



OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
MET EXPRESS
 Machine Id
MET EXPRESS 24018
 Component
Rear Differential
 Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

▲ Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION	method	limit/base	current	history 1	history 2
Sample Number	Client Info		WC0828795	---	---
Sample Date	Client Info		24 May 2023	---	---
Machine Age	mls	Client Info	534	---	---
Oil Age	mls	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			ABNORMAL	---	---

WEAR METALS	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >500	7	---	---
Chromium	ppm	ASTM D5185m >10	<1	---	---
Nickel	ppm	ASTM D5185m >10	<1	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m >25	0	---	---
Lead	ppm	ASTM D5185m >25	0	---	---
Copper	ppm	ASTM D5185m >100	0	---	---
Tin	ppm	ASTM D5185m >10	0	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	94	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m	<1	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m	196	---	---
Calcium	ppm	ASTM D5185m	2	---	---
Phosphorus	ppm	ASTM D5185m	2161	---	---
Zinc	ppm	ASTM D5185m	0	---	---
Sulfur	ppm	ASTM D5185m	31113	---	---

CONTAMINANTS	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >75	2	---	---
Sodium	ppm	ASTM D5185m	2	---	---
Potassium	ppm	ASTM D5185m >20	2	---	---
Water	%	ASTM D6304 >.2	0.052	---	---
ppm Water	ppm	ASTM D6304 >2000	521.5	---	---

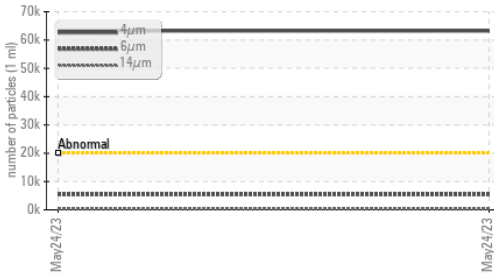
FLUID CLEANLINESS	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647	>20000	▲ 63222	---	---
Particles >6µm	ASTM D7647	>5000	▲ 5415	---	---
Particles >14µm	ASTM D7647	>640	269	---	---
Particles >21µm	ASTM D7647	>160	123	---	---
Particles >38µm	ASTM D7647	>40	2	---	---
Particles >71µm	ASTM D7647	>10	0	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 23/20/15	---	---

FLUID DEGRADATION	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.17	---	---

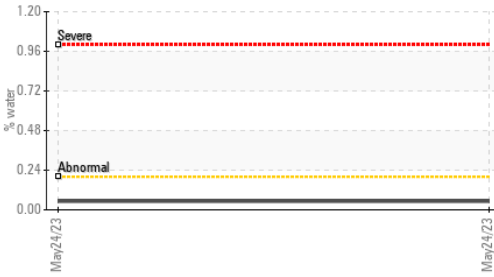


OIL ANALYSIS REPORT

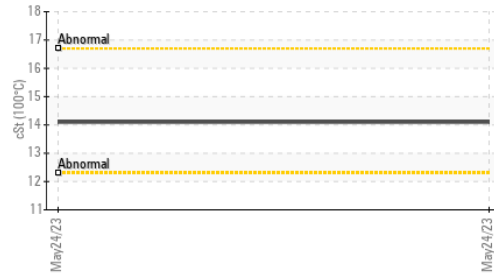
Particle Trend



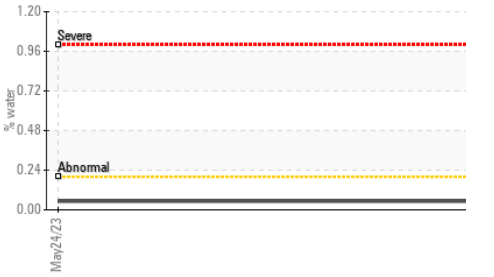
Water



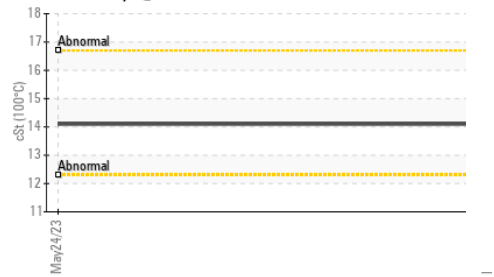
Viscosity @ 100°C



Water



Viscosity @ 100°C



VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	LIGHT	---
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	>.2	NEG	---
Free Water	scalar	*Visual		NEG	---

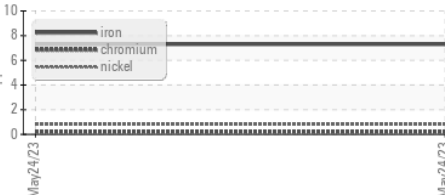
FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	83.0	---	---
Visc @ 100°C	cSt	ASTM D445	14.1	---	---
Viscosity Index (VI)	Scale	ASTM D2270	176	---	---

SAMPLE IMAGES

	method	limit/base	current	history 1	history 2
Color				no image	no image
Bottom				no image	no image

GRAPHS

Ferrous Alloys



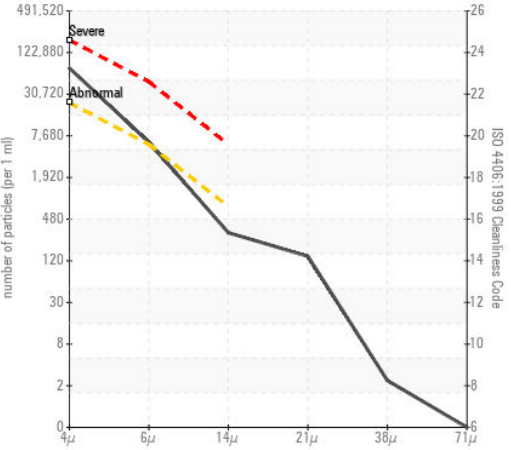
Non-ferrous Metals



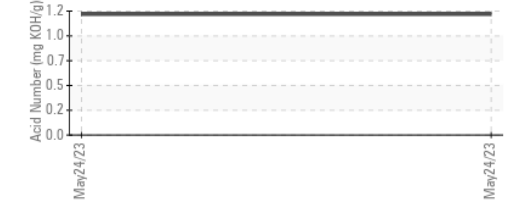
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0828795 **Received** : 22 Jun 2023
Lab Number : 05881467 **Diagnosed** : 30 Jun 2023
Unique Number : 10526570 **Diagnostician** : Wes Davis
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

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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)