



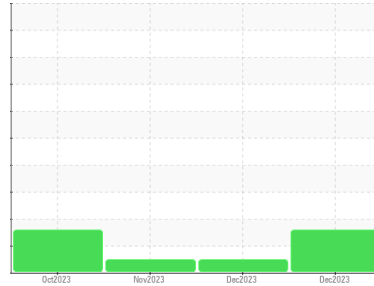
OIL ANALYSIS REPORT

Sample Rating Trend

SOOT



Machine Id
CATERPILLAR R1600G SCP215
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)



DIAGNOSIS

▲ Recommendation

The oil change at the time of sampling has been noted. No other corrective action is recommended at this time.

Wear

All component wear rates are normal.

▲ Contamination

Light fuel dilution occurring. Light concentration of carbon/soot present in the oil. No other contaminants were detected in the oil.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0890056	WC0888405	WC0879205
Sample Date	Client Info		25 Dec 2023	21 Dec 2023	14 Nov 2023
Machine Age	hrs	Client Info	2428	0	2607
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	N/A	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	92	22	28
Chromium	ppm	ASTM D5185(m)	>20	1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	1	0	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	<1	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	5	2	2
Lead	ppm	ASTM D5185(m)	>40	18	3	8
Copper	ppm	ASTM D5185(m)	>330	20	4	6
Tin	ppm	ASTM D5185(m)	>15	2	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	250	18	34	45
Barium	ppm	ASTM D5185(m)	10	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	34	41	40
Manganese	ppm	ASTM D5185(m)		<1	0	0
Magnesium	ppm	ASTM D5185(m)	450	386	511	497
Calcium	ppm	ASTM D5185(m)	3000	2127	1704	1689
Phosphorus	ppm	ASTM D5185(m)	1150	755	758	740
Zinc	ppm	ASTM D5185(m)	1350	919	889	884
Sulfur	ppm	ASTM D5185(m)	4250	3313	2235	2051
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

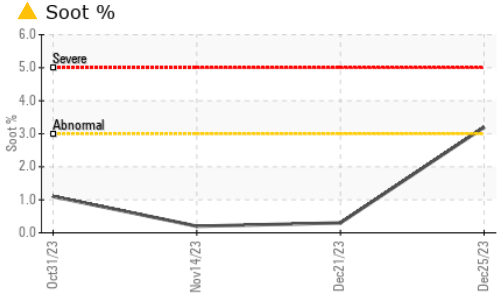
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	7	4	4
Sodium	ppm	ASTM D5185(m)	>158	3	2	3
Potassium	ppm	ASTM D5185(m)	>20	0	0	0
Fuel	%	ASTM D7593*	>5	▲ 2.3	<1.0	<1.0

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	▲ 3.2	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	12.7	8.5	7.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	28.3	23.9	23.6



