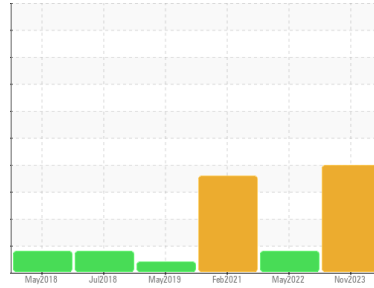


OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
KOMATSU WA380-8 30-48 (S/N A74013)
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL (38 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Wear

The iron level is abnormal. The copper level is abnormal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil viscosity is higher than normal. Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0095025	PCA0056884	PCA0023965
Sample Date	Client Info		13 Nov 2023	12 May 2022	20 Feb 2021
Machine Age	hrs	Client Info	11271	9711	8886
Oil Age	hrs	Client Info	6270	4251	862
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	▲ 53	▲ 49	▲ 28
Chromium	ppm	ASTM D5185m >10	0	<1	<1
Nickel	ppm	ASTM D5185m >10	0	0	<1
Titanium	ppm	ASTM D5185m	0	<1	<1
Silver	ppm	ASTM D5185m	0	<1	0
Aluminum	ppm	ASTM D5185m >10	1	2	1
Lead	ppm	ASTM D5185m >10	0	<1	2
Copper	ppm	ASTM D5185m >75	▲ 163	13	▲ 153
Tin	ppm	ASTM D5185m >10	<1	1	0
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	5	6	2
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	1	<1	1
Manganese	ppm	ASTM D5185m 1	<1	<1	<1
Magnesium	ppm	ASTM D5185m 0	▲ 35	13	▲ 38
Calcium	ppm	ASTM D5185m 100	▲ 2669	243	▲ 2704
Phosphorus	ppm	ASTM D5185m 670	▲ 966	430	▲ 867
Zinc	ppm	ASTM D5185m 850	▲ 1077	547	1036
Sulfur	ppm	ASTM D5185m 1600	▲ 3503	1323	▲ 3210

CONTAMINANTS

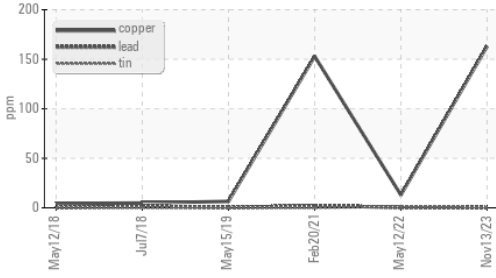
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	8	5	6
Sodium	ppm	ASTM D5185m	1	0	1
Potassium	ppm	ASTM D5185m >20	0	1	6

VISUAL

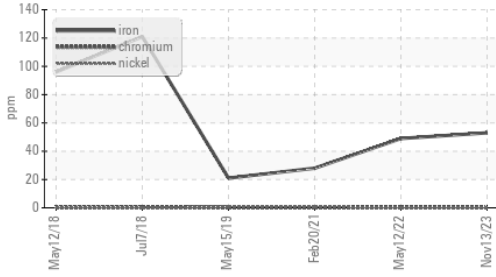
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	NONE	NONE	NONE
Debris	scalar	*Visual NONE	LIGHT	NONE	NONE
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	NONE
Appearance	scalar	*Visual NORML	NORML	NORML	NORML
Odor	scalar	*Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual >0.1	NEG	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG

OIL ANALYSIS REPORT

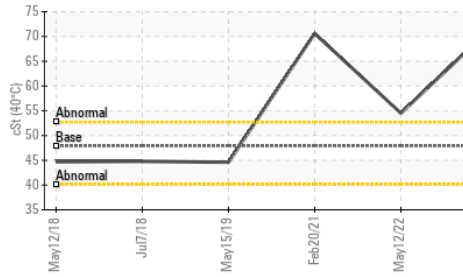
▲ Non-ferrous Metals



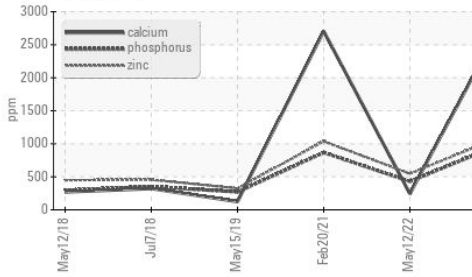
▲ Ferrous Alloys



▲ Viscosity @ 40°C



▲ Additives



FLUID PROPERTIES

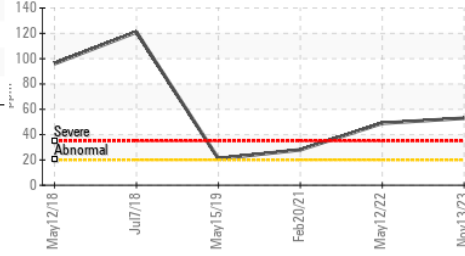
method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445	47.9 ▲ 70.9	54.5	▲ 70.6

SAMPLE IMAGES

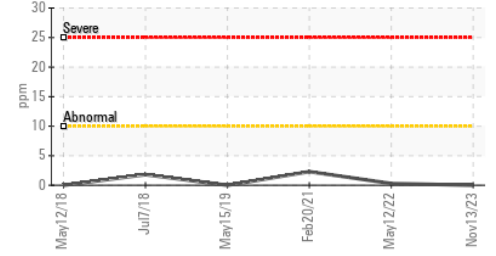
method	limit/base	current	history1	history2
Color			no image	no image
Bottom			no image	no image

GRAPHS

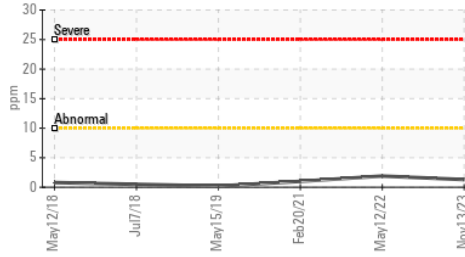
▲ Iron (ppm)



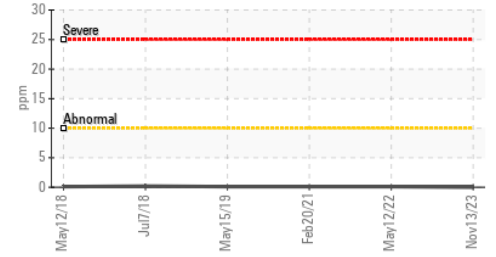
▲ Lead (ppm)



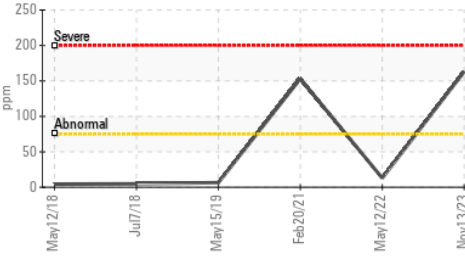
▲ Aluminum (ppm)



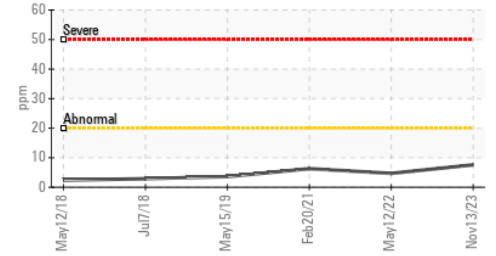
▲ Chromium (ppm)



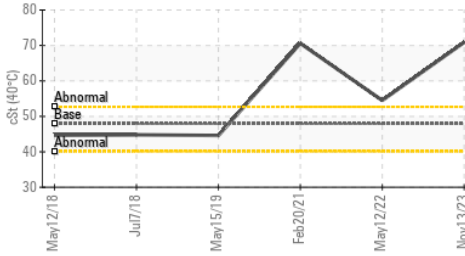
▲ Copper (ppm)



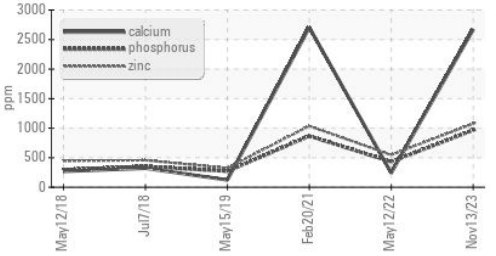
▲ Silicon (ppm)



▲ Viscosity @ 40°C



▲ Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0095025 **Recieved** : 25 Jan 2024
Lab Number : **06070812** **Diagnosed** : 28 Jan 2024
Unique Number : 10847489 **Diagnostician** : Don Baldrige
Test Package : MOB 1

JOHNSON DAVIS CONTRACTORS
 604 HILBRATH DR
 LANTANA, FL
 US 33462
 Contact: GENE GARDNER
 ggardner@johnsondavis.com
 T: (561)588-1170
 F:

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)