



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
CATERPILLAR GM01 - DA LUBRICANT BLUE FLAME HB-5 SAE 40 (S/N LGS00177)
 Component
New (Unused) Oil
 Fluid
D-A Lubricant Blue Flame HB-8 40W (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0760088	---	---
Sample Date		Client Info		19 May 2023	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				NORMAL	---	---

WEAR

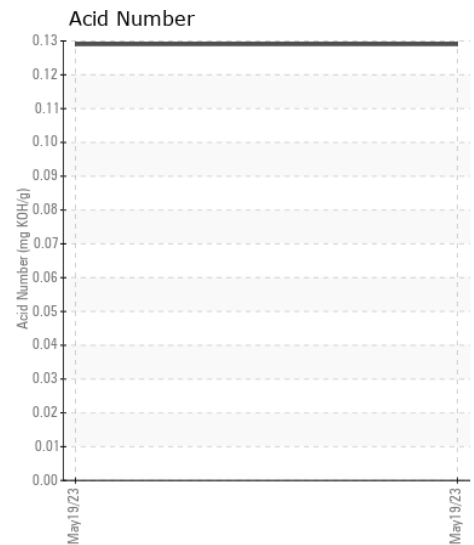
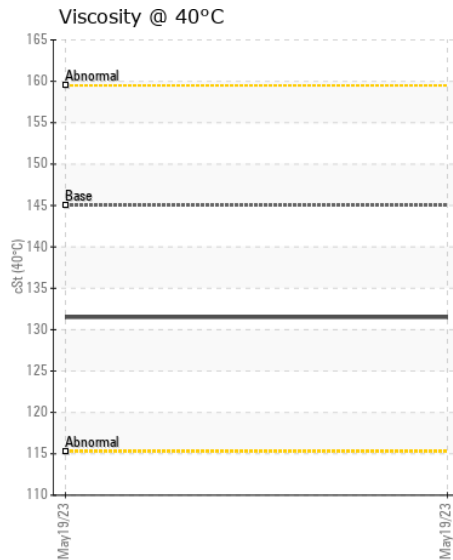
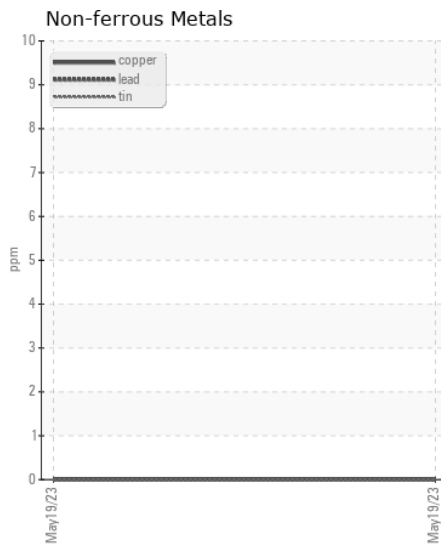
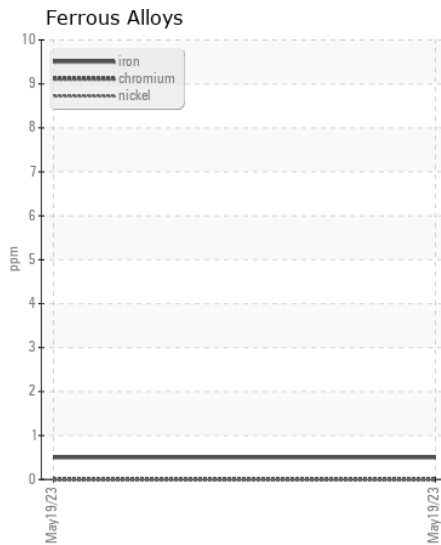
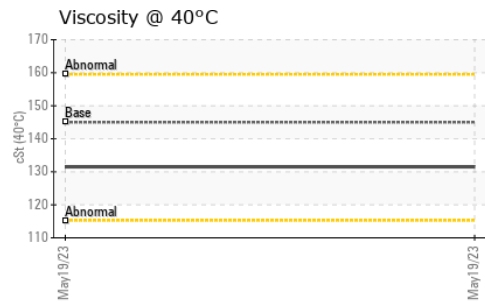
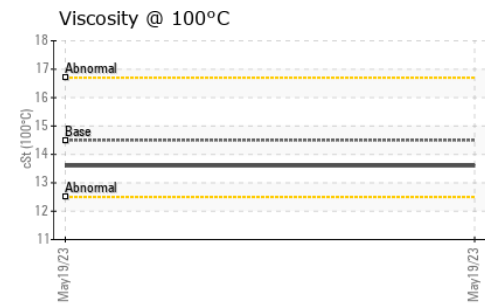
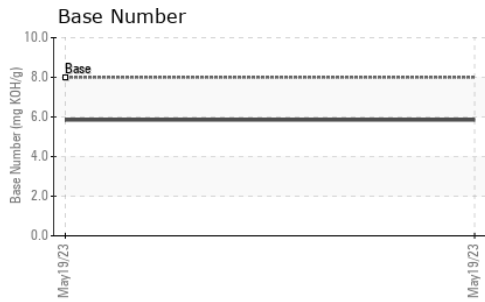
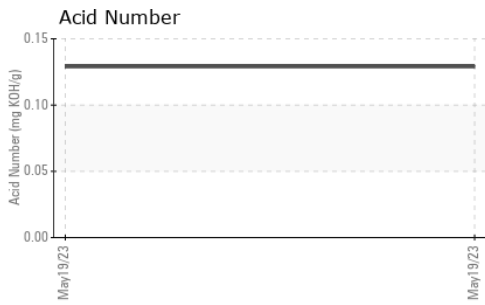
Iron	ppm	ASTM D5185m		<1	---	---
Chromium	ppm	ASTM D5185m		0	---	---
Nickel	ppm	ASTM D5185m		0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m		1	---	---
Lead	ppm	ASTM D5185m		0	---	---
Copper	ppm	ASTM D5185m		0	---	---
Tin	ppm	ASTM D5185m		0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

Silicon	ppm	ASTM D5185m		5	---	---
Potassium	ppm	ASTM D5185m	>20	1	---	---
Water		WC Method		NEG	---	---
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	---	---

FLUID CONDITION

Sodium	ppm	ASTM D5185m		0	---	---
Boron	ppm	ASTM D5185m		1	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		1	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m		7	---	---
Calcium	ppm	ASTM D5185m		1273	---	---
Phosphorus	ppm	ASTM D5185m		278	---	---
Zinc	ppm	ASTM D5185m		355	---	---
Sulfur	ppm	ASTM D5185m		2932	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.129	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8	5.85	---	---
Visc @ 40°C	cSt	ASTM D445	145	131.5	---	---
Visc @ 100°C	cSt	ASTM D445	14.5	13.6	---	---
Viscosity Index (VI)	Scale	ASTM D2270	98	98	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0760088

Lab Number : 05854735

Unique Number : 10484090

Test Package : MOB 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, TBN, VI)

Received : 23 May 2023

Tested : 25 May 2023

Diagnosed : 25 May 2023 - Jonathan Hester

ONSLow

465 MEADOWVIEW RD

JACKSONVILLE, NC

US 28540

Contact: THOMAS BURTON

thomas.burton@cubedistrictenergy.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)

T:

F: