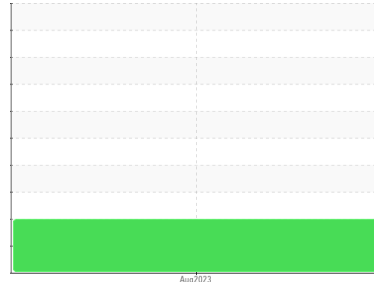




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
HER SON
Machine Id
CATERPILLAR G3406 Biodigestor
Component
Biogas Engine
Fluid
MOBIL PEGASUS 610 (70 LTR)

DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory data updates. (Customer Sample Comment: No KLEENOIL on board)

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of particulates present 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		KL0012784	---	---
Sample Date	Client Info		15 Aug 2023	---	---
Machine Age	hrs	Client Info	36748	---	---
Oil Age	hrs	Client Info	401	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	69	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m	1	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m	14	---	---
Calcium	ppm	ASTM D5185m	3715	---	---
Phosphorus	ppm	ASTM D5185m	6	---	---
Zinc	ppm	ASTM D5185m	5	---	---
Sulfur	ppm	ASTM D5185m	9257	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >200	6	---	---
Sodium	ppm	ASTM D5185m	0	---	---
Potassium	ppm	ASTM D5185m >20	1	---	---

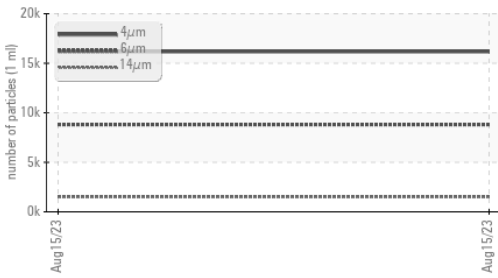
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	---	---
Nitration	Abs/cm	*ASTM D7624 >20	6.0	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	21.7	---	---



OIL ANALYSIS REPORT

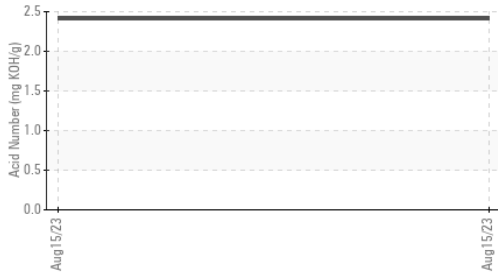
Particle Trend



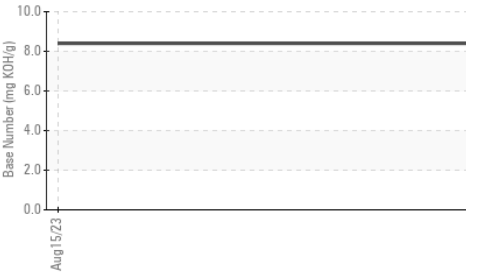
Base Number



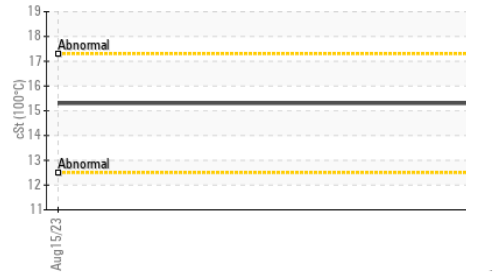
Acid Number



Base Number



Viscosity @ 100°C



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		16173	---	---
Particles >6µm	ASTM D7647	>5000	▲ 8810	---	---
Particles >14µm	ASTM D7647	>640	▲ 1499	---	---
Particles >21µm	ASTM D7647	>160	▲ 505	---	---
Particles >38µm	ASTM D7647	>40	▲ 78	---	---
Particles >71µm	ASTM D7647	>10	8	---	---
Oil Cleanliness	ISO 4406 (c)	>19/16	▲ 20/18	---	---

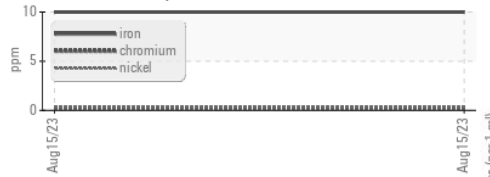
FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	7.5	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		2.412	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.40	---	---

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		15.3	---	---

GRAPHS

Ferrous Alloys



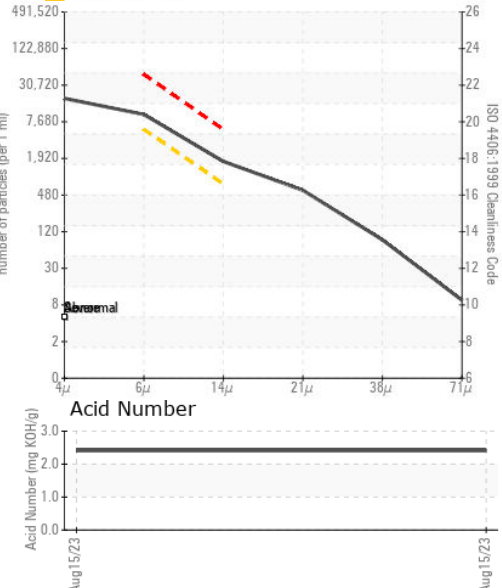
Non-ferrous Metals



Viscosity @ 100°C



Particle Count



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0012784 **Received** : 22 Aug 2023
Lab Number : 05931666 **Diagnosed** : 25 Aug 2023
Unique Number : 10616937 **Diagnostician** : Doug Bogart
Test Package : MOB 2 (Additional Tests: PrtCount, TAN MAN)

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)

CONOR
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