



OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Area
[526158]
 Machine Id
BSD ACM195065

Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

Aluminum ppm levels are noted. All other component wear rates are normal.

▲ Contamination

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

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			WC0467840	---	---
Sample Date	Client Info			05 Dec 2023	---	---
Machine Age	hrs	Client Info		5230	---	---
Oil Age	hrs	Client Info		100	---	---
Oil Changed	Client Info			Changed	---	---
Sample Status				ABNORMAL	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	---	---
Water	WC Method	>0.2		NEG	---	---
Glycol	WC Method			NEG	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	54	---	---
Chromium	ppm	ASTM D5185(m)	>20	7	---	---
Nickel	ppm	ASTM D5185(m)	>4	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	10	---	---
Lead	ppm	ASTM D5185(m)	>40	3	---	---
Copper	ppm	ASTM D5185(m)	>330	8	---	---
Tin	ppm	ASTM D5185(m)	>15	3	---	---
Antimony	ppm	ASTM D5185(m)		1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
Beryllium	ppm	ASTM D5185(m)		0	---	---
Cadmium	ppm	ASTM D5185(m)		0	---	---

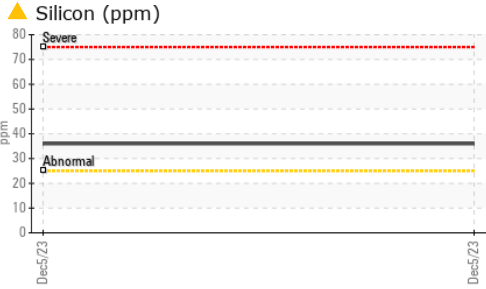
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	67	---	---
Barium	ppm	ASTM D5185(m)	10	<1	---	---
Molybdenum	ppm	ASTM D5185(m)	100	92	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)	450	43	---	---
Calcium	ppm	ASTM D5185(m)	3000	2201	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	971	---	---
Zinc	ppm	ASTM D5185(m)	1350	1186	---	---
Sulfur	ppm	ASTM D5185(m)	4250	3021	---	---
Lithium	ppm	ASTM D5185(m)		<1	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	▲ 36	---	---
Sodium	ppm	ASTM D5185(m)	>158	4	---	---
Potassium	ppm	ASTM D5185(m)	>20	2	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	9.7	---	---
Sulfation	Abs./1mm	ASTM D7415*	>30	19.3	---	---



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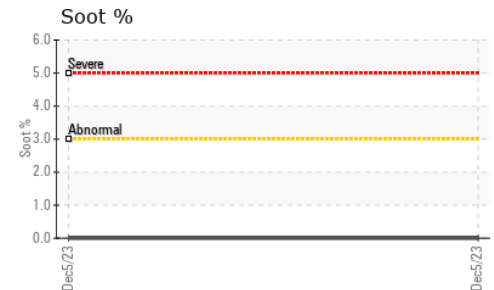
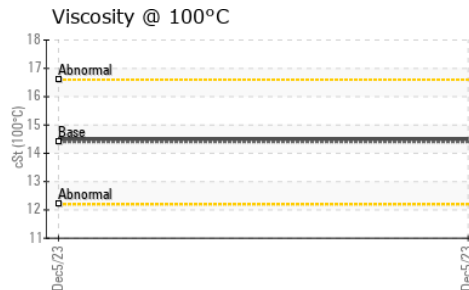
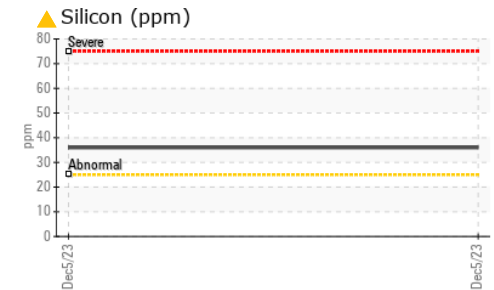
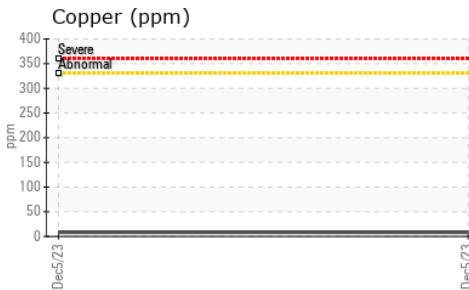
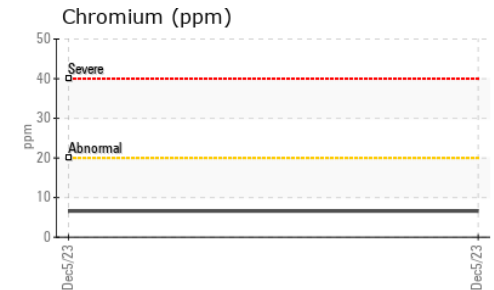
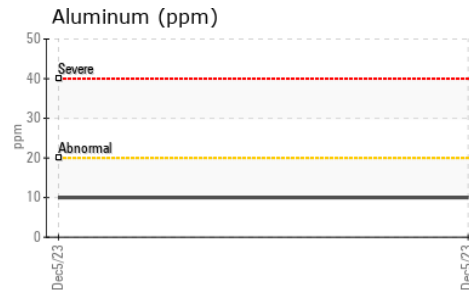
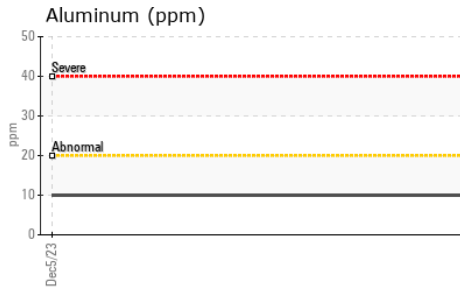
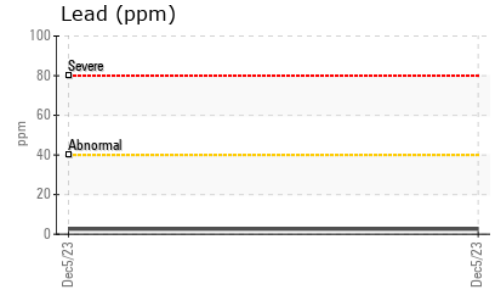
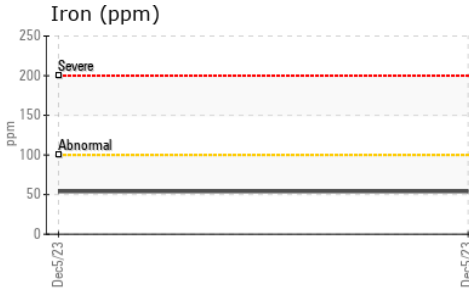
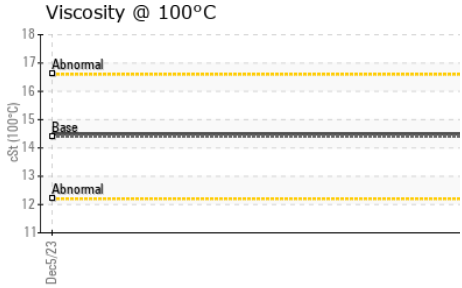


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	15.7	---	---

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.5	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0467840
Lab Number : **02601772**
Unique Number : 5694857
Test Package : MOB 1
Received : 08 Dec 2023
Diagnosed : 08 Dec 2023
Diagnostician : Kevin Marson

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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.