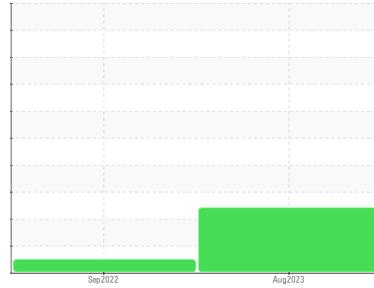




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
KUBOTA X1140 MCP727
 Component
Diesel Engine
 Fluid
DISEL 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		WC0835181	WC0695854	---
Sample Date	Client Info		07 Aug 2023	03 Sep 2022	---
Machine Age	hrs	Client Info	1139	847	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		Changed	N/A	---
Sample Status			ABNORMAL	NORMAL	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	18	29	---
Chromium	ppm	ASTM D5185(m)	>20	<1	1	---
Nickel	ppm	ASTM D5185(m)	>4	<1	0	---
Titanium	ppm	ASTM D5185(m)		<1	<1	---
Silver	ppm	ASTM D5185(m)	>3	0	0	---
Aluminum	ppm	ASTM D5185(m)	>20	▲ 16	9	---
Lead	ppm	ASTM D5185(m)	>40	0	<1	---
Copper	ppm	ASTM D5185(m)	>330	2	5	---
Tin	ppm	ASTM D5185(m)	>15	0	0	---
Antimony	ppm	ASTM D5185(m)		0	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	250	73	5	---
Barium	ppm	ASTM D5185(m)	10	0	<1	---
Molybdenum	ppm	ASTM D5185(m)	100	50	54	---
Manganese	ppm	ASTM D5185(m)		<1	1	---
Magnesium	ppm	ASTM D5185(m)	450	567	916	---
Calcium	ppm	ASTM D5185(m)	3000	1810	1068	---
Phosphorus	ppm	ASTM D5185(m)	1150	849	1042	---
Zinc	ppm	ASTM D5185(m)	1350	955	1124	---
Sulfur	ppm	ASTM D5185(m)	4250	2123	2575	---
Lithium	ppm	ASTM D5185(m)		1	<1	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	▲ 42	10	---
Sodium	ppm	ASTM D5185(m)	>158	8	10	---
Potassium	ppm	ASTM D5185(m)	>20	2	4	---

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	5.9	5.1	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.3	19.5	---

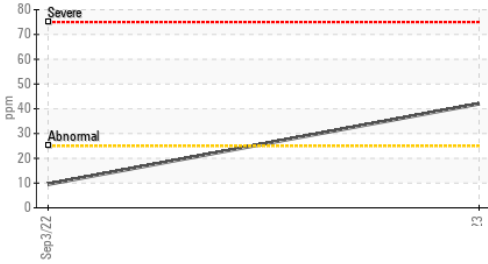
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.8	14.1	---

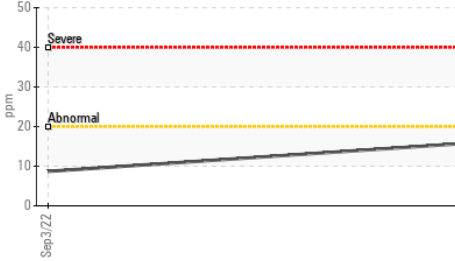


OIL ANALYSIS REPORT

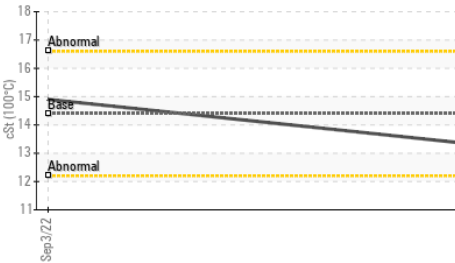
▲ Silicon (ppm)



▲ Aluminum (ppm)



Viscosity @ 100°C

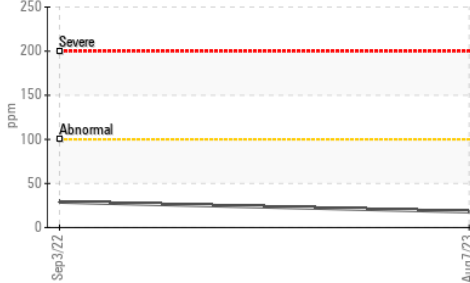


VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	13.3	14.9

GRAPHS

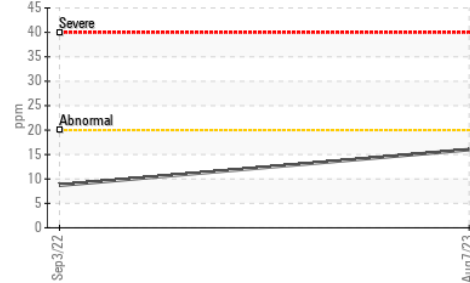
Iron (ppm)



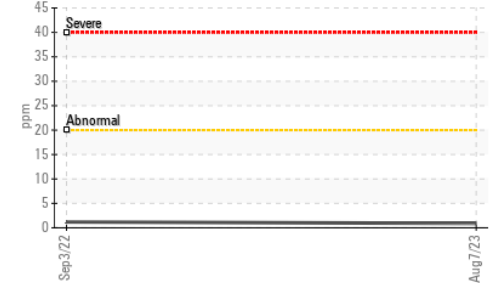
Lead (ppm)



▲ Aluminum (ppm)



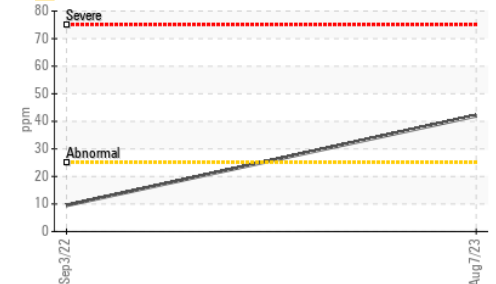
Chromium (ppm)



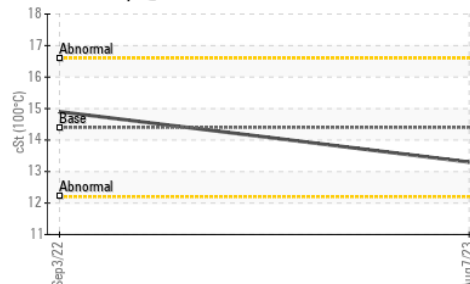
Copper (ppm)



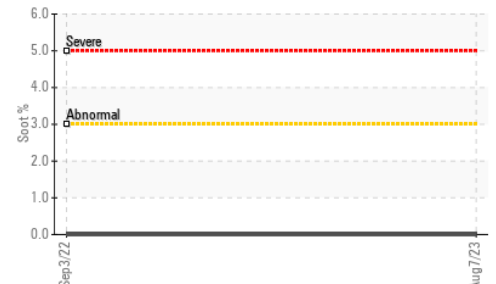
▲ Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
 Sample No. : WC0835181 Received : 11 Aug 2023
 Lab Number : 02575325 Diagnosed : 11 Aug 2023
 Unique Number : 5620376 Diagnostician : Kevin Marson
 Test Package : MOB 1

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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.