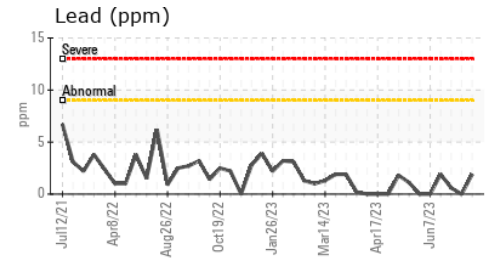
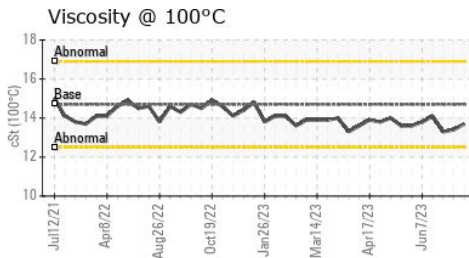
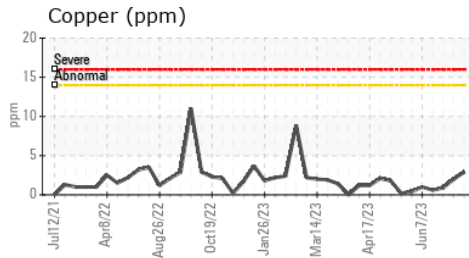
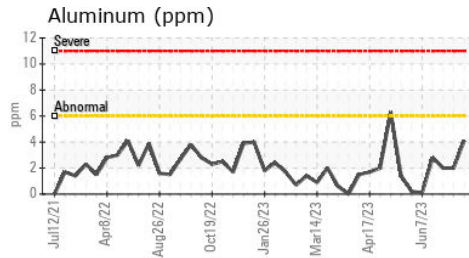
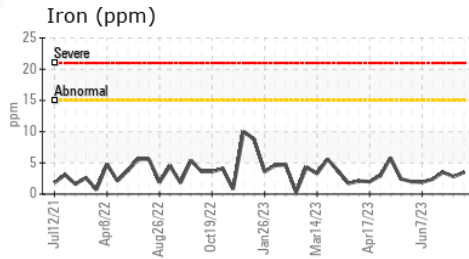
# OIL ANALYSIS REPORT



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	13.7	13.4

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0732925 Received : 18 Jul 2023  
 Lab Number : 05901450 Diagnosed : 20 Jul 2023  
 Unique Number : 10562806 Diagnostician : Jonathan Hester  
 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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F: