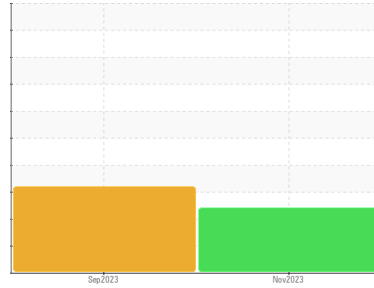


OIL ANALYSIS REPORT



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

Sample Rating Trend



DEGRADATION



DIAGNOSIS

▲ Recommendation

The oil is near the end of its useful service life, recommend schedule an oil change. 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		PCA0118695	PCA0073700	---
Sample Date	Client Info		29 Nov 2023	06 Sep 2023	---
Machine Age	hrs	Client Info	0	50441	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		N/A	Changed	---
Sample Status			ABNORMAL	ABNORMAL	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >45	7	12	---
Chromium	ppm	ASTM D5185m >2	0	<1	---
Nickel	ppm	ASTM D5185m >2	0	0	---
Titanium	ppm	ASTM D5185m	0	0	---
Silver	ppm	ASTM D5185m >5	0	0	---
Aluminum	ppm	ASTM D5185m >10	1	1	---
Lead	ppm	ASTM D5185m >5	<1	▲ 15	---
Copper	ppm	ASTM D5185m >14	2	3	---
Tin	ppm	ASTM D5185m >13	0	<1	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 80	2	0	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	<1	0	---
Manganese	ppm	ASTM D5185m	0	0	---
Magnesium	ppm	ASTM D5185m	14	9	---
Calcium	ppm	ASTM D5185m 1020	1563	1598	---
Phosphorus	ppm	ASTM D5185m 220	316	321	---
Zinc	ppm	ASTM D5185m 230	376	383	---
Sulfur	ppm	ASTM D5185m 1000	4005	2458	---

CONTAMINANTS

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

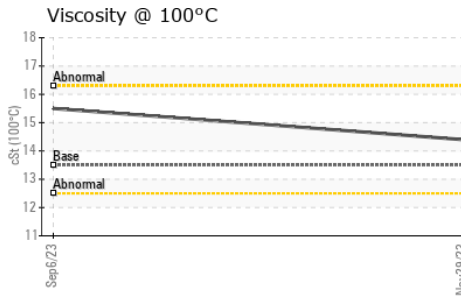
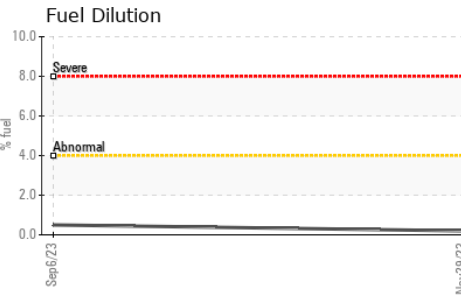
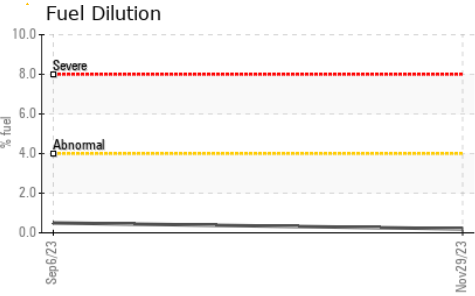
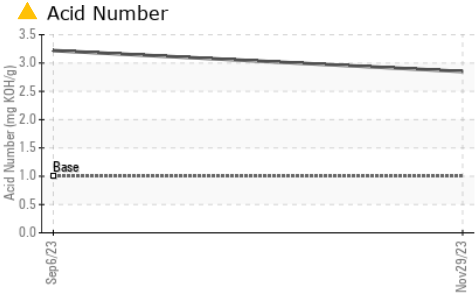
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0.1	---
Nitration	Abs/cm	*ASTM D7624 >20	8.1	12.8	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.2	24.4	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.9	30.3	---
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	▲ 2.85	▲ 3.22	---
Base Number (BN)	mg KOH/g	ASTM D2896 6.4	▲ 2.55	▲ 2.02	---

