



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[05W47105]
 Machine Id
CATERPILLAR 938M YLDR1724 (S/N J3R02317)
 Component
Hydraulic System
 Fluid
CAT HYDO (120 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0217683	JR0203138	JR0189931
Sample Date		Client Info		24 May 2024	16 Feb 2024	19 Oct 2023
Machine Age	hrs	Client Info		10802	10370	9888
Oil Age	hrs	Client Info		10802	10370	9888
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	12	10	7
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		1	0	0
Aluminum	ppm	ASTM D5185m	>10	1	1	2
Lead	ppm	ASTM D5185m	>10	1	<1	1
Copper	ppm	ASTM D5185m	>75	4	3	2
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

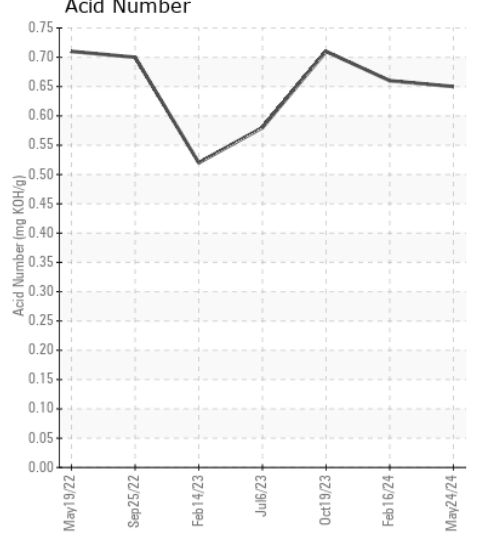
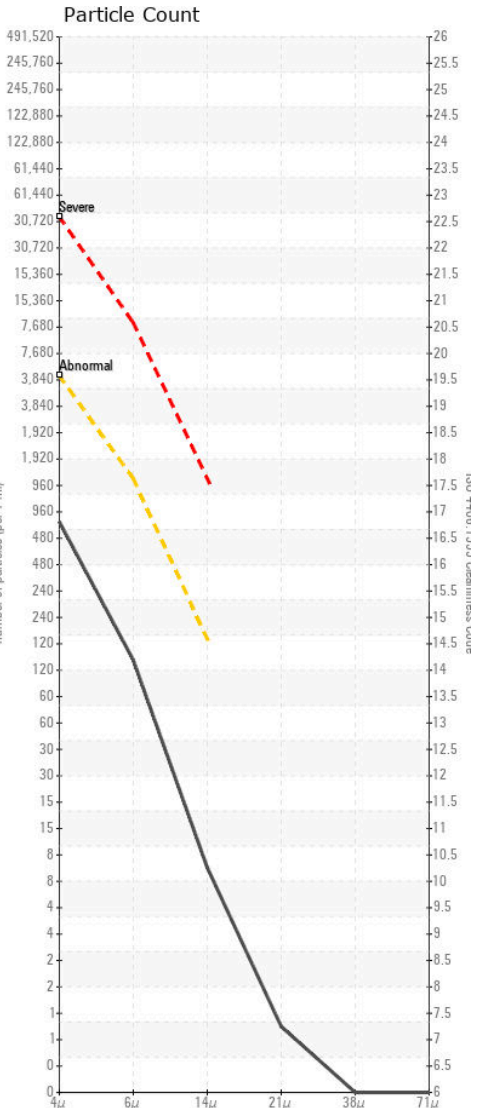
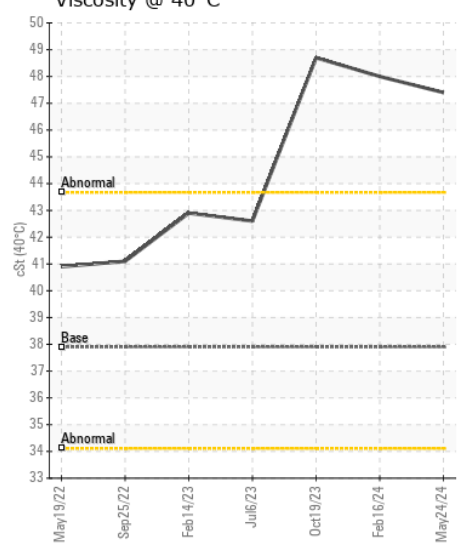
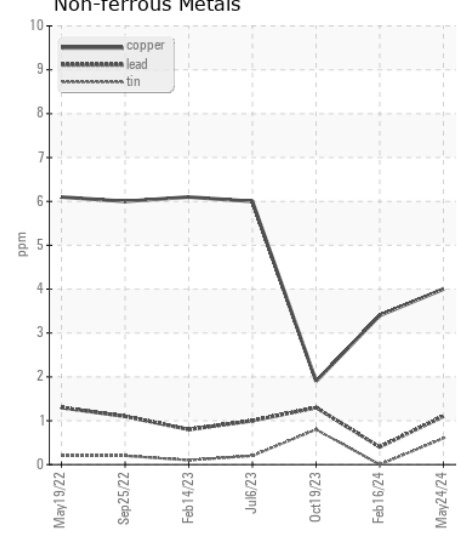
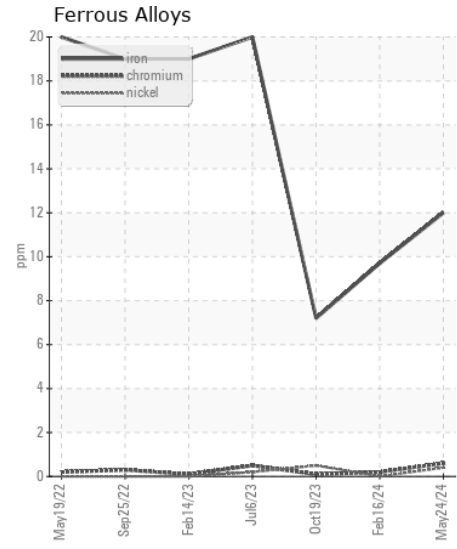
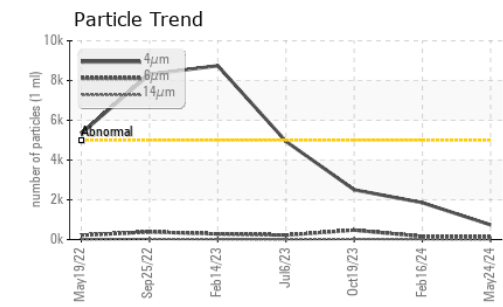
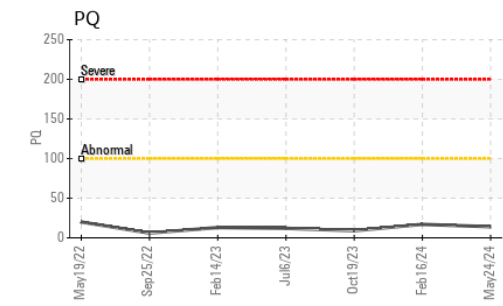
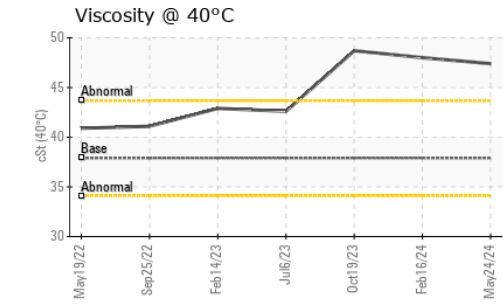
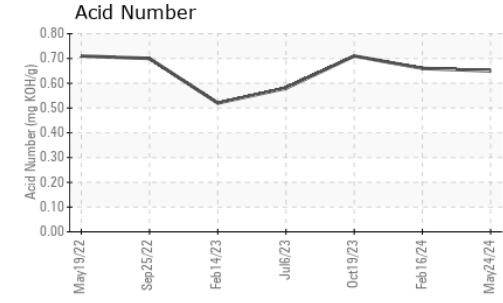
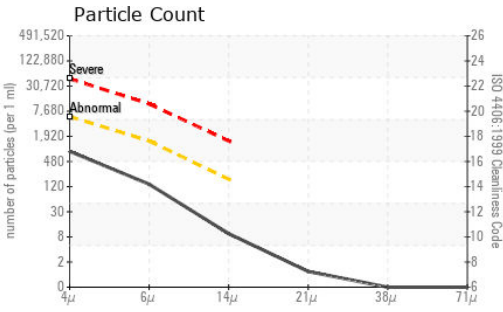
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>20	10	8	9
Potassium	ppm	ASTM D5185m	>20	3	2	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	739	1854	2505
Particles >6µm		ASTM D7647	>1300	121	159	477
Particles >14µm		ASTM D7647	>160	8	15	27
Particles >21µm		ASTM D7647	>40	1	3	6
Particles >38µm		ASTM D7647	>10	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/14/10	18/14/11	19/16/12
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	0	2
Boron	ppm	ASTM D5185m		72	66	64
Barium	ppm	ASTM D5185m		0	3	0
Molybdenum	ppm	ASTM D5185m		1	<1	0
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		16	17	21
Calcium	ppm	ASTM D5185m		2068	2056	2126
Phosphorus	ppm	ASTM D5185m	1100	872	898	969
Zinc	ppm	ASTM D5185m	1210	1064	1139	1226
Sulfur	ppm	ASTM D5185m		5497	5734	5570
Acid Number (AN)	mg KOH/g	ASTM D8045		0.65	0.66	0.71
Visc @ 40°C	cSt	ASTM D445	37.9	47.4	48.0	48.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0217683 **Received** : 29 May 2024
Lab Number : 06194603 **Tested** : 30 May 2024
Unique Number : 11056726 **Diagnosed** : 31 May 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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Certificate L2367
 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)