



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
CATERPILLAR IT-14G 001505 (S/N KZN00957/8618)
Component
Hydraulic System
Fluid
CASTROL HYPURON 15W40 (19 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0800460	WC0463825	WCMC168205
Sample Date		Client Info		02 Jan 2024	23 Jul 2020	19 Feb 2018
Machine Age	hrs	Client Info		2274	2274	1815
Oil Age	hrs	Client Info		500	500	0
Filter Age	hrs	Client Info		81	500	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	2	2	3
Chromium	ppm	ASTM D5185m	>10	<1	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>10	2	3	2
Lead	ppm	ASTM D5185m	>10	<1	<1	<1
Copper	ppm	ASTM D5185m	>75	4	1	<1
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	VLITE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

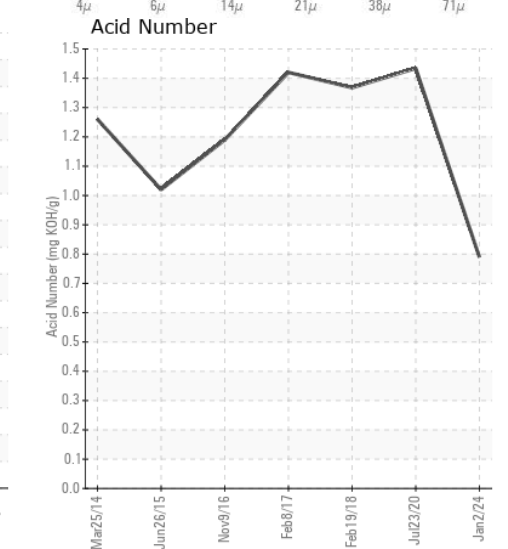
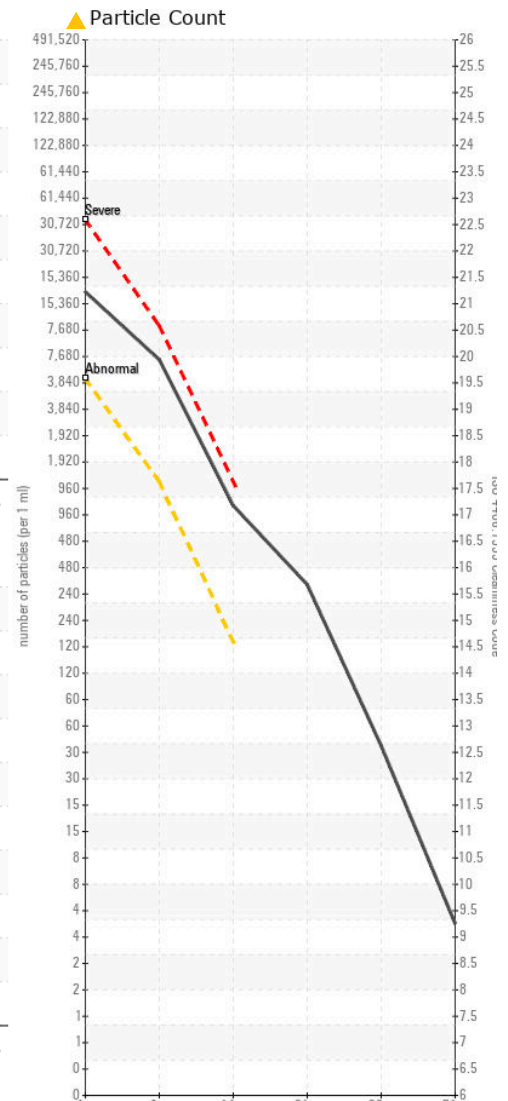
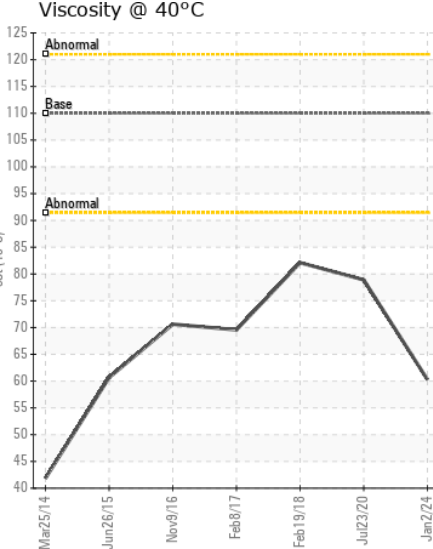
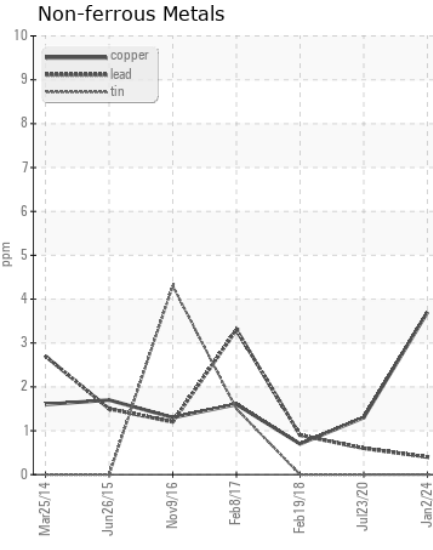
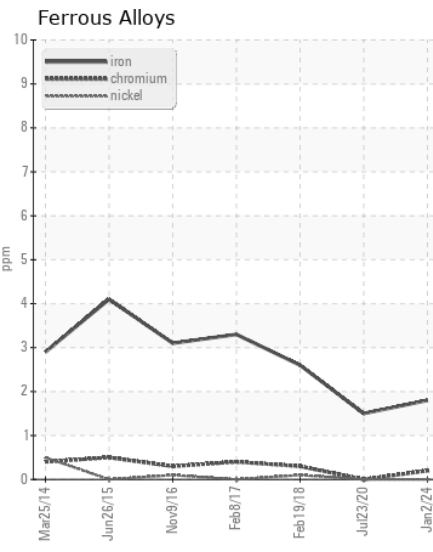
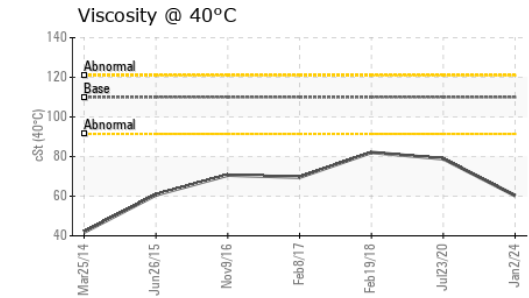
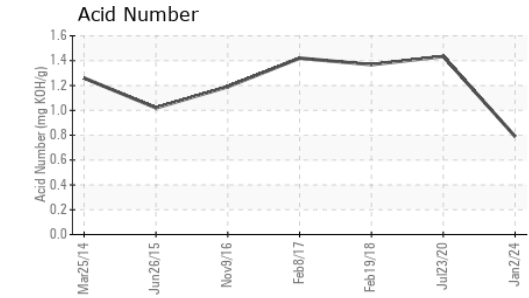
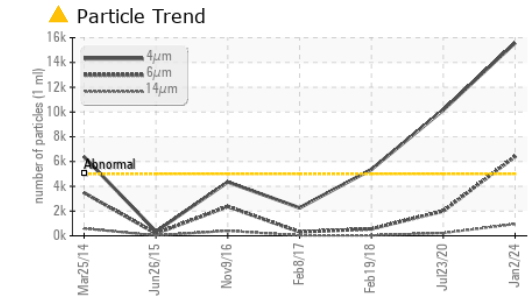
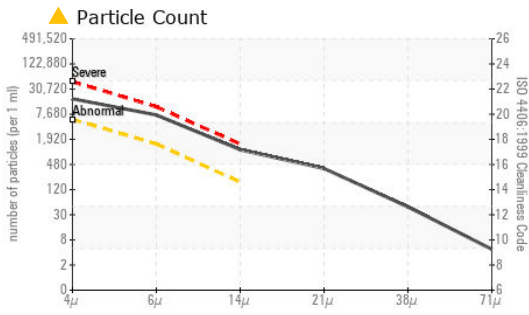
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>20	3	3	4
Potassium	ppm	ASTM D5185m	>20	2	0	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 15584	▲ 10159	5362
Particles >6µm		ASTM D7647	>1300	▲ 6410	▲ 1999	556
Particles >14µm		ASTM D7647	>160	▲ 950	▲ 224	30
Particles >21µm		ASTM D7647	>40	▲ 338	▲ 75	7
Particles >38µm		ASTM D7647	>10	▲ 41	5	0
Particles >71µm		ASTM D7647	>3	▲ 4	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 21/20/17	▲ 21/18/15	20/16/12
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	VLITE
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	4	5
Boron	ppm	ASTM D5185m		24	43	68
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		23	38	6
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		370	608	85
Calcium	ppm	ASTM D5185m		1032	1553	2006
Phosphorus	ppm	ASTM D5185m		807	1046	975
Zinc	ppm	ASTM D5185m		899	1239	998
Sulfur	ppm	ASTM D5185m		2768	2832	4168
Acid Number (AN)	mg KOH/g	ASTM D8045		0.79	1.434	1.368
Visc @ 40°C	cSt	ASTM D445	110	60.3	78.9	82.1



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0800460 **Received** : 12 Jan 2024
Lab Number : 06060167 **Diagnosed** : 16 Jan 2024
Unique Number : 10831549 **Diagnostician** : Jonathan Hester
Test Package : CONST

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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