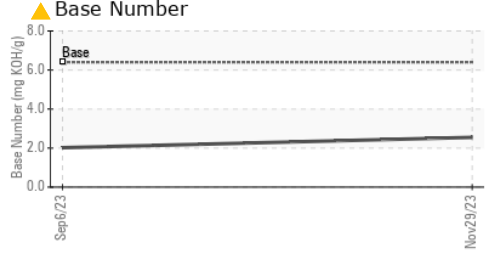
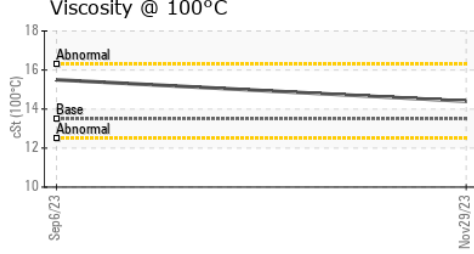
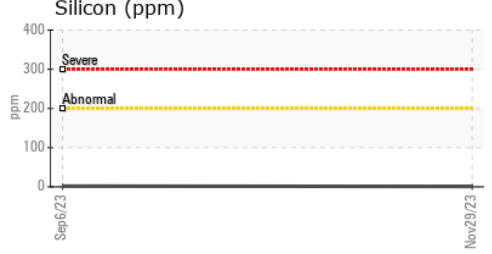
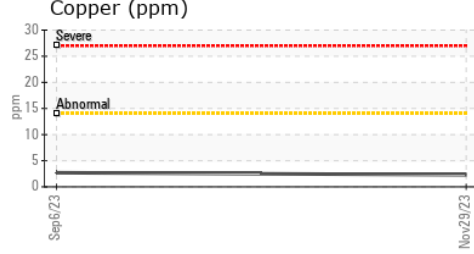
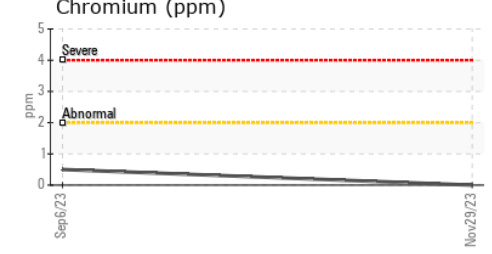
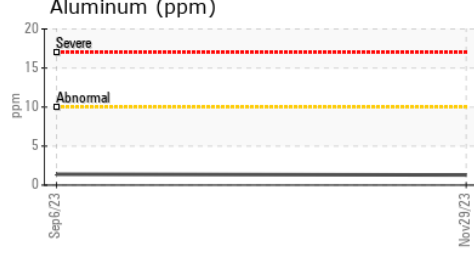
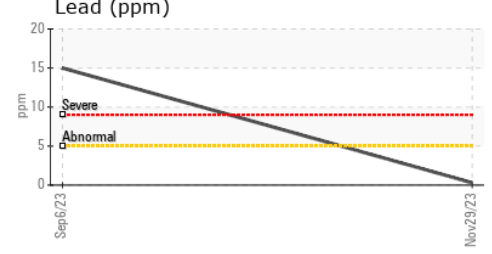
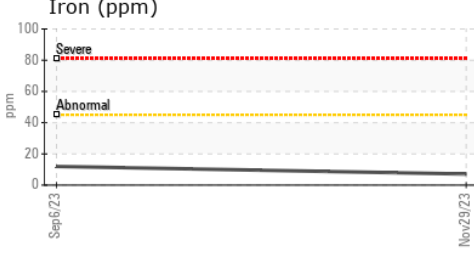
OIL ANALYSIS REPORT



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	14.4	15.5	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0118695 **Received** : 25 Mar 2024
Lab Number : **06128802** **Tested** : 28 Mar 2024
Unique Number : 10942953 **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)

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F: