



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
AMR-St Louis
Machine Id
574220 CATERPILLAR 980H CAT0980HTJMS06047
Component
Front Left Final Drive
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		DJJ0020768	DJJ0012386	DJJ0012611
Sample Date		Client Info		15 Feb 2024	19 Apr 2023	11 Oct 2022
Machine Age	hrs	Client Info		16481	15261	14646
Oil Age	hrs	Client Info		1000	2000	1500
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Changed	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	>800	15	22	33
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m	>15	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>75	<1	0	1
Lead	ppm	ASTM D5185m	>10	<1	<1	0
Copper	ppm	ASTM D5185m	>75	<1	22	4
Tin	ppm	ASTM D5185m	>8	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

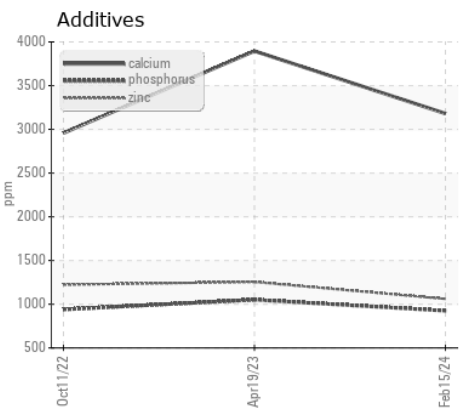
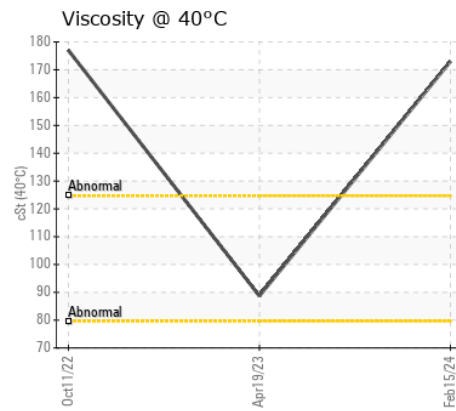
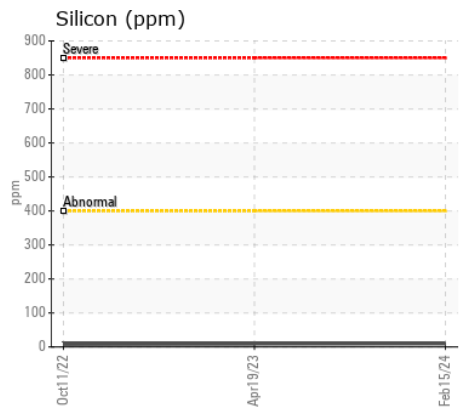
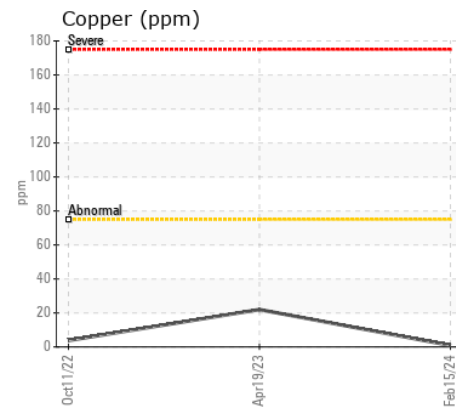
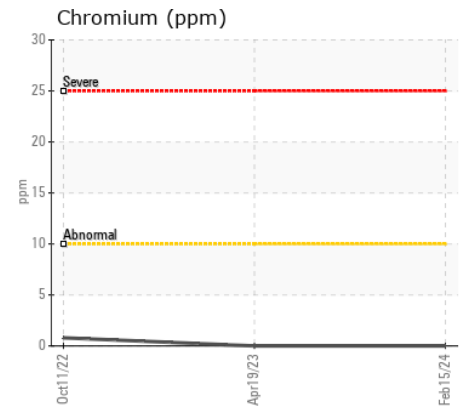
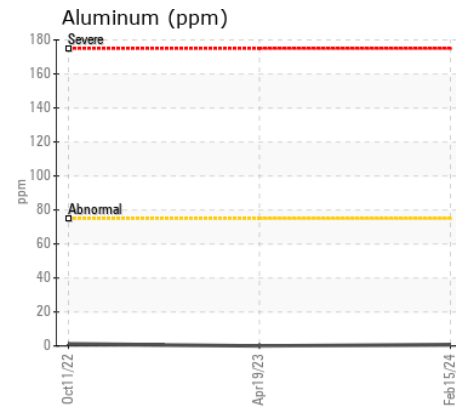
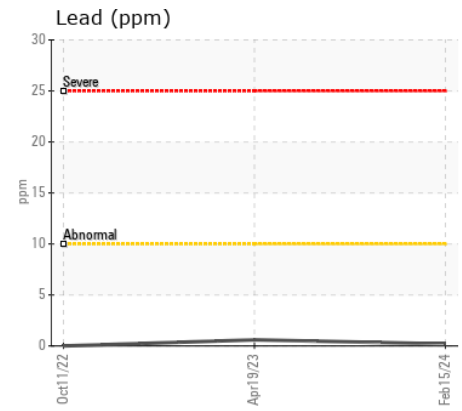
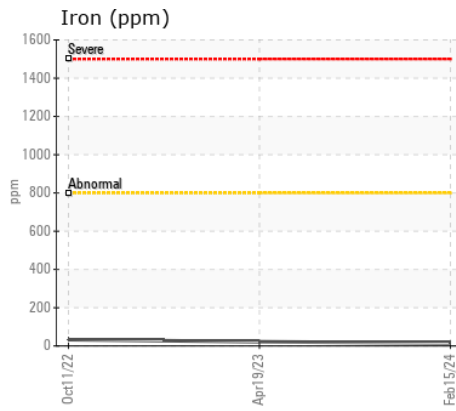
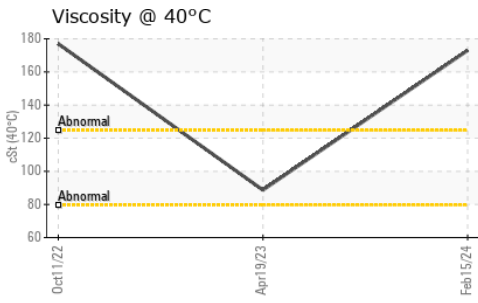
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>400	9	9	8
Potassium	ppm	ASTM D5185m	>20	0	2	0
Water		WC Method	>0.2	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	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<1	<1	0
Boron	ppm	ASTM D5185m		4	25	0
Barium	ppm	ASTM D5185m		0	18	0
Molybdenum	ppm	ASTM D5185m		<1	8	1
Manganese	ppm	ASTM D5185m		0	<1	1
Magnesium	ppm	ASTM D5185m		14	41	19
Calcium	ppm	ASTM D5185m		3181	3896	2958
Phosphorus	ppm	ASTM D5185m		925	1051	940
Zinc	ppm	ASTM D5185m		1061	1255	1223
Sulfur	ppm	ASTM D5185m		6138	4463	12694
Visc @ 40°C	cSt	ASTM D445		173	88.7	177



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0020768
Lab Number : 06105597
Unique Number : 10903827
Test Package : MOBCE

Received : 29 Feb 2024
Tested : 01 Mar 2024
Diagnosed : 04 Mar 2024 - Don Baldrige

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

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