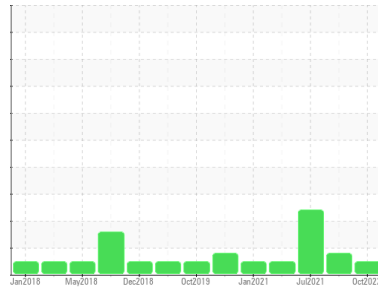


# OIL ANALYSIS REPORT



Machine Id  
**KOMATSU WA380-8 30-49 (S/N A74180)**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON XL SYN BLEND 15W40 (7 GAL)**

Sample Rating Trend



NORMAL

✓

## DIAGNOSIS

**Recommendation**  
 Resample at the next service interval to monitor. No other corrective action is recommended at this time.

**Wear**  
 All component wear rates are normal.

**Contamination**  
 Light fuel dilution occurring. No other contaminants were detected 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		<b>PCA0056846</b>	PCA0036046	PCA0036053
Sample Date	Client Info		<b>25 Oct 2022</b>	26 Sep 2021	10 Jul 2021
Machine Age	hrs	Client Info	<b>8878</b>	8009	7860
Oil Age	hrs	Client Info	<b>869</b>	149	572
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status			<b>NORMAL</b>	ABNORMAL	SEVERE

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>28</b>	5	18
Chromium	ppm	ASTM D5185m >20	<b>2</b>	<1	2
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	<1	1
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >330	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 1	<b>4</b>	7	11
Barium	ppm	ASTM D5185m 1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>63</b>	55	54
Manganese	ppm	ASTM D5185m 1	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>898</b>	848	741
Calcium	ppm	ASTM D5185m 1070	<b>1243</b>	1019	1019
Phosphorus	ppm	ASTM D5185m 1150	<b>1029</b>	970	869
Zinc	ppm	ASTM D5185m 1270	<b>1296</b>	1151	1037
Sulfur	ppm	ASTM D5185m 2060	<b>3612</b>	2698	2281

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>3</b>	<1	3
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	2	1
Potassium	ppm	ASTM D5185m >20	<b>2</b>	0	<1
Fuel	%	ASTM D3524 >5	<b>1.0</b>	▲ 5.4	▲ 15.5

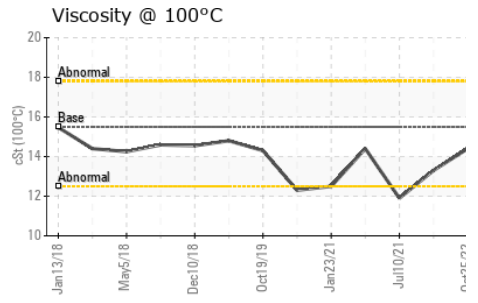
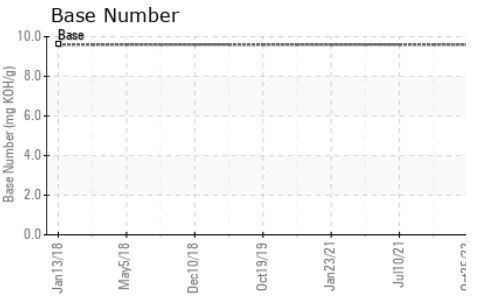
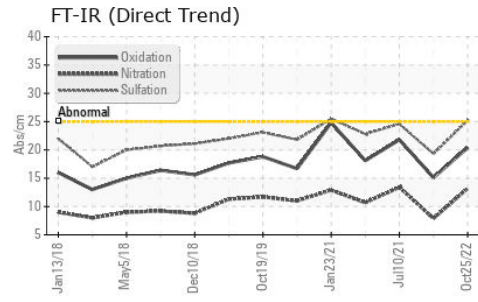
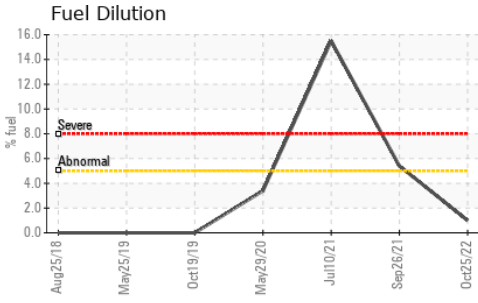
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.1</b>	0.4	1.2
Nitration	Abs/cm	*ASTM D7624 >20	<b>13.2</b>	7.9	13.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>25.2</b>	19.3	24.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>20.4</b>	15.1	21.8
Base Number (BN)	mg KOH/g	ASTM D2896 9.6	<b>8.0</b>	---	---

