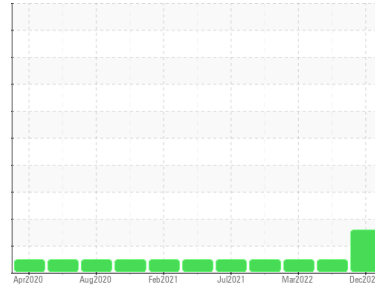


# OIL ANALYSIS REPORT

**Sample Rating Trend**

**DIRT**

 Machine Id  
**PETERBILT 4**

 Component  
**Diesel Engine**

 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**
**DIAGNOSIS**
**Recommendation**

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. 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**

Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material.

**Fluid Condition**

The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PCA0096390</b>	PCA0054220	PCA0054260
Sample Date	Client Info			<b>11 Dec 2023</b>	03 Jun 2022	21 Mar 2022
Machine Age	mls	Client Info		<b>640364</b>	523188	499720
Oil Age	mls	Client Info		<b>20000</b>	20000	20000
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	<1.0	<1.0
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>16</b>	10	15
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
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>	3	3
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	1	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

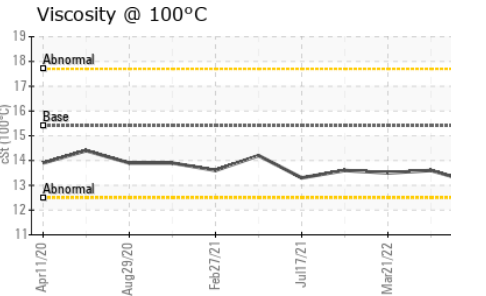
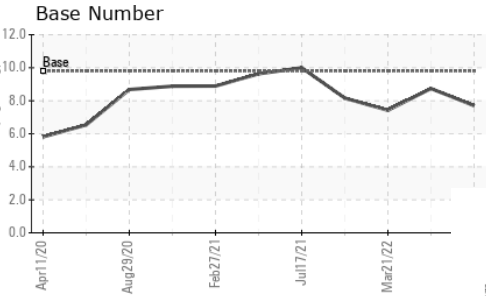
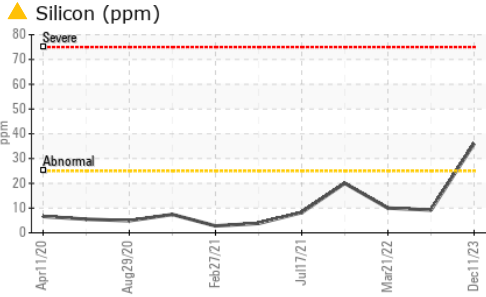
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>2</b>	7	11
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>58</b>	56	60
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>998</b>	885	989
Calcium	ppm	ASTM D5185m	1070	<b>1187</b>	1159	1131
Phosphorus	ppm	ASTM D5185m	1150	<b>1074</b>	958	1079
Zinc	ppm	ASTM D5185m	1270	<b>1341</b>	1181	1328
Sulfur	ppm	ASTM D5185m	2060	<b>3090</b>	2802	2709

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>▲ 36</b>	9	10
Sodium	ppm	ASTM D5185m		<b>2</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.4</b>	8.2	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.3</b>	20.4	19.7

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.7</b>	16.7	16.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.7</b>	8.74	7.42

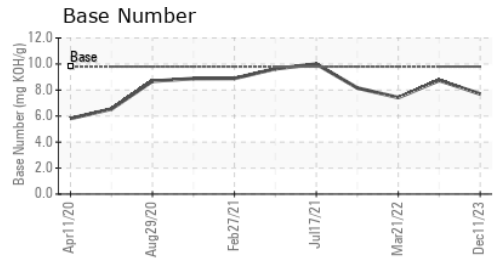
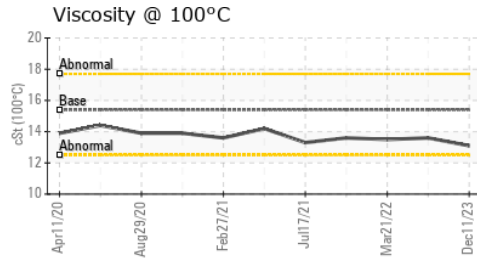
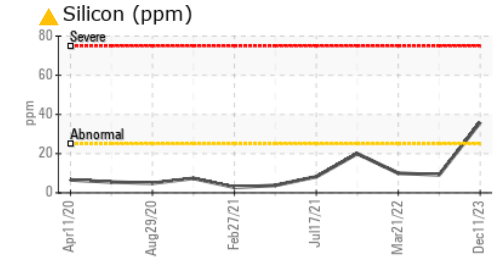
