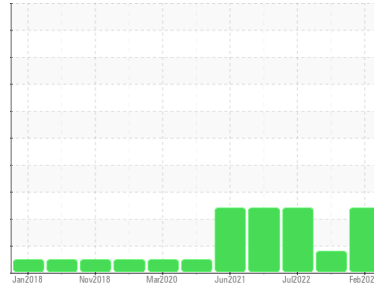


OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
KOMATSU PC-240-LC-11 20-69 (S/N A95106)
Component
Diesel Engine
Fluid
PETRO CANADA DURON XL SYN BLEND 15W40 (6 GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of fuel present in the oil.

▲ Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0056820	PCA0056864	PCA0056945
Sample Date	Client Info		14 Feb 2024	18 Jan 2023	06 Jul 2022
Machine Age	hrs	Client Info	8245	7071	6654
Oil Age	hrs	Client Info	699	95	521
Oil Changed	Client Info		Changed	Not Changd	Changed
Sample Status			SEVERE	MARGINAL	SEVERE

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	27	8	41
Chromium	ppm	ASTM D5185m >20	2	<1	1
Nickel	ppm	ASTM D5185m >4	0	<1	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	<1	1	6
Lead	ppm	ASTM D5185m >40	0	1	0
Copper	ppm	ASTM D5185m >330	<1	<1	1
Tin	ppm	ASTM D5185m >15	0	<1	<1
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 1	17	5	42
Barium	ppm	ASTM D5185m 1	0	4	0
Molybdenum	ppm	ASTM D5185m 60	42	46	56
Manganese	ppm	ASTM D5185m 1	0	<1	<1
Magnesium	ppm	ASTM D5185m 1010	574	715	396
Calcium	ppm	ASTM D5185m 1070	898	1198	1530
Phosphorus	ppm	ASTM D5185m 1150	700	913	892
Zinc	ppm	ASTM D5185m 1270	858	1131	1112
Sulfur	ppm	ASTM D5185m 2060	2496	3345	3372

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	4	3	4
Sodium	ppm	ASTM D5185m	2	<1	0
Potassium	ppm	ASTM D5185m >20	0	1	2
Fuel	%	ASTM D3524 >5	▲ 20.3	▲ 2.4	▲ 11.3

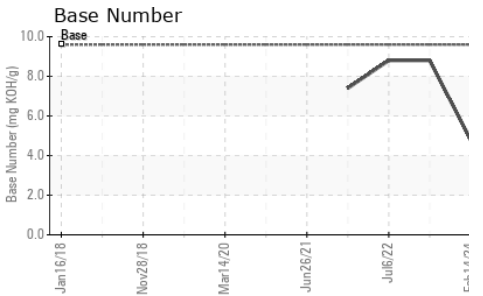
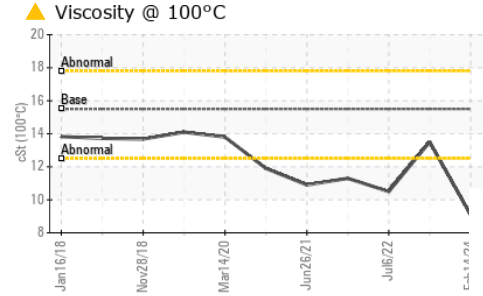
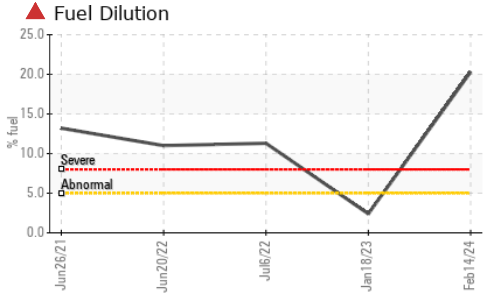
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.5	0.1	0.5
Nitration	Abs/cm	*ASTM D7624 >20	11.0	5.8	10.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.8	17.0	21.1

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	19.4	12.4	18.0
Base Number (BN)	mg KOH/g	ASTM D2896 9.6	4.8	8.8	8.8

