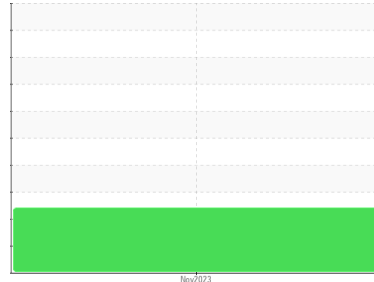


# OIL ANALYSIS REPORT

Sample Rating Trend



**DEGRADATION**



Machine Id  
**RESIDUE 2**  
 Component  
**Biogas Engine**  
 Fluid  
**{not provided} (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

### ▲ Fluid Condition

The AN level is above the recommended limit. The BN level is low.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PCA0118694</b>	---	---
Sample Date	Client Info		<b>29 Nov 2023</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	---	---
Glycol	WC Method		<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >45	<b>17</b>	---	---
Chromium	ppm	ASTM D5185m >2	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m >2	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m >5	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >10	<b>1</b>	---	---
Lead	ppm	ASTM D5185m >5	<b>0</b>	---	---
Copper	ppm	ASTM D5185m >14	<b>2</b>	---	---
Tin	ppm	ASTM D5185m >13	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	---	---
Barium	ppm	ASTM D5185m	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m	<b>4</b>	---	---
Calcium	ppm	ASTM D5185m	<b>1460</b>	---	---
Phosphorus	ppm	ASTM D5185m	<b>294</b>	---	---
Zinc	ppm	ASTM D5185m	<b>342</b>	---	---
Sulfur	ppm	ASTM D5185m	<b>3697</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >200	<b>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185m	<b>2</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	---	---
Fuel	%	ASTM D3524 >4.0	<b>0.3</b>	---	---

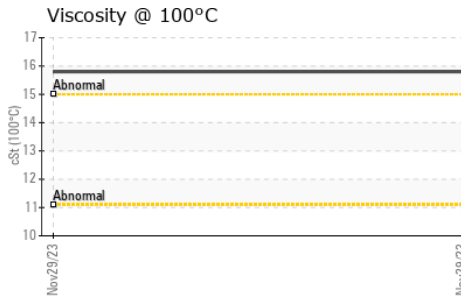
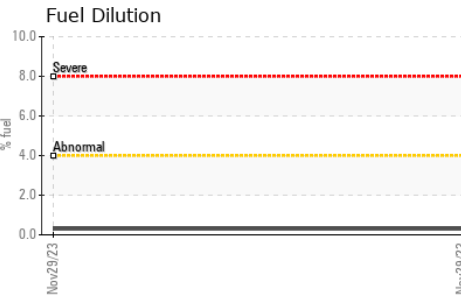
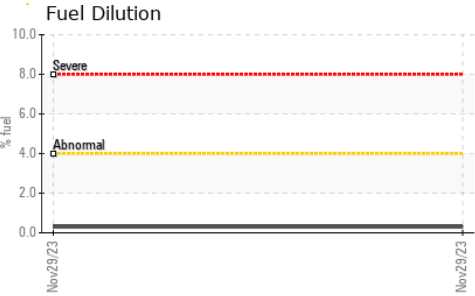
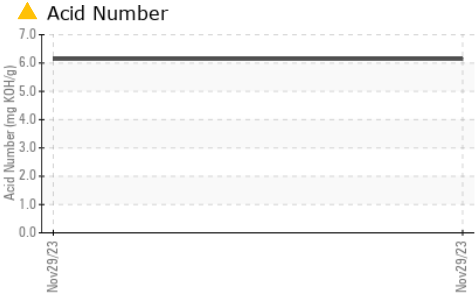
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0.1</b>	---	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>15.7</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>28.9</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>35.5</b>	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>▲ 6.14</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	<b>▲ 1.36</b>	---	---

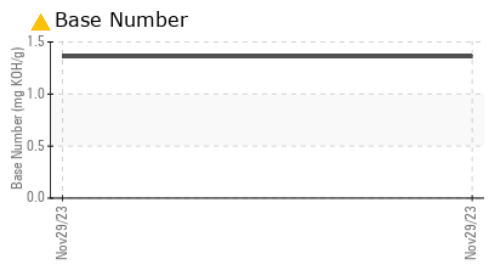
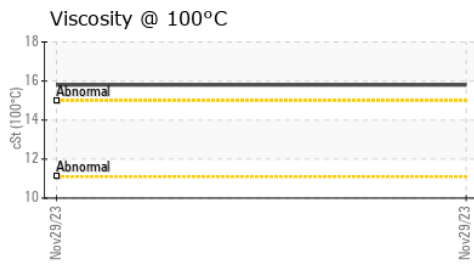
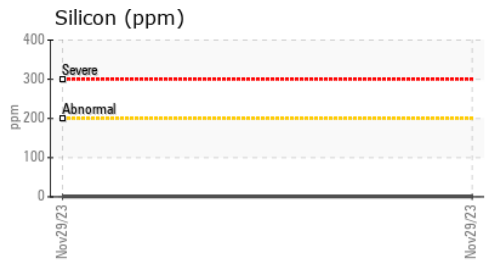
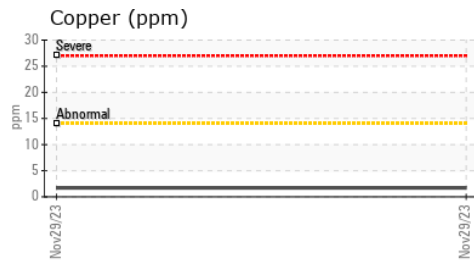
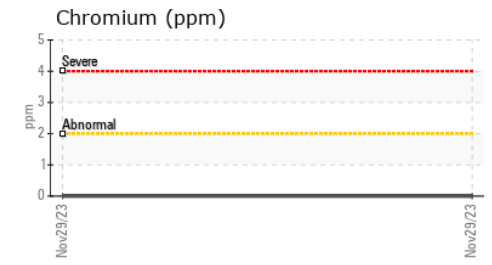
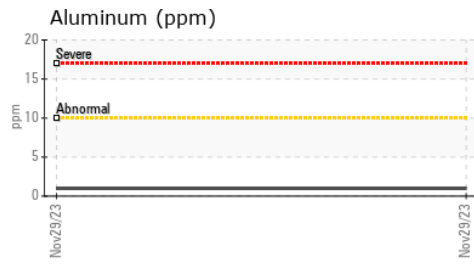
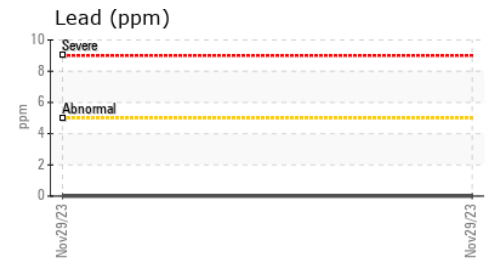
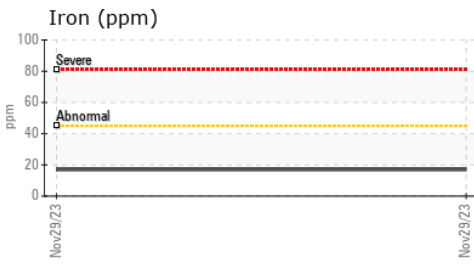
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.8	---	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0118694      **Received** : 25 Mar 2024  
**Lab Number** : 06128803      **Tested** : 28 Mar 2024  
**Unique Number** : 10942954      **Diagnosed** : 28 Mar 2024 - Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: FuelDilution, PercentFuel )

**DIVERSIFIED ENERGY - FRIERSON**  
 1716 FRIENDSHIP RD  
 FRIERSON, LA  
 US 71027  
 Contact: KORRY SHELTON  
 kshelton@dgoc.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)