



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
DOOSAN DL420-5 DWGCWLBJLL1010785

Component
Diesel Engine

Fluid
DOOSAN 15W40 (--- GAL)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number	Client Info		WC0713503	---	---
Sample Date	Client Info		28 Dec 2022	---	---
Machine Age	hrs	Client Info	3935	---	---
Oil Age	hrs	Client Info	500	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

	method	limit/base	current	history 1	history 2
Fuel	WC Method	>5	<1.0	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185(m)	>50	3	---
Chromium	ppm	ASTM D5185(m)	>20	0	---
Nickel	ppm	ASTM D5185(m)	>5	0	---
Titanium	ppm	ASTM D5185(m)		<1	---
Silver	ppm	ASTM D5185(m)	>3	0	---
Aluminum	ppm	ASTM D5185(m)	>20	<1	---
Lead	ppm	ASTM D5185(m)	>40	<1	---
Copper	ppm	ASTM D5185(m)	>30	1	---
Tin	ppm	ASTM D5185(m)	>15	<1	---
Antimony	ppm	ASTM D5185(m)		0	---
Vanadium	ppm	ASTM D5185(m)		0	---
Beryllium	ppm	ASTM D5185(m)		0	---
Cadmium	ppm	ASTM D5185(m)		0	---

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185(m)		44	---
Barium	ppm	ASTM D5185(m)		0	---
Molybdenum	ppm	ASTM D5185(m)		36	---
Manganese	ppm	ASTM D5185(m)		<1	---
Magnesium	ppm	ASTM D5185(m)		522	---
Calcium	ppm	ASTM D5185(m)		1726	---
Phosphorus	ppm	ASTM D5185(m)		816	---
Zinc	ppm	ASTM D5185(m)		868	---
Sulfur	ppm	ASTM D5185(m)		2181	---
Lithium	ppm	ASTM D5185(m)		<1	---

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185(m)	>15	8	---
Sodium	ppm	ASTM D5185(m)		2	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---

INFRA-RED

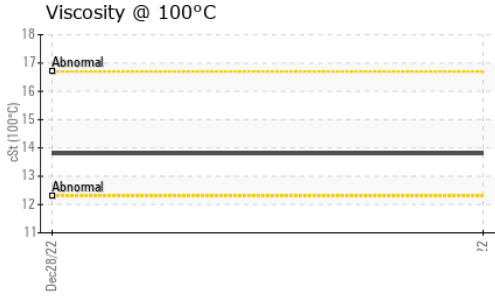
	method	limit/base	current	history 1	history 2
Soot %	%	ASTM D7844*	>3	0	---
Nitration	Abs/cm	ASTM D7624*	>20	5.8	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.1	---

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.3	---



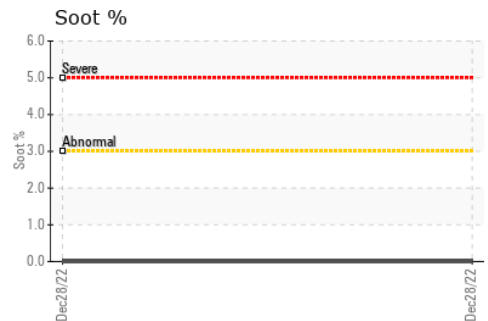
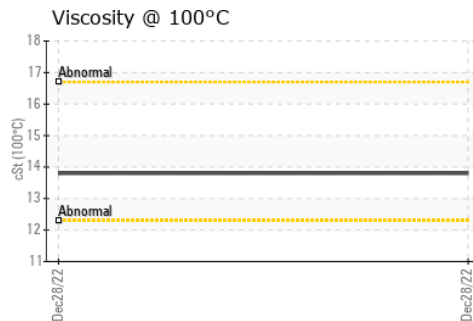
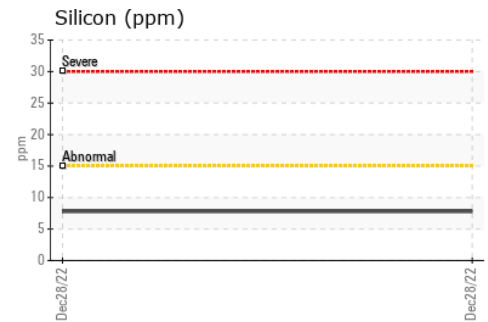
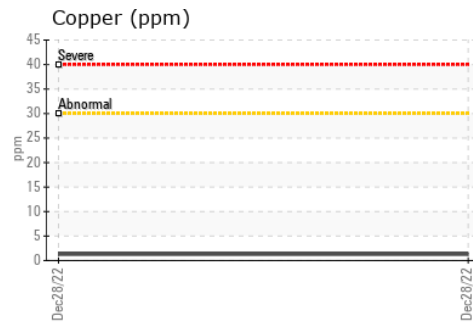
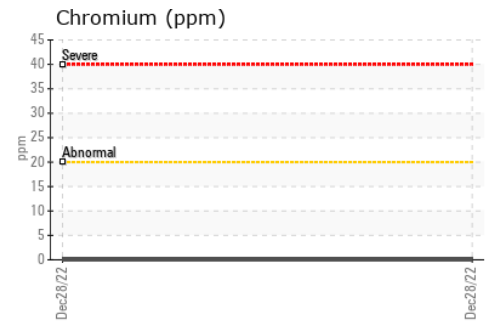
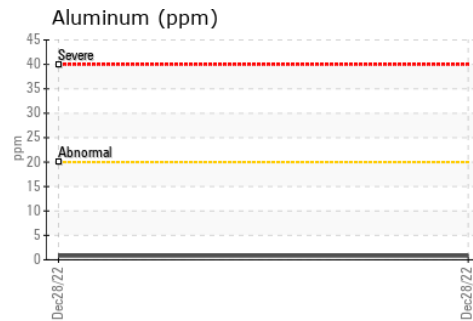
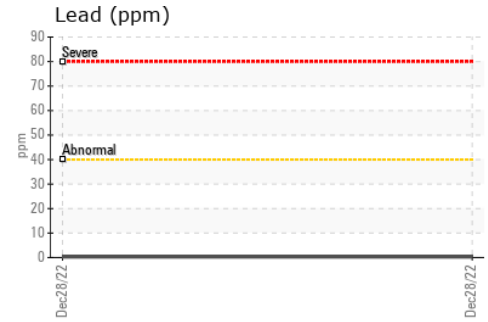
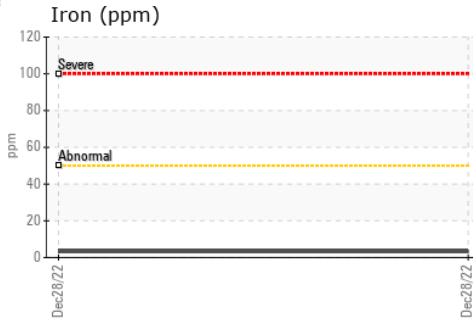
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
Emulsified Water	scalar	Visual*	>0.1	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D7279(m)	13.8	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0713503 **Received** : 03 Jan 2023
Lab Number : 02530990 **Diagnosed** : 03 Jan 2023
Unique Number : 5511989 **Diagnostician** : Kevin Marson
Test Package : MOB 1

Mann 2018 Ltd.
 7367 Wellington County Road 30
 GUELPH, ON
 CA N1H 6J3
 Contact: Randy Mann
 randy@mannconstruction.ca

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.

T:
F: