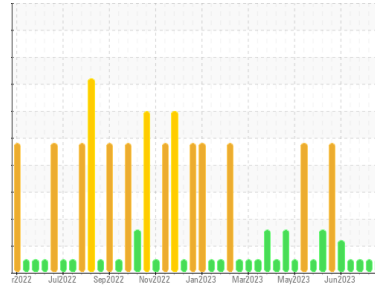




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**Brent Run CAT 1 BRRM01BE**  
 Component  
**Biogas Engine**  
 Fluid  
**CHEVRON HDAX 6500 LFG GAS ENGINE OIL (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: 600 hour sample TEO was performed on 7/12/2023 oil was changed day after )

### 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 suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0776848</b>	WC0776843	WC0776806
Sample Date	Client Info		<b>08 Aug 2023</b>	01 Aug 2023	25 Jul 2023
Machine Age	hrs	Client Info	<b>36874</b>	36706	36540
Oil Age	hrs	Client Info	<b>565</b>	397	231
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status			<b>NORMAL</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>2</b>	2
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0
Aluminum	ppm	ASTM D5185m	>6	<b>3</b>	2
Lead	ppm	ASTM D5185m	>9	<b>1</b>	<1
Copper	ppm	ASTM D5185m	>6	<b>&lt;1</b>	<1
Tin	ppm	ASTM D5185m	>4	<b>4</b>	3
Vanadium	ppm	ASTM D5185m		<b>0</b>	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>1</b>	<1
Barium	ppm	ASTM D5185m		<b>0</b>	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1
Magnesium	ppm	ASTM D5185m		<b>13</b>	9
Calcium	ppm	ASTM D5185m		<b>2007</b>	1969
Phosphorus	ppm	ASTM D5185m		<b>307</b>	279
Zinc	ppm	ASTM D5185m		<b>362</b>	356
Sulfur	ppm	ASTM D5185m		<b>3342</b>	2981

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>181	<b>171</b>	159
Sodium	ppm	ASTM D5185m		<b>2</b>	0
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1

## INFRA-RED

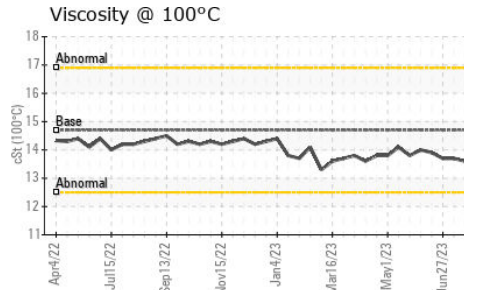
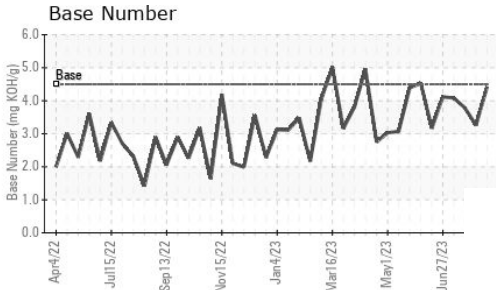
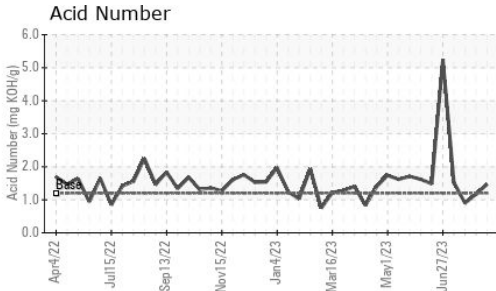
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		<b>0.1</b>	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.4</b>	6.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.9</b>	21.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.2</b>	13.4
Acid Number (AN)	mg KOH/g	ASTM D8045	1.2	<b>1.47</b>	1.17
Base Number (BN)	mg KOH/g	ASTM D2896	4.5	<b>4.42</b>	3.26