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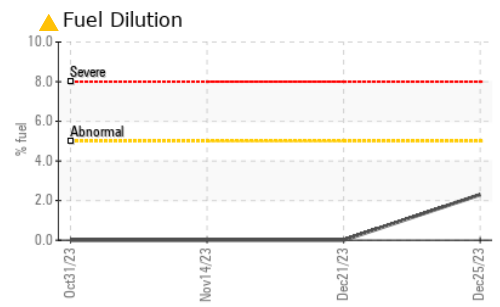
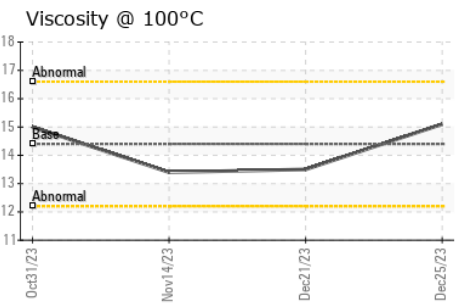
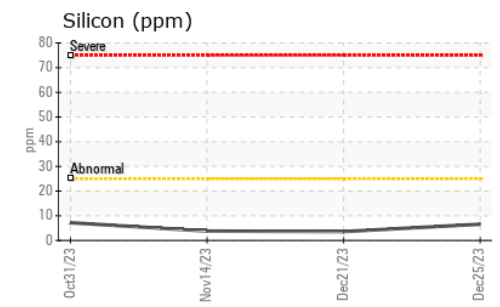
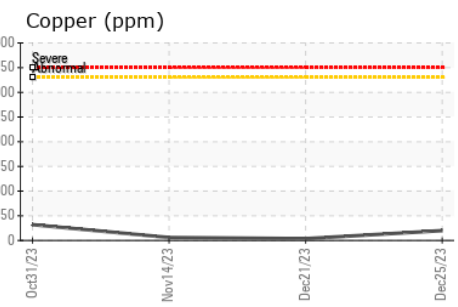
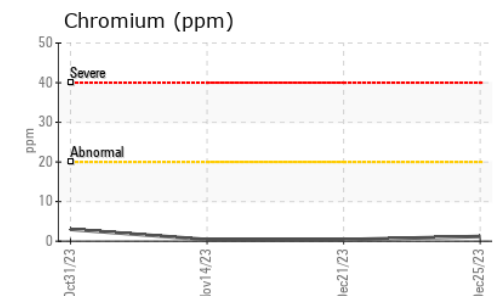
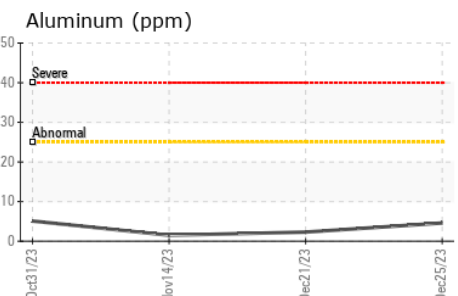
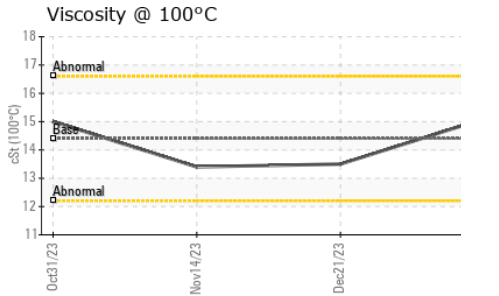
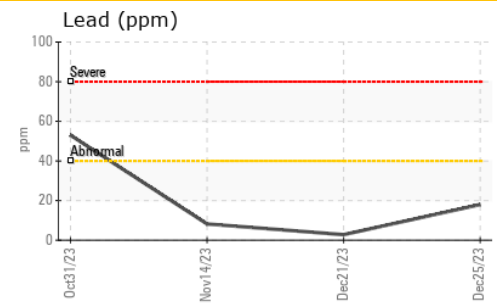
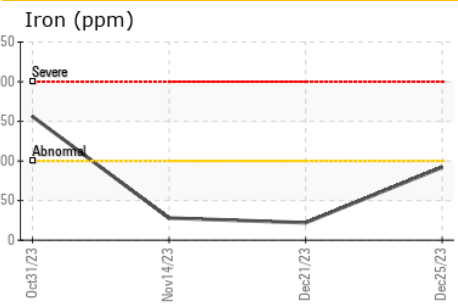
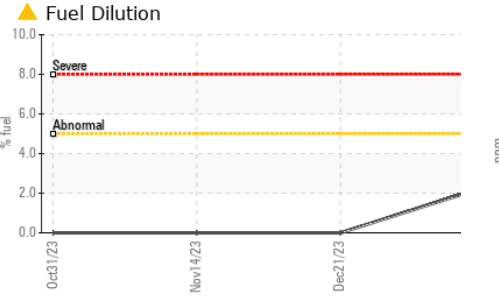


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	23.1	22.5	21.7

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	15.1	13.5	13.4

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0890056 **Received** : 04 Jan 2024
Lab Number : 02606496 **Diagnosed** : 05 Jan 2024
Unique Number : 5707582 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, 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.