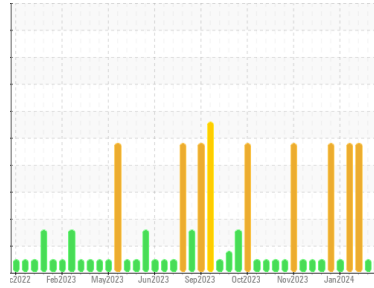




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**BRCM03BE (S/N 6ZJ00395)**

Component  
**Biogas Engine**

Fluid  
**CHEVRON HDAX 9500 GAS ENGINE OIL 40 (150 GAL)**

## DIAGNOSIS

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0760847</b>	WC0760856	WC0760859
Sample Date	Client Info			<b>21 Feb 2024</b>	12 Feb 2024	01 Feb 2024
Machine Age	hrs	Client Info		<b>91782</b>	91574	91330
Oil Age	hrs	Client Info		<b>282</b>	74	450
Oil Changed	Client Info			<b>Not Changed</b>	Not Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>4.0		<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.1		<b>NEG</b>	NEG	NEG
Glycol	WC Method			<b>NEG</b>	NEG	NEG

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

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>18</b>	17	17
Barium	ppm	ASTM D5185m		<b>5</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>10</b>	9	12
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>38</b>	34	52
Calcium	ppm	ASTM D5185m		<b>1700</b>	1600	1873
Phosphorus	ppm	ASTM D5185m		<b>289</b>	275	387
Zinc	ppm	ASTM D5185m		<b>396</b>	361	435
Sulfur	ppm	ASTM D5185m		<b>2041</b>	1546	2422

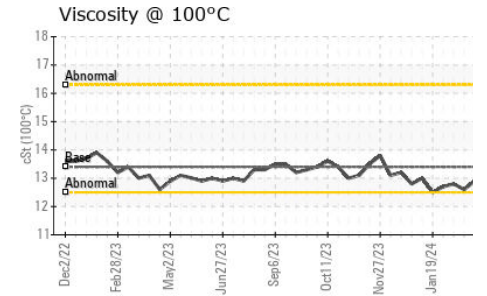
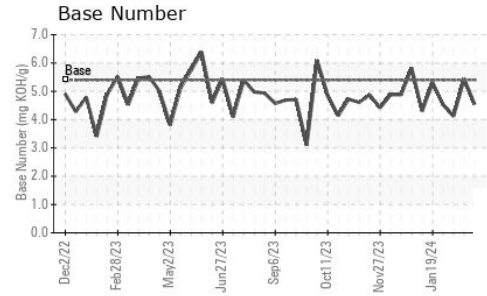
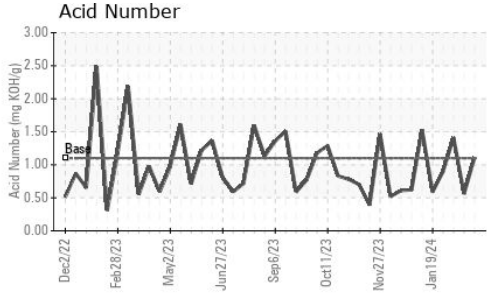
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>181	<b>174</b>	46	257
Sodium	ppm	ASTM D5185m		<b>0</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		<b>0.1</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.2</b>	5.5	6.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.9</b>	15.5	19.4

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>11.7</b>	8.7	13.5
Acid Number (AN)	mg KOH/g	ASTM D8045	1.1	<b>1.11</b>	0.56	1.41
Base Number (BN)	mg KOH/g	ASTM D2896	5.4	<b>4.54</b>	5.44	4.12



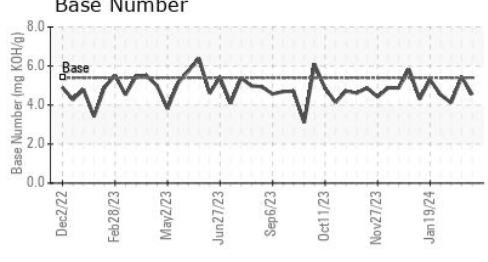
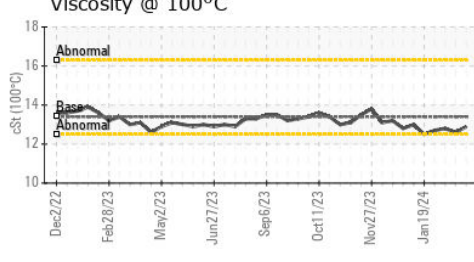
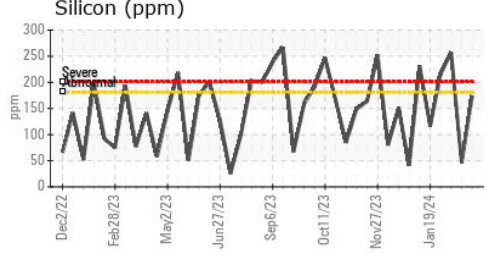
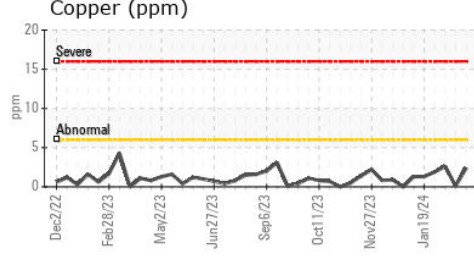
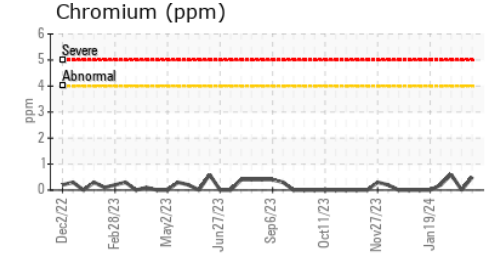
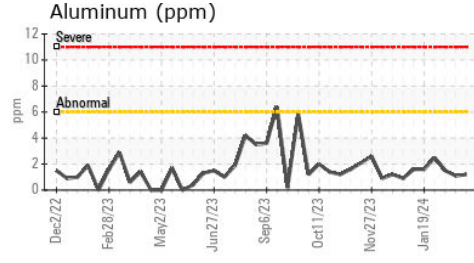
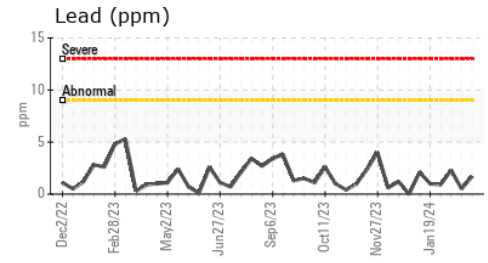
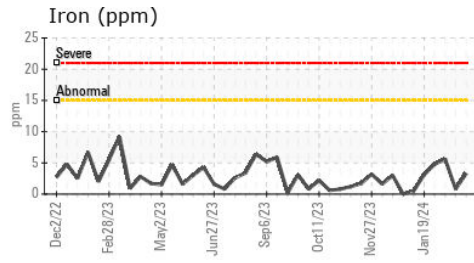
# OIL ANALYSIS REPORT



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	13.4	<b>12.9</b>	12.6	12.8

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0760847  
**Lab Number** : 06099294  
**Unique Number** : 10897524  
**Test Package** : MOB 2

**Received** : 23 Feb 2024  
**Tested** : 26 Feb 2024  
**Diagnosed** : 27 Feb 2024 - Sean Felton

**EDL NA Recips-Brown County**  
 BROWN COUNTY POWER STATION, 9427 BEYERS RD  
 GEORGETOWN, OH  
 US 45121  
 Contact: MITCHELL BUTLER  
 Mitchell.Butler@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)

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