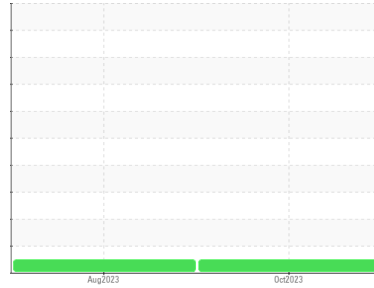




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
MAHLER Q8 40WT

Component
New (Unused) Oil
Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0660925	WC0660879	---
Sample Date	Client Info			31 Oct 2023	24 Aug 2023	---
Machine Age	hrs	Client Info		0	0	---
Oil Age	hrs	Client Info		0	0	---
Oil Changed	Client Info			N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m		0	<1	---
Chromium	ppm	ASTM D5185m		<1	0	---
Nickel	ppm	ASTM D5185m		0	0	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m		2	2	---
Lead	ppm	ASTM D5185m		0	0	---
Copper	ppm	ASTM D5185m		0	0	---
Tin	ppm	ASTM D5185m		<1	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	<1	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		8	9	---
Calcium	ppm	ASTM D5185m		2253	2262	---
Phosphorus	ppm	ASTM D5185m		393	415	---
Zinc	ppm	ASTM D5185m		441	449	---
Sulfur	ppm	ASTM D5185m		2256	2705	---

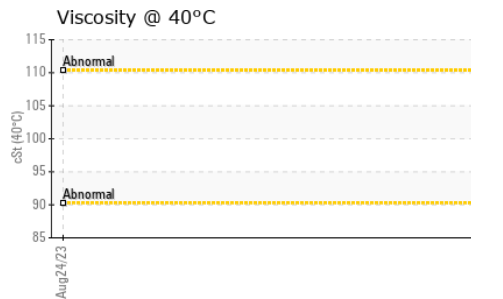
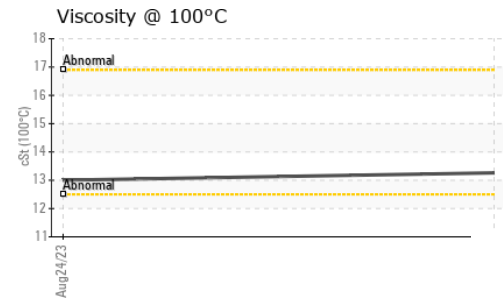
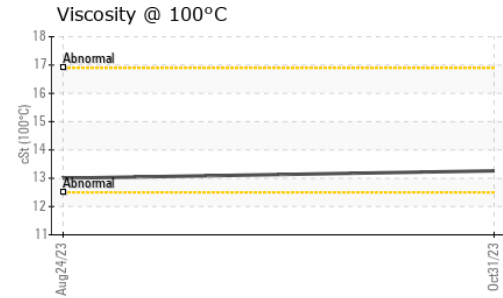
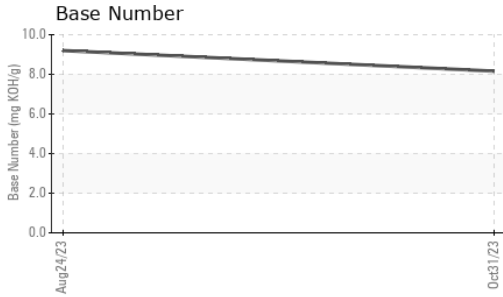
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		3	6	---
Sodium	ppm	ASTM D5185m		<1	2	---
Potassium	ppm	ASTM D5185m	>20	0	2	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		---	0	---
Nitration	Abs/cm	*ASTM D7624		---	4.4	---
Sulfation	Abs/.1mm	*ASTM D7415		---	14.5	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414		---	8.3	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.17	0.982	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.16	9.20	---



OIL ANALYSIS REPORT



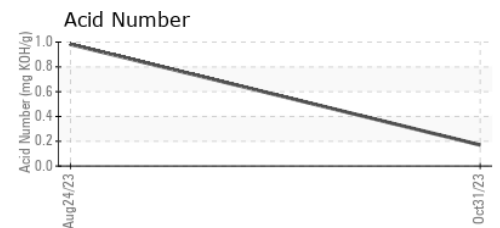
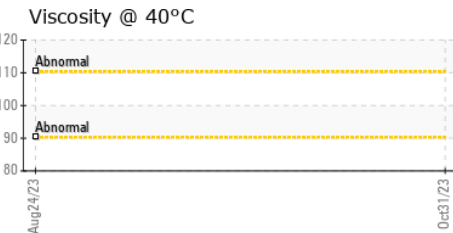
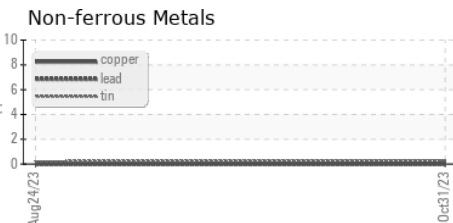
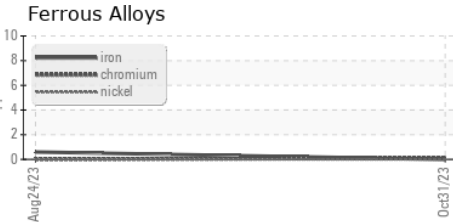
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	113.2	---	---
Visc @ 100°C	cSt	ASTM D445	13.26	13.0	---
Viscosity Index (VI)	Scale	ASTM D2270	112	---	---

SAMPLE IMAGES

	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0660925 **Received** : 03 Nov 2023
Lab Number : 05998553 **Diagnosed** : 07 Nov 2023
Unique Number : 10726913 **Diagnostician** : Jonathan Hester
Test Package : MOB 2 (Additional Tests: FT-IR, ICP-NewOil, KF, KV100, PrtCount, TBN, VI)
 Contact: KEVIN WEAVER
 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 kevin.weaver@cubedistrictenergy.com
 * - 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)