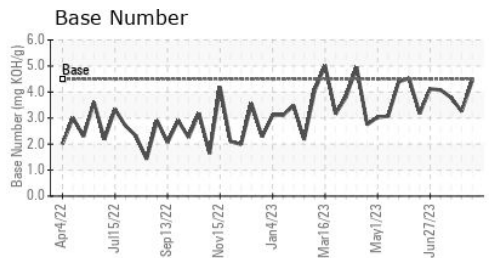
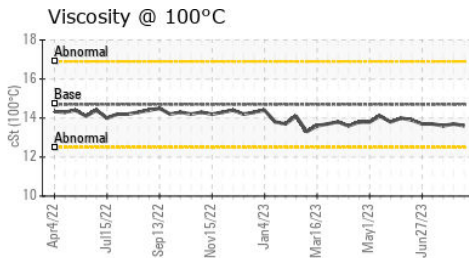
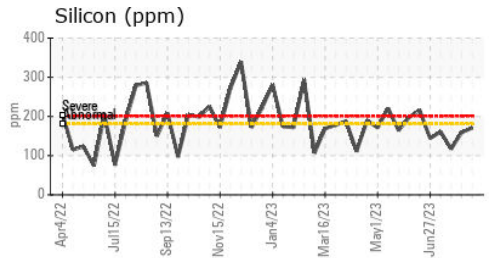
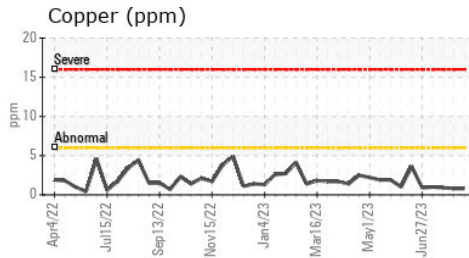
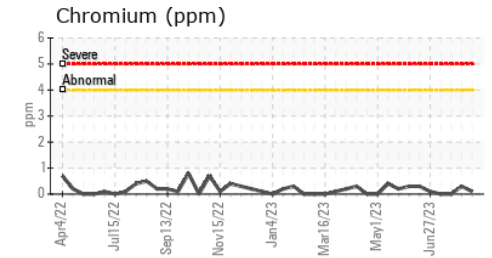
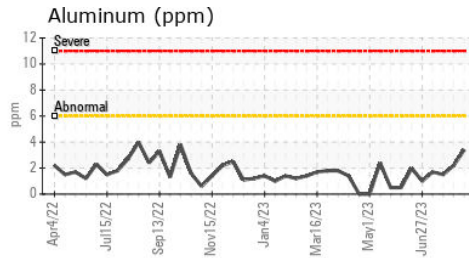
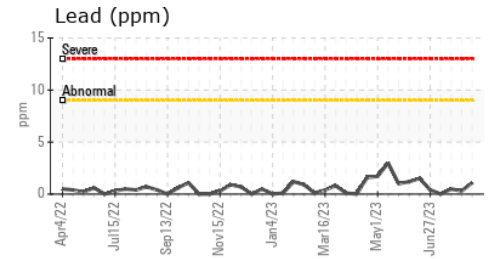
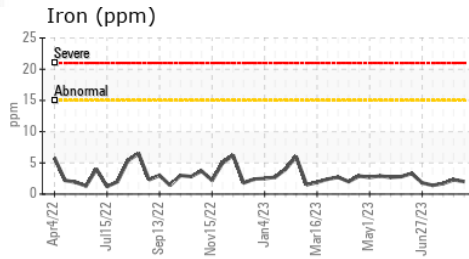
# OIL ANALYSIS REPORT



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	13.6	13.7

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0776848 Received : 11 Aug 2023  
 Lab Number : 05922383 Diagnosed : 14 Aug 2023  
 Unique Number : 10602330 Diagnostician : Don Baldrige  
 Test Package : MOB 2

**EDL NA Recips-Brent Run**  
 Brent Run Power Station, 8383 Vienna Road  
 Montrose, MI  
 US 48457-9141  
 Contact: Jenna Hiltz  
 Jenna.Hiltz@edlenergy.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)

T:  
F: