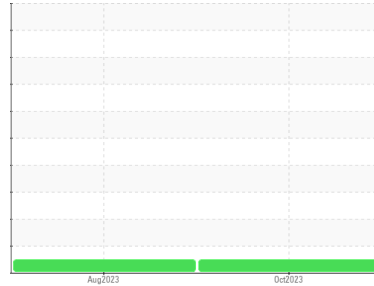




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
DETROIT DETROIT 80837416

Component
Genset
Fluid
ALPHA 15W40 (8 GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. 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 result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0617420	WC05918211	---
Sample Date	Client Info			09 Oct 2023	07 Aug 2023	---
Machine Age	hrs	Client Info		2263	1724	---
Oil Age	hrs	Client Info		539	290	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Glycol	WC Method			NEG	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	35	2	---
Chromium	ppm	ASTM D5185m	>4	2	<1	---
Nickel	ppm	ASTM D5185m	>2	0	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>5	0	<1	---
Aluminum	ppm	ASTM D5185m	>12	3	2	---
Lead	ppm	ASTM D5185m	>17	4	<1	---
Copper	ppm	ASTM D5185m	>70	2	1	---
Tin	ppm	ASTM D5185m	>15	2	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		1	5	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		214	68	---
Manganese	ppm	ASTM D5185m		<1	0	---
Magnesium	ppm	ASTM D5185m		70	1011	---
Calcium	ppm	ASTM D5185m		4037	1257	---
Phosphorus	ppm	ASTM D5185m		1038	1117	---
Zinc	ppm	ASTM D5185m		1014	1362	---
Sulfur	ppm	ASTM D5185m		3731	3543	---

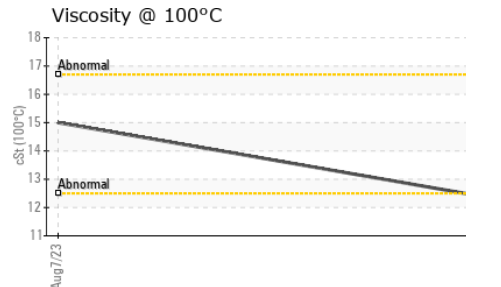
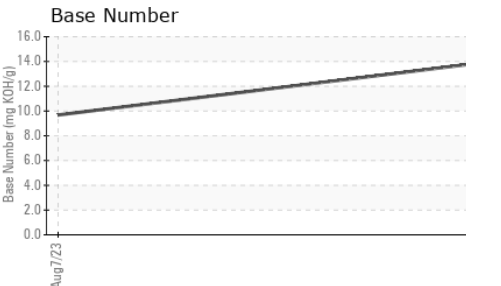
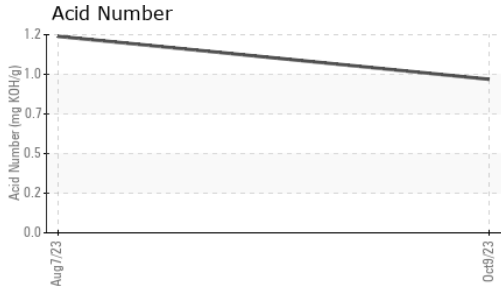
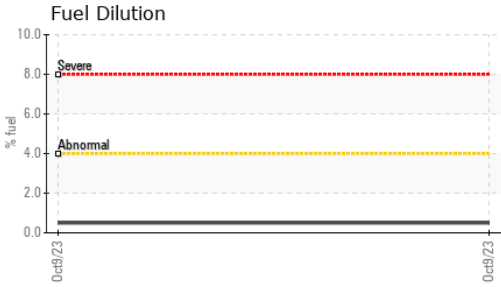
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	7	5	---
Sodium	ppm	ASTM D5185m		4	2	---
Potassium	ppm	ASTM D5185m	>20	2	<1	---
Fuel	%	ASTM D3524	>4.0	0.5	<1.0	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0.5	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	8.2	6.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	35.2	18.5	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	36.4	14.9	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.93	1.19	---
Base Number (BN)	mg KOH/g	ASTM D2896		13.97	9.68	---