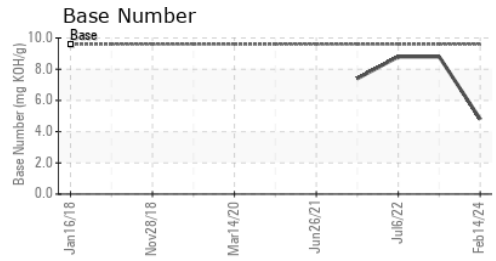
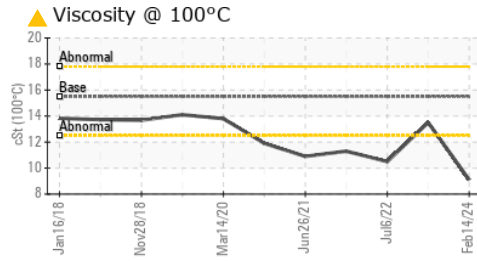
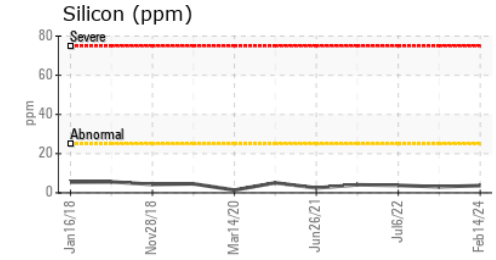
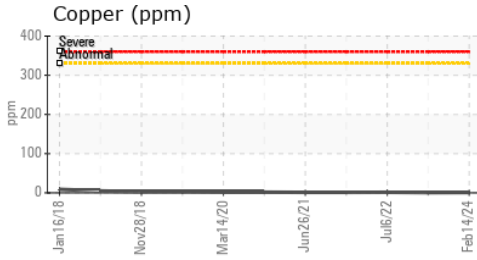
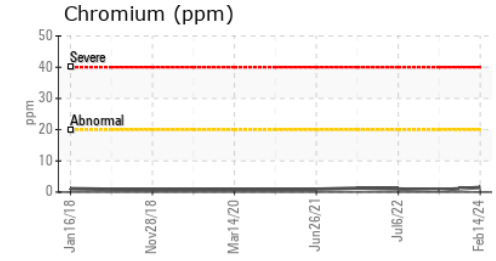
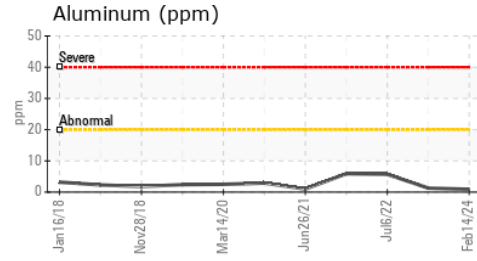
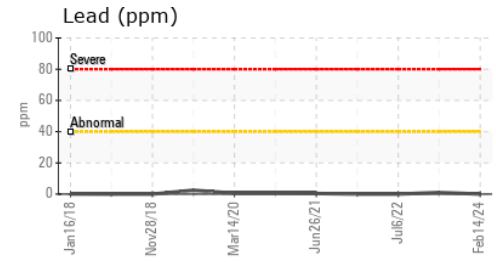
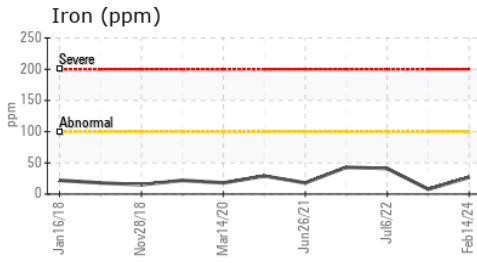
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.5 ▲ 9.1	13.5	▲ 10.5

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0056820 **Received** : 18 Mar 2024
Lab Number : 06120507 **Tested** : 20 Mar 2024
Unique Number : 10929340 **Diagnosed** : 20 Mar 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

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 US 33462
 Contact: GENE GARDNER
 ggardner@johnsondavis.com
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 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)