



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
AMR-St Louis
Machine Id
574556 CATERPILLAR 966M CAT0966MLKJP02701
Component
Rear Differential
Fluid
SHELL 50W (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0020765	DJJ0020815	DJJ0012800
Sample Date		Client Info		16 Feb 2024	16 Oct 2023	24 May 2023
Machine Age	hrs	Client Info		15844	15098	14098
Oil Age	hrs	Client Info		1000	0	1000
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	62	19	13
Chromium	ppm	ASTM D5185m	>3	0	<1	0
Nickel	ppm	ASTM D5185m	>3	<1	<1	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	<1	1	<1
Lead	ppm	ASTM D5185m	>13	<1	0	<1
Copper	ppm	ASTM D5185m	>103	2	2	2
Tin	ppm	ASTM D5185m	>5	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

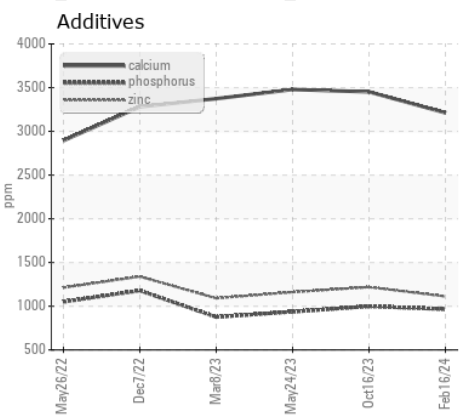
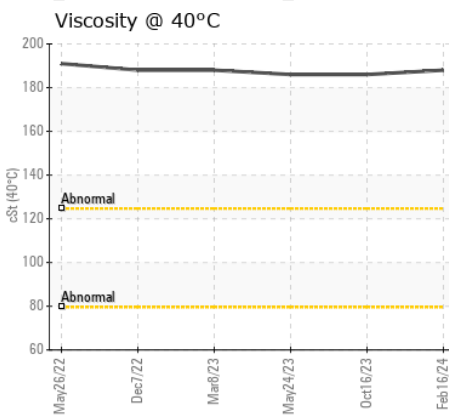
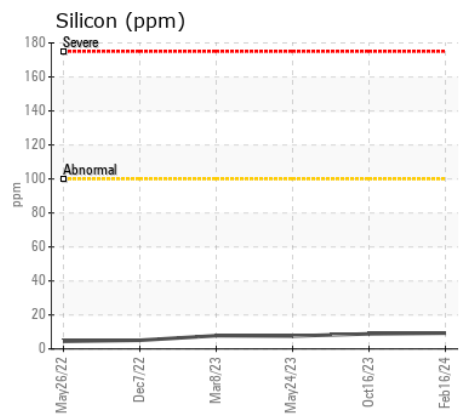
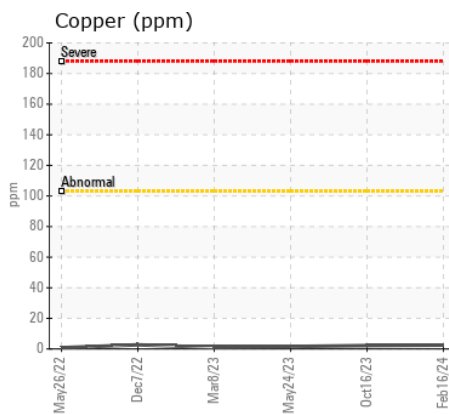
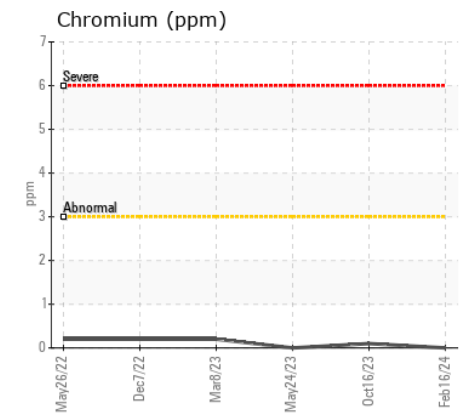
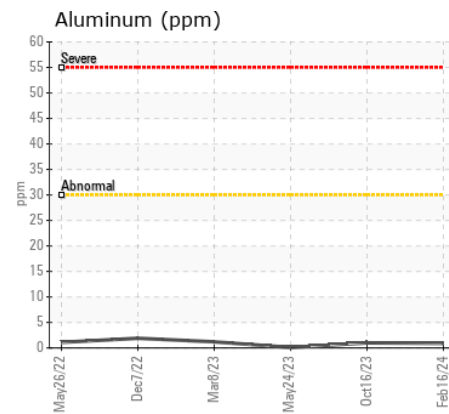
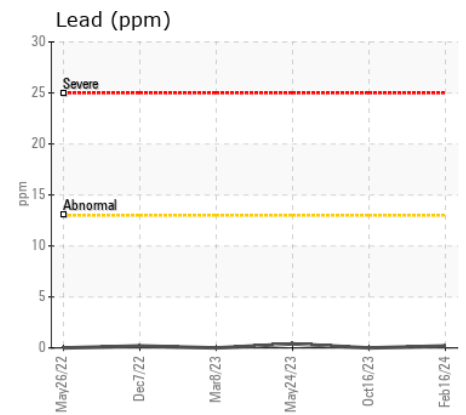
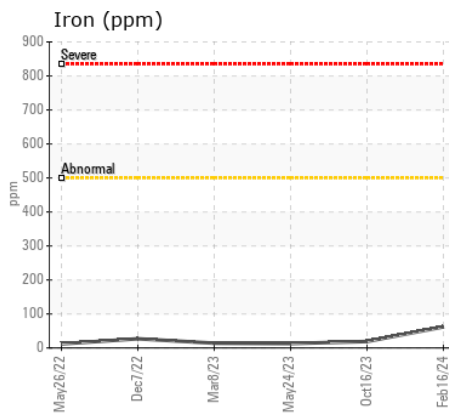
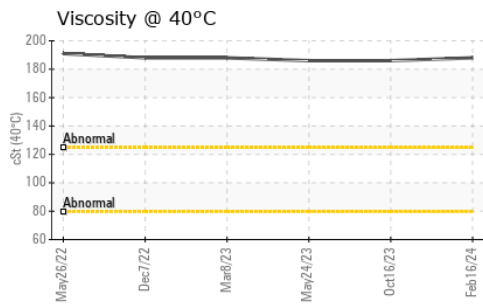
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	9	9	8
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<1	0	<1
Boron	ppm	ASTM D5185m		11	2	9
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	<1
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		10	16	11
Calcium	ppm	ASTM D5185m		3212	3452	3479
Phosphorus	ppm	ASTM D5185m		966	999	937
Zinc	ppm	ASTM D5185m		1112	1219	1161
Sulfur	ppm	ASTM D5185m		6193	6533	7179
Visc @ 40°C	cSt	ASTM D445		188	186	186



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0020765 **Received** : 29 Feb 2024
Lab Number : 06105599 **Tested** : 01 Mar 2024
Unique Number : 10903829 **Diagnosed** : 01 Mar 2024 - Wes Davis
Test Package : MOBCE

ADVANTAGE METALS RECYCLING - ST LOUIS
 5 N MARKET
 ST LOUIS, MO
 US 63102
 Contact: JEANETTE VAGO
 jeanette.vago@advantagerecycling.com
 T:
 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)