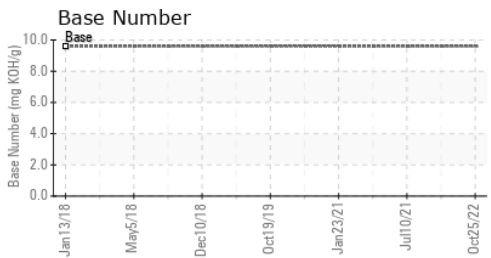
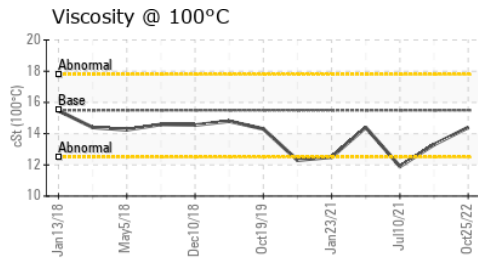
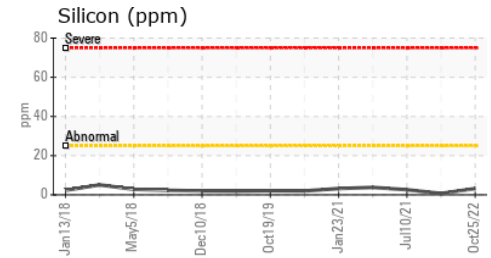
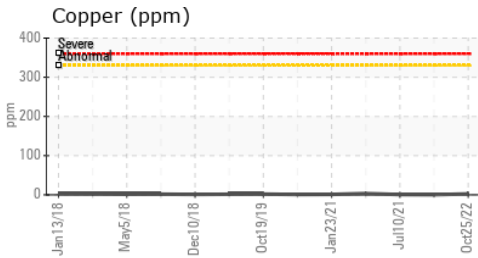
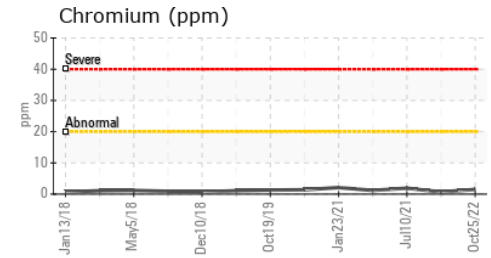
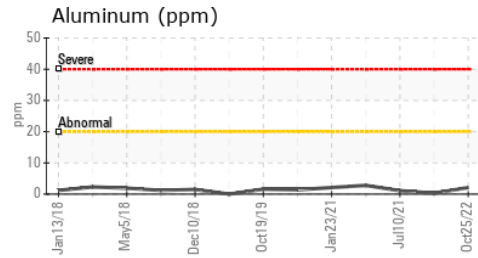
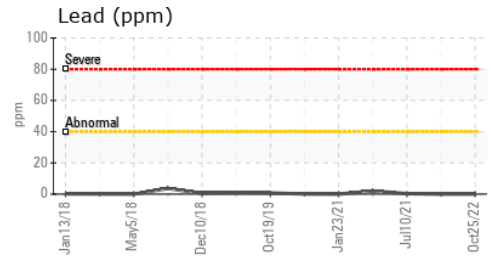
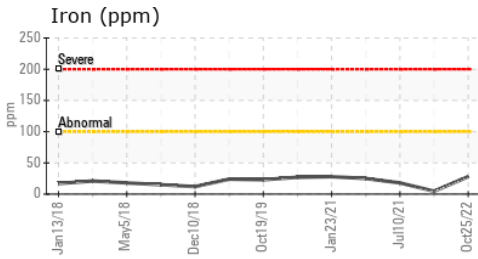
# OIL ANALYSIS REPORT



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	<b>14.4</b>	13.3	▲ 11.9	

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0056846      **Received** : 26 Oct 2022  
**Lab Number** : **05676564**      **Tested** : 27 Oct 2022  
**Unique Number** : 10191135      **Diagnosed** : 27 Oct 2022 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel, TBN )

**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)