

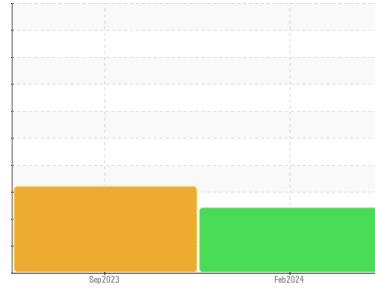
# OIL ANALYSIS REPORT

Sample Rating Trend

**DEGRADATION**



Machine Id  
**UNIT 3**  
Component  
**Biogas Engine**  
Fluid  
**MOBIL PEGASUS 805 (--- GAL)**



## DIAGNOSIS

### ▲ Recommendation

We recommend that you drain the oil and perform a filter service on this component if not already done. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

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

### ▲ Fluid Condition

The BN level is low. The AN level is at the top-end of the recommended limit.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PCA0118690</b>	PCA0073700	---
Sample Date	Client Info			<b>05 Feb 2024</b>	06 Sep 2023	---
Machine Age	hrs	Client Info		<b>52838</b>	50441	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>N/A</b>	Changed	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>45	<b>8</b>	12	---
Chromium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	1	---
Lead	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<b>▲ 15</b>	---
Copper	ppm	ASTM D5185m	>14	<b>3</b>	3	---
Tin	ppm	ASTM D5185m	>13	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

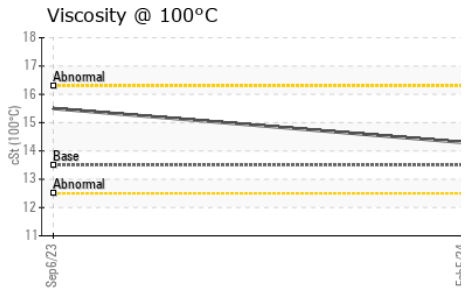
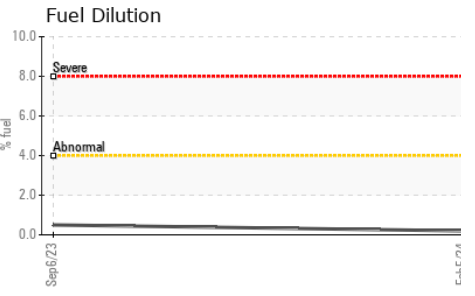
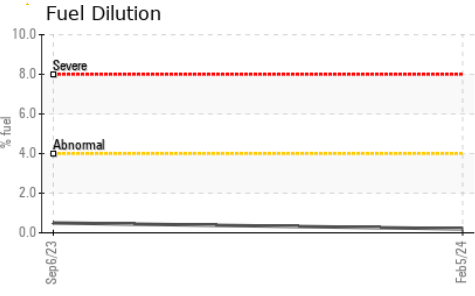
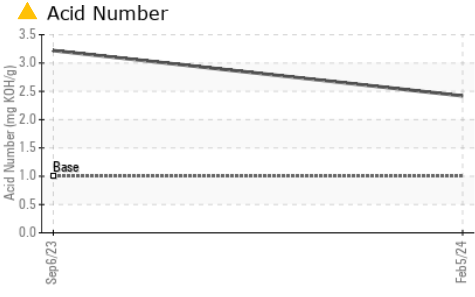
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	80	<b>0</b>	0	---
Barium	ppm	ASTM D5185m		<b>5</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>3</b>	0	---
Manganese	ppm	ASTM D5185m		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m		<b>9</b>	9	---
Calcium	ppm	ASTM D5185m	1020	<b>1486</b>	1598	---
Phosphorus	ppm	ASTM D5185m	220	<b>356</b>	321	---
Zinc	ppm	ASTM D5185m	230	<b>393</b>	383	---
Sulfur	ppm	ASTM D5185m	1000	<b>3670</b>	2458	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>200	<b>&lt;1</b>	2	---
Sodium	ppm	ASTM D5185m		<b>0</b>	<1	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	---
Fuel	%	ASTM D3524	>4.0	<b>0.2</b>	0.5	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		<b>0</b>	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.0</b>	12.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.3</b>	24.4	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.6</b>	30.3	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>▲ 2.419</b>	▲ 3.22	---
Base Number (BN)	mg KOH/g	ASTM D2896	6.4	<b>▲ 2.11</b>	▲ 2.02	---

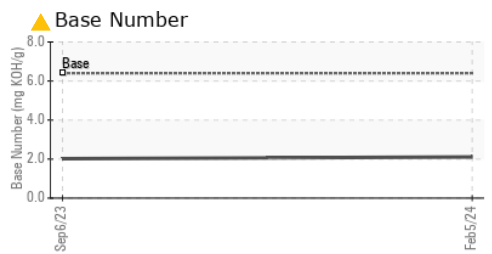
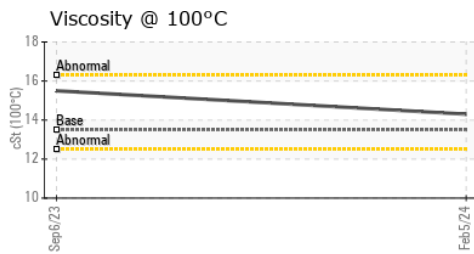
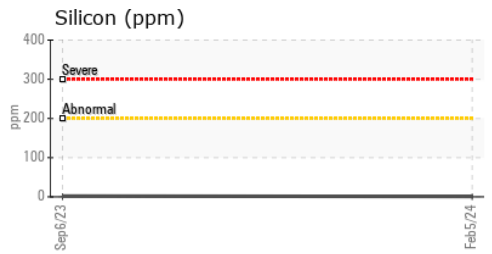
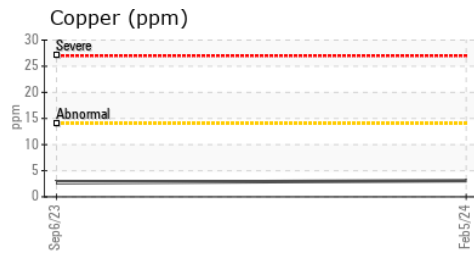
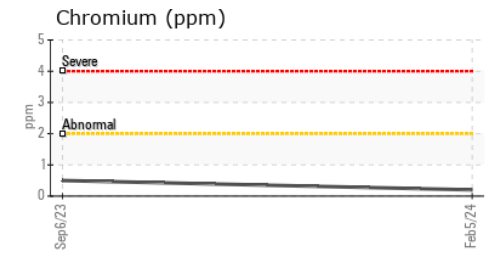
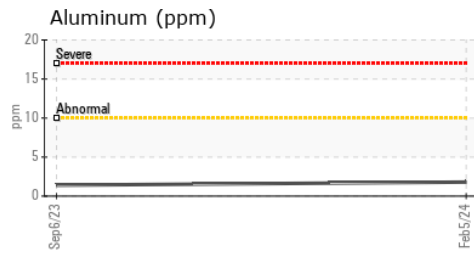
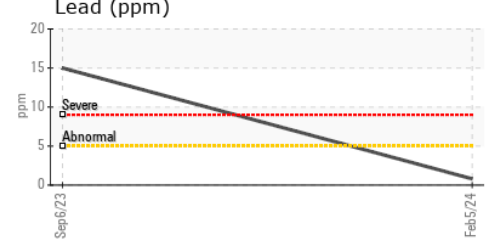
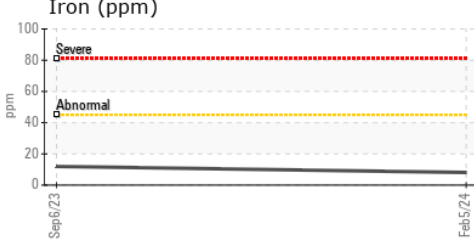
# OIL ANALYSIS REPORT



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	13.5	<b>14.3</b>	15.5

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0118690 **Received** : 05 Feb 2024  
**Lab Number** : 06080893 **Tested** : 07 Feb 2024  
**Unique Number** : 10862984 **Diagnosed** : 07 Feb 2024 - Sean Felton  
**Test Package** : MOB 2 ( Additional Tests: FuelDilution, PercentFuel )

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

Certificate L2367  
 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)