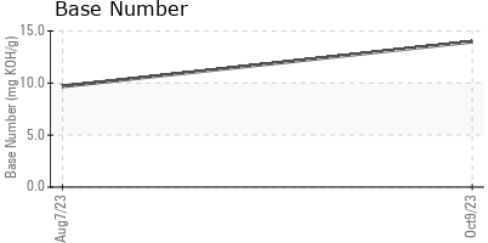
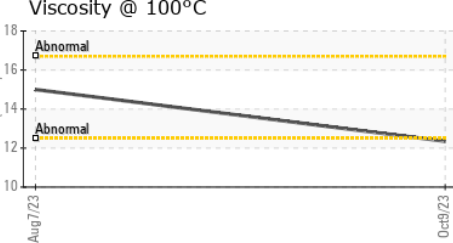
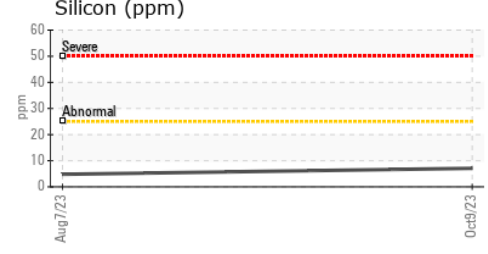
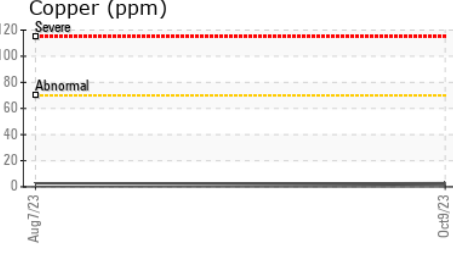
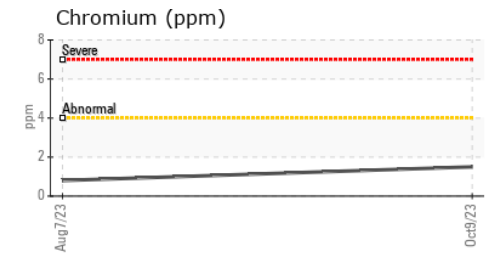
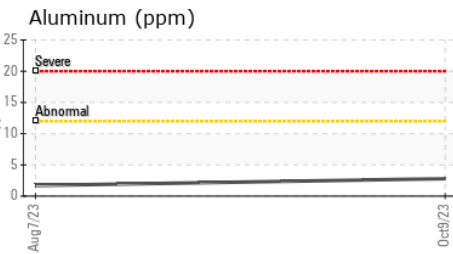
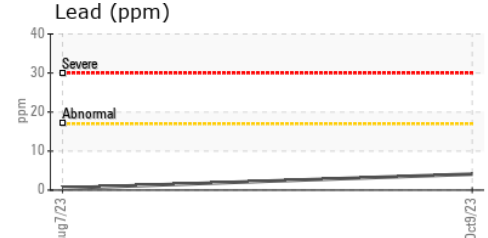
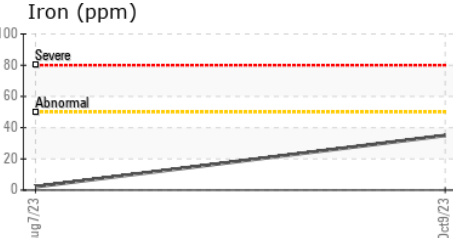
OIL ANALYSIS REPORT



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	12.35	15.0	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0617420 **Received** : 30 Oct 2023
Lab Number : 05993758 **Diagnosed** : 03 Nov 2023
Unique Number : 10722118 **Diagnostician** : Jonathan Hester
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

WENGERD BROTHERS LLC
 93 E MAIN ST
 PALATINE BRIDGE, NY
 US 13428
 Contact: E. WENGERD
 ewengerd@ibyfax.com
 T: (518)646-6456
 F:

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)