



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL



Machine Id
CATERPILLAR R1600 SCP219
Component
Diesel Engine
Fluid
MOBIL 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0897576	WC	WC0820198
Sample Date		Client Info		14 Jan 2024	31 Dec 2023	18 Oct 2023
Machine Age	hrs	Client Info		2605	2498	1749
Oil Age	hrs	Client Info		0	0	164
Filter Age	hrs	Client Info		0	0	164
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	N/A	Not Changd
Sample Status				MARGINAL	ABNORMAL	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	8	21	11
Chromium	ppm	ASTM D5185(m)	>20	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	2	2	2
Lead	ppm	ASTM D5185(m)	>40	4	8	4
Copper	ppm	ASTM D5185(m)	>330	23	37	26
Tin	ppm	ASTM D5185(m)	>15	3	5	3
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

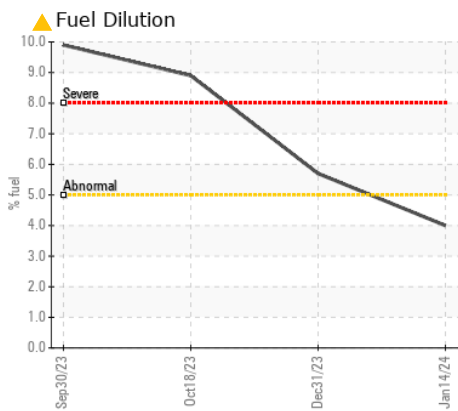
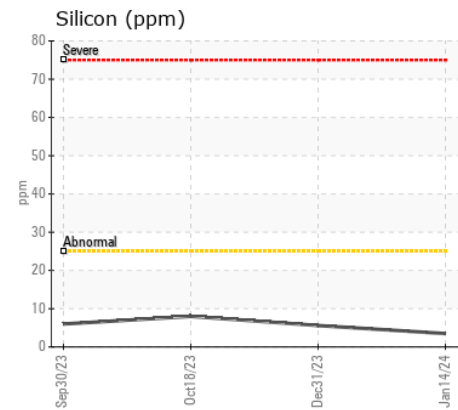
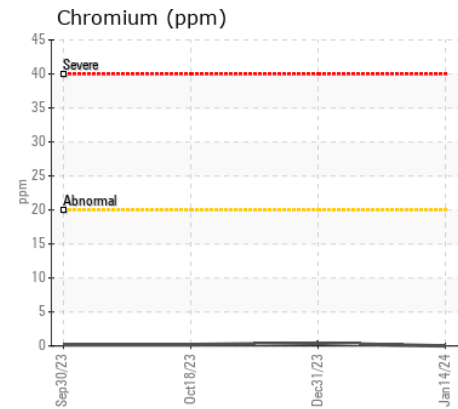
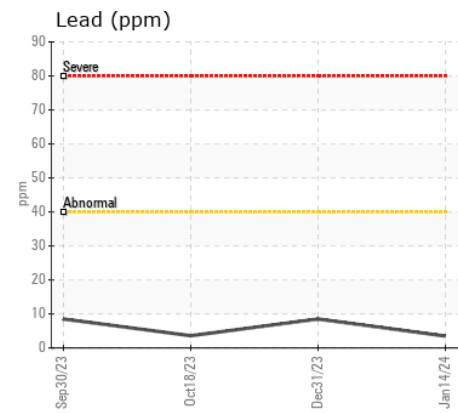
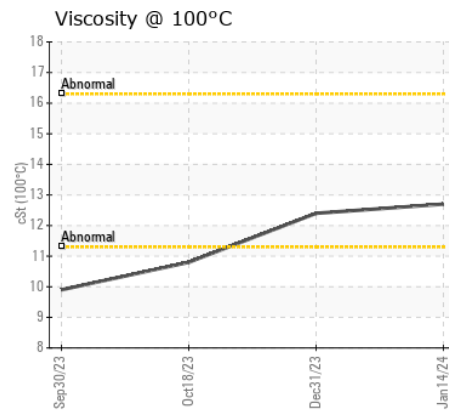
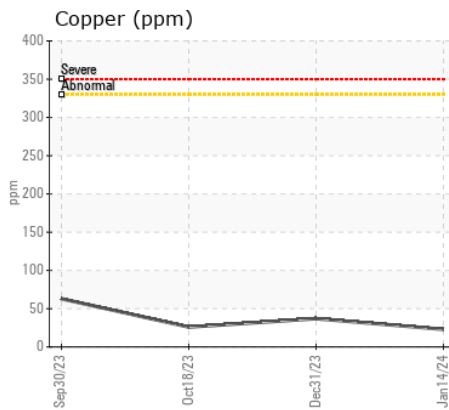
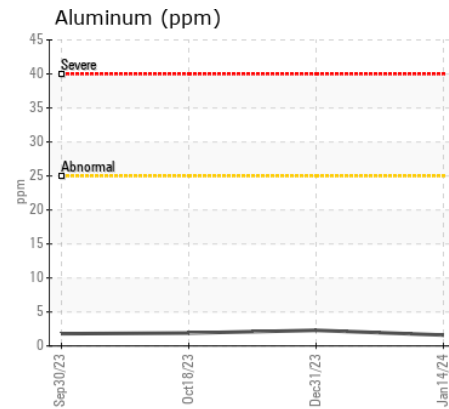
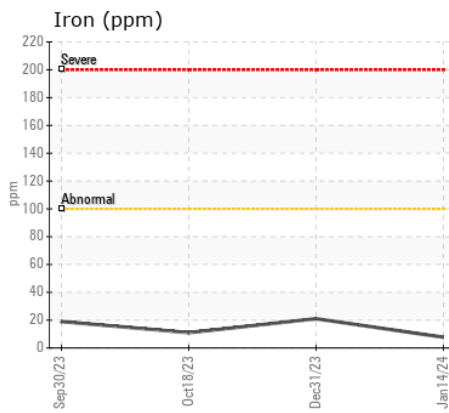
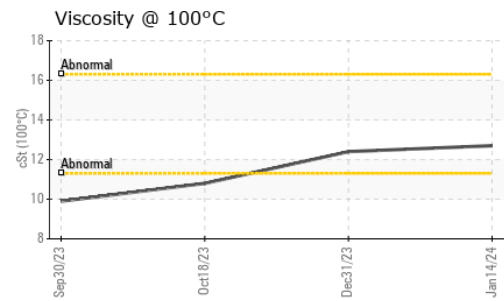
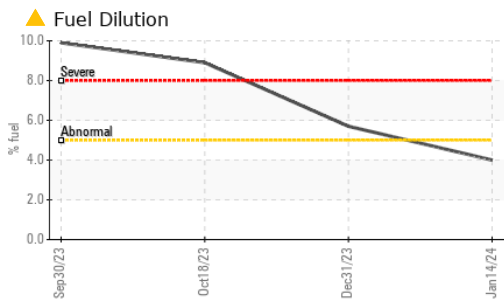
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	6	8
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
Fuel	%	ASTM D7593*	>5	▲ 4	▲ 5.7	● 8.9
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.1	0.3	0
Nitration	Abs/cm	ASTM D7624*	>20	7.5	11.1	7.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.6	25.7	23.3
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 D5185(m)	>118	2	4	3
Boron	ppm	ASTM D5185(m)		40	29	37
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		38	40	36
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		485	483	441
Calcium	ppm	ASTM D5185(m)		1662	1709	1593
Phosphorus	ppm	ASTM D5185(m)		735	720	696
Zinc	ppm	ASTM D5185(m)		843	865	900
Sulfur	ppm	ASTM D5185(m)		2170	2055	1929
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.1	27.3	22.8
Visc @ 100°C	cSt	ASTM D7279(m)		12.7	▲ 12.4	▲ 10.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0897576 **Received** : 17 Jan 2024
Lab Number : 02609216 **Diagnosed** : 18 Jan 2024
Unique Number : 5710302 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: PercentFuel)

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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.