

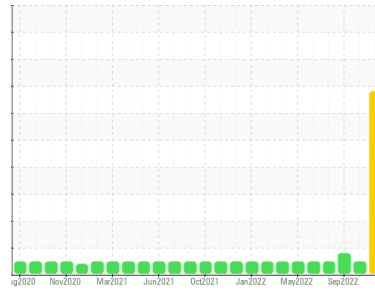


OIL ANALYSIS REPORT



Machine Id
CATERPILLAR 374F 8397 (S/N XWL00214)
 Component
Right Final Drive
 Fluid
TDTO FLUID SAE 50 (--- QTS)

Sample Rating Trend



DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

Bearing and/or bushing wear is indicated.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0899217	WC0888071	WC0734275
Sample Date	Client Info		17 Jun 2024	07 Mar 2024	05 Sep 2022
Machine Age	hrs	Client Info	13562	12945	12338
Oil Age	hrs	Client Info	617	607	474
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	NORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>800	233	93	53
Chromium	ppm	ASTM D5185m	>10	3	<1	<1
Nickel	ppm	ASTM D5185m	>5	▲ 10	<1	3
Titanium	ppm	ASTM D5185m	>15	3	1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>75	● 36	11	7
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>75	▲ 205	59	▲ 55
Tin	ppm	ASTM D5185m	>8	▲ 8	2	2
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	37	● 127	7	38
Barium	ppm	ASTM D5185m	7	0	0	<1
Molybdenum	ppm	ASTM D5185m	5	0	<1	<1
Manganese	ppm	ASTM D5185m		3	1	<1
Magnesium	ppm	ASTM D5185m	40	7	0	11
Calcium	ppm	ASTM D5185m	2650	● 747	3466	3348
Phosphorus	ppm	ASTM D5185m	1050	● 497	992	911
Zinc	ppm	ASTM D5185m	1075	● 248	1089	991
Sulfur	ppm	ASTM D5185m	5750	5143	15437	3383

CONTAMINANTS

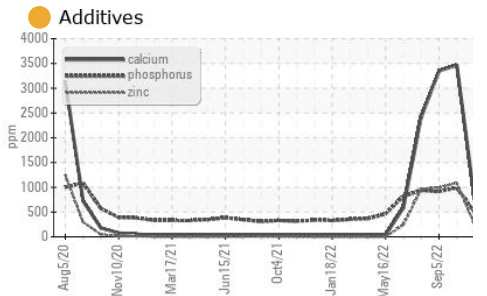
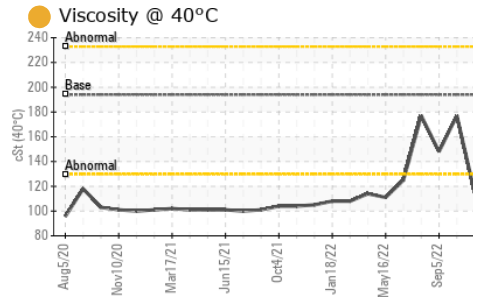
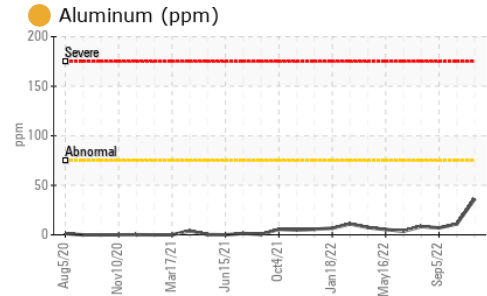
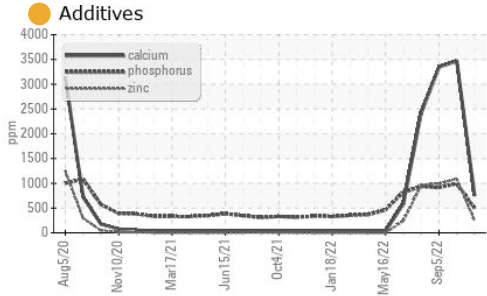
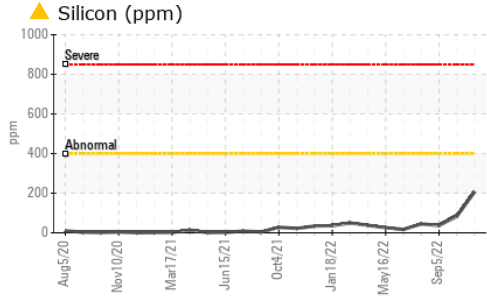
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>400	▲ 207	84	37
Sodium	ppm	ASTM D5185m		4	1	0
Potassium	ppm	ASTM D5185m	>20	10	<1	0

VISUAL

	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG	NEG



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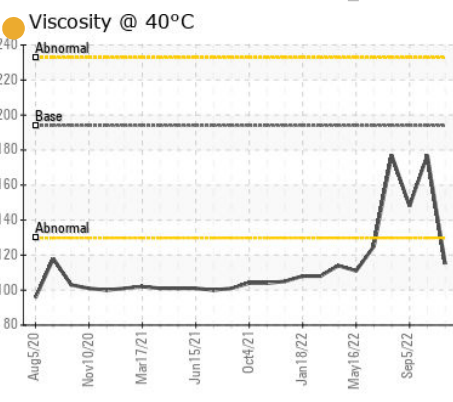
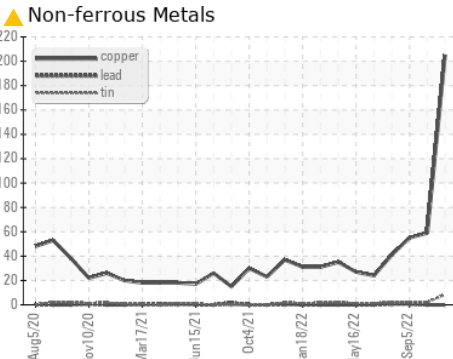
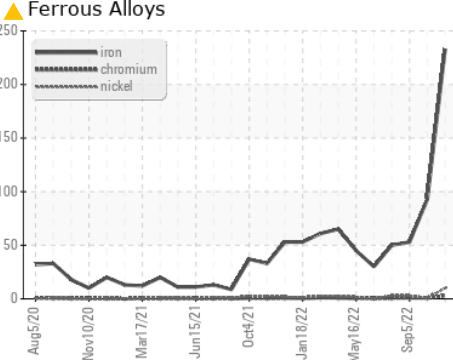


FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	194 ● 115	177	148

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color				no image	no image	no image
Bottom				no image	no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0899217
Lab Number : **06218653**
Unique Number : 11096850
Test Package : CONST
Received : 24 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 26 Jun 2024 - Sean Felton

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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)