



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
CATERPILLAR 963D 963D
Component
Diesel Engine
Fluid
DYNAGARD 15W40 (6 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0859394	---	---
Sample Date		Client Info		18 May 2024	---	---
Machine Age	hrs	Client Info		13875	---	---
Oil Age	hrs	Client Info		275	---	---
Filter Age	hrs	Client Info		275	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	4	---	---
Chromium	ppm	ASTM D5185m	>20	0	---	---
Nickel	ppm	ASTM D5185m	>2	0	---	---
Titanium	ppm	ASTM D5185m	>2	0	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>25	<1	---	---
Lead	ppm	ASTM D5185m	>40	0	---	---
Copper	ppm	ASTM D5185m	>330	48	---	---
Tin	ppm	ASTM D5185m	>15	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

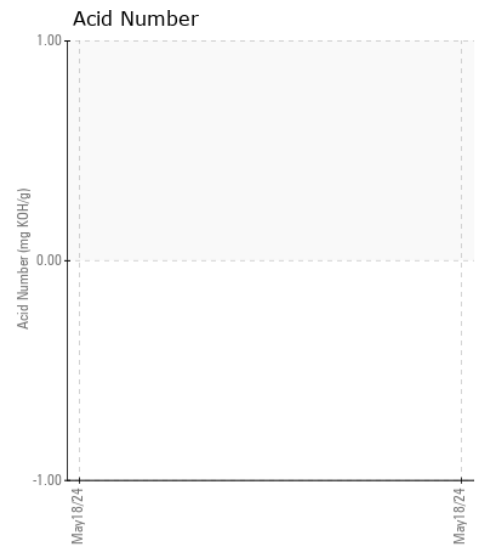
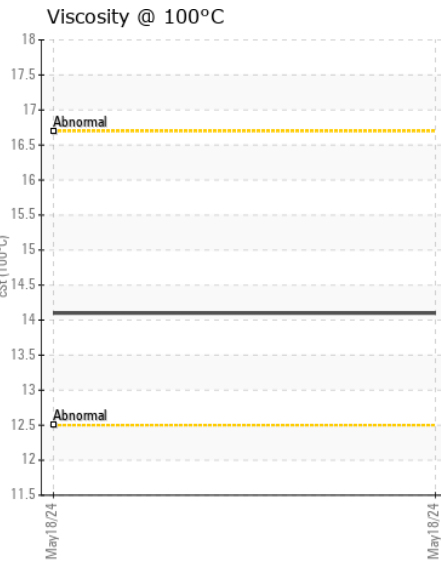
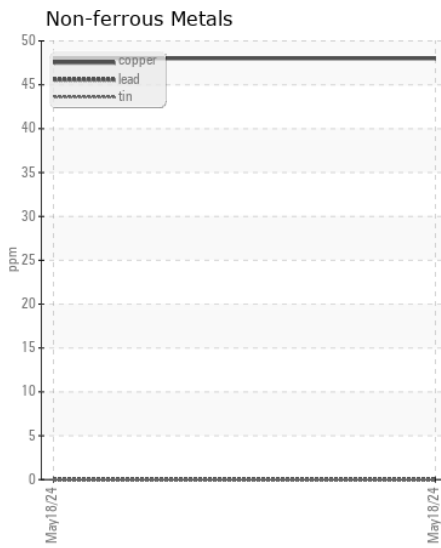
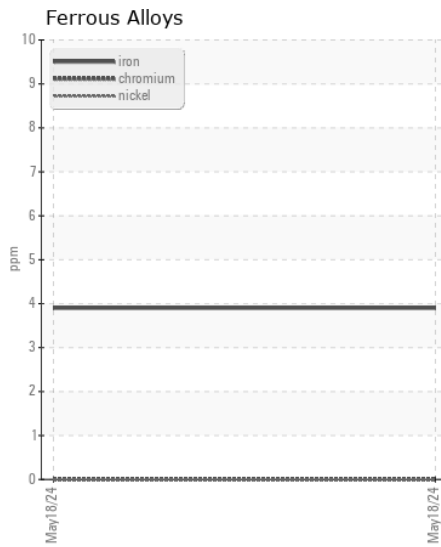
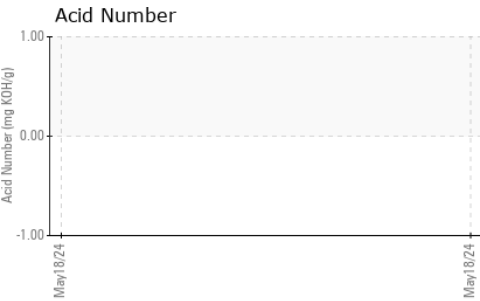
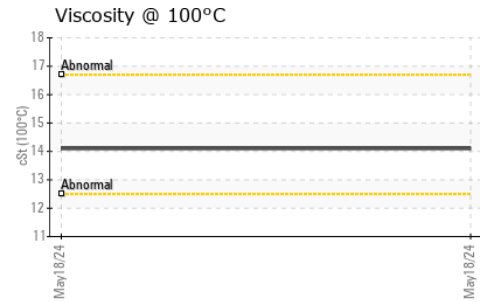
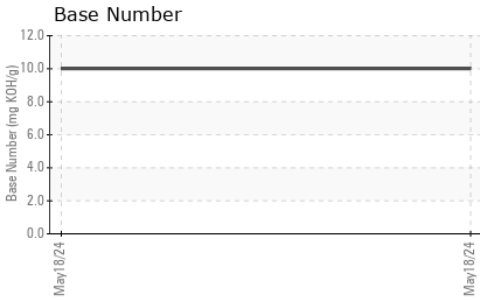
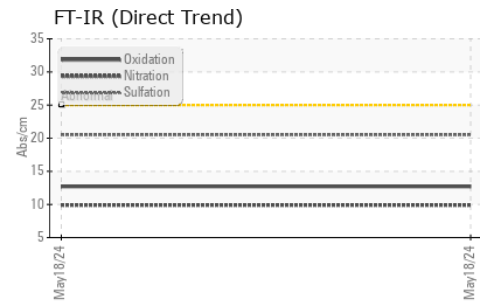
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	2	---	---
Potassium	ppm	ASTM D5185m	>20	13	---	---
Fuel		WC Method	>5	<1.0	---	---
Water	%	ASTM D6304	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	2.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	9.9	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.5	---	---
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	>0.2	NEG	---	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		30	---	---
Boron	ppm	ASTM D5185m		0	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		54	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		913	---	---
Calcium	ppm	ASTM D5185m		1143	---	---
Phosphorus	ppm	ASTM D5185m		1052	---	---
Zinc	ppm	ASTM D5185m		1130	---	---
Sulfur	ppm	ASTM D5185m		3637	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.7	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		10.01	---	---
Visc @ 100°C	cSt	ASTM D445		14.1	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0859394 **Received** : 23 May 2024
Lab Number : 06189769 **Tested** : 29 May 2024
Unique Number : 11046521 **Diagnosed** : 29 May 2024 - Sean Felton
Test Package : PLANT (Additional Tests: FT-IR, KV100, TBN)

KERSEY VALLEY LANDFILL
 3940 KIVETT DRIVE
 JAMSTOWN, NC
 US 27282
 Contact: Service Manager

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: