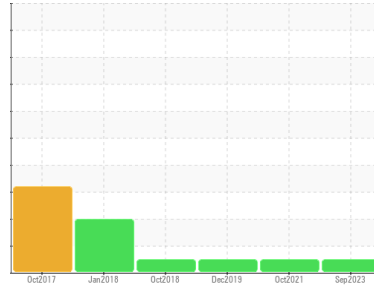


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
KUBOTA SVL90 610-60
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (3 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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0106862	PCA0057457	LWI-000682
Sample Date	Client Info	08 Sep 2023	04 Oct 2021	04 Dec 2019
Machine Age	hrs	1143	800	508
Oil Age	hrs	500	350	500
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		NORMAL	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	37	42	29
Chromium	ppm ASTM D5185m >20	1	2	1
Nickel	ppm ASTM D5185m >4	<1	<1	0
Titanium	ppm ASTM D5185m	<1	0	0
Silver	ppm ASTM D5185m >3	0	<1	0
Aluminum	ppm ASTM D5185m >20	3	4	5
Lead	ppm ASTM D5185m >40	0	<1	0
Copper	ppm ASTM D5185m >330	4	5	2
Tin	ppm ASTM D5185m >15	<1	<1	0
Antimony	ppm ASTM D5185m	---	0	0
Vanadium	ppm ASTM D5185m	0	<1	0
Cadmium	ppm ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	2	5	0
Barium	ppm ASTM D5185m 0	0	0	0
Molybdenum	ppm ASTM D5185m 60	58	58	41
Manganese	ppm ASTM D5185m 0	<1	<1	0
Magnesium	ppm ASTM D5185m 1010	932	943	686
Calcium	ppm ASTM D5185m 1070	1049	1080	1585
Phosphorus	ppm ASTM D5185m 1150	1013	997	1021
Zinc	ppm ASTM D5185m 1270	1248	1267	1171
Sulfur	ppm ASTM D5185m 2060	2925	2676	---
Lithium	ppm ASTM D5185m	---	---	0

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	7	6	5
Sodium	ppm ASTM D5185m	2	2	11
Potassium	ppm ASTM D5185m >20	2	2	0

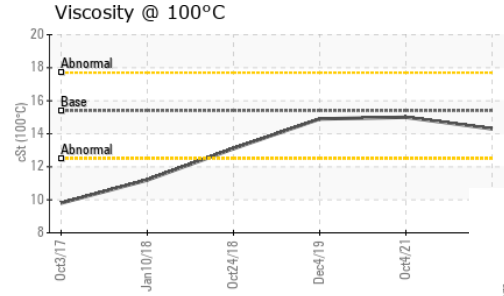
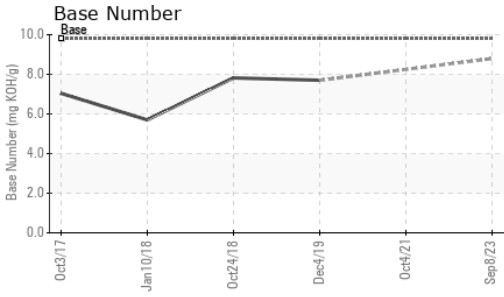
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	1.1	1	---
Nitration	Abs/cm *ASTM D7624 >20	8.1	7.9	6
Sulfation	Abs/.1mm *ASTM D7415 >30	19.2	19.3	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	14.4	14.5	9
Base Number (BN)	mg KOH/g ASTM D2896 9.8	8.8	---	7.7

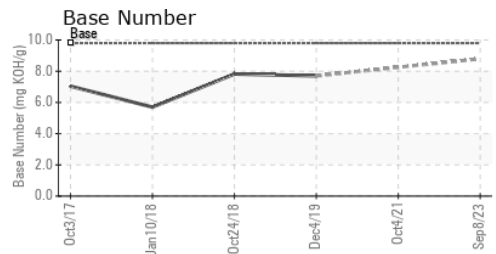
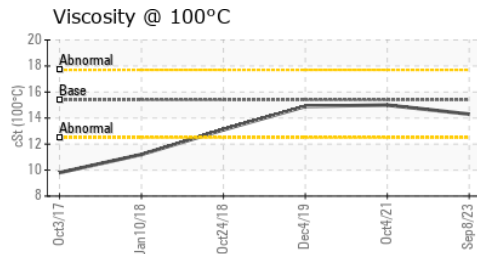
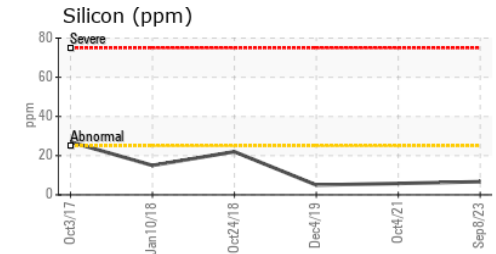
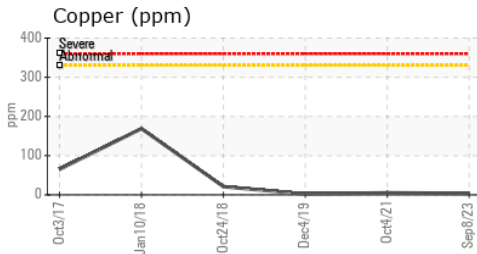
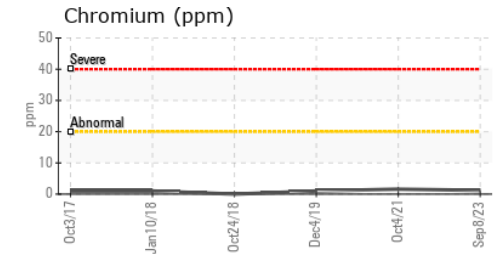
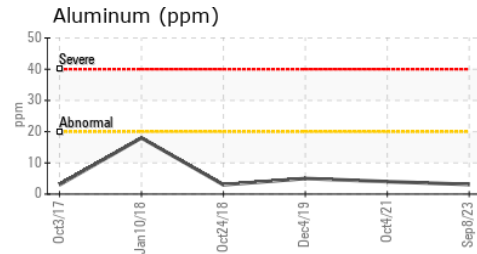
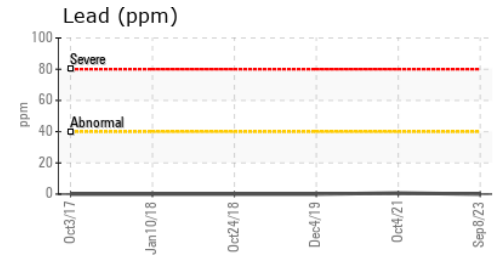
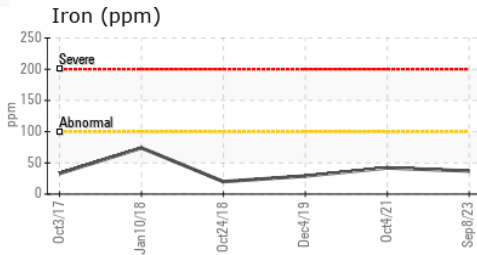
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
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 D445	15.4	14.3	15.0	14.9

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0106862 **Received** : 02 Oct 2023
Lab Number : 05965974 **Diagnosed** : 02 Oct 2023
Unique Number : 10672525 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

GE MARSHALL EXCAVATION
 1351 JOLIET RD
 VALPARAISO, IN
 US 46385
 Contact: MARK STEFFEL
 mark.steffel@gemarshall.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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F: