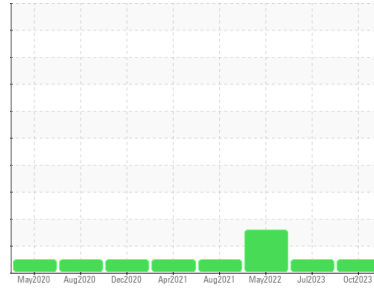


# OIL ANALYSIS REPORT

**Sample Rating Trend**

**NORMAL**

 Machine Id  
**KENWORTH 30**

 Component  
**Diesel Engine**

 Fluid  
**PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)**
**DIAGNOSIS**
**Recommendation**

Resample at the next service interval to monitor.

**Wear**

Metal levels are typical for a new component breaking in.

**Contamination**

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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	<b>PCA0105050</b>	PCA0054217	PCA0053945	
Sample Date	Client Info	<b>14 Oct 2023</b>	12 Jul 2023	31 May 2022	
Machine Age	mls	Client Info	<b>74161</b>	53461	547738
Oil Age	mls	Client Info	<b>20000</b>	20000	20000
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed	
Sample Status		<b>NORMAL</b>	NORMAL	ABNORMAL	

**CONTAMINATION**

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

**WEAR METALS**

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>36</b>	41	▲ 119
Chromium	ppm ASTM D5185m >20	<b>3</b>	3	3
Nickel	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm ASTM D5185m >3	<b>&lt;1</b>	<1	0
Aluminum	ppm ASTM D5185m >20	<b>24</b>	40	7
Lead	ppm ASTM D5185m >40	<b>3</b>	3	▲ 62
Copper	ppm ASTM D5185m >330	<b>1</b>	2	6
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	<1	2
Antimony	ppm ASTM D5185m	<b>---</b>	---	---
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>7</b>	4	14
Barium	ppm ASTM D5185m 1	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>60</b>	59	61
Manganese	ppm ASTM D5185m 1	<b>&lt;1</b>	1	1
Magnesium	ppm ASTM D5185m 1010	<b>989</b>	989	864
Calcium	ppm ASTM D5185m 1070	<b>1096</b>	1180	1341
Phosphorus	ppm ASTM D5185m 1150	<b>1067</b>	1047	1056
Zinc	ppm ASTM D5185m 1270	<b>1297</b>	1344	1317
Sulfur	ppm ASTM D5185m 2060	<b>2922</b>	3650	3237

**CONTAMINANTS**

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>16</b>	12	21
Sodium	ppm ASTM D5185m	<b>2</b>	2	4
Potassium	ppm ASTM D5185m >20	<b>68</b>	117	5

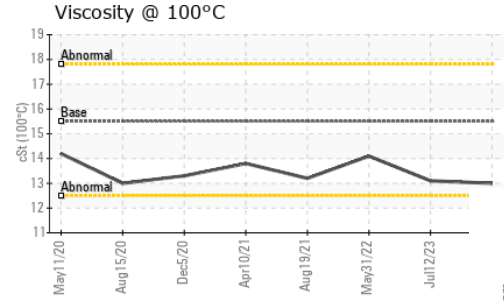
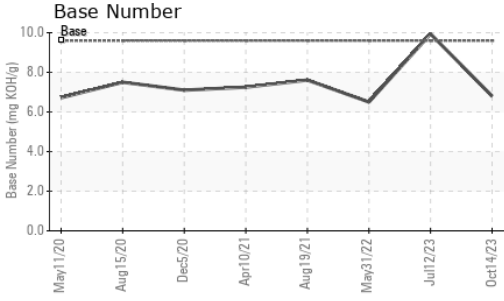
**INFRA-RED**

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.4</b>	0.3	1.6
Nitration	Abs/cm *ASTM D7624 >20	<b>8.7</b>	8.5	15.3
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>22.0</b>	21.9	33.3

**FLUID DEGRADATION**

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>19.2</b>	18.8	30.7
Base Number (BN)	mg KOH/g ASTM D2896 9.6	<b>6.8</b>	9.94	6.5

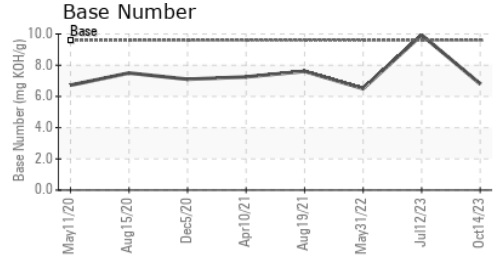
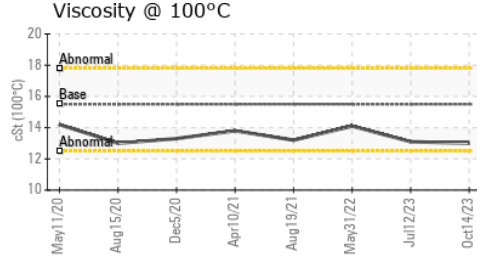
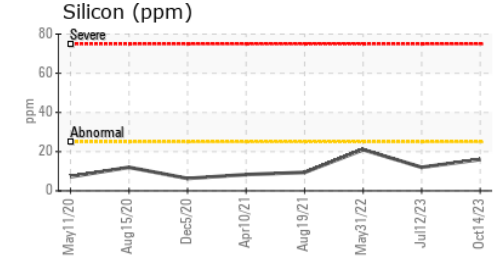
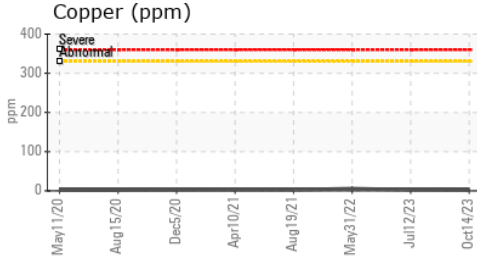
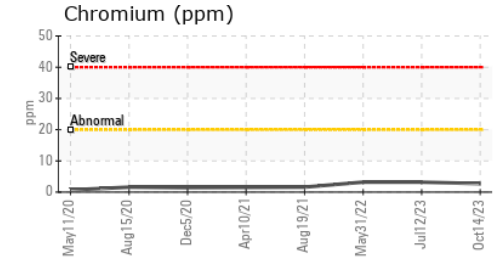
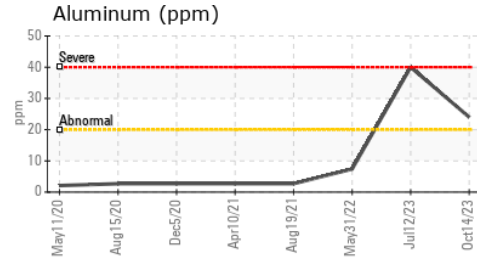
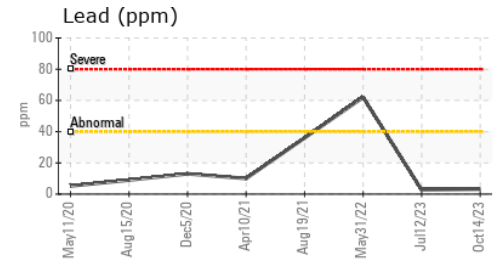
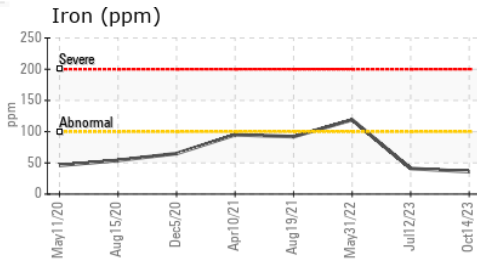
# OIL ANALYSIS REPORT



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>13.0</b>	13.1	14.1

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0105050 **Received** : 06 Nov 2023  
**Lab Number** : 05999714 **Diagnosed** : 07 Nov 2023  
**Unique Number** : 10728074 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**B & B HARVESTING**  
 2842 LADD RD  
 MODESTO, CA  
 US 95356  
 Contact: Service Manager  
 drcalvalley@gmail.com  
 T: (209)545-8300  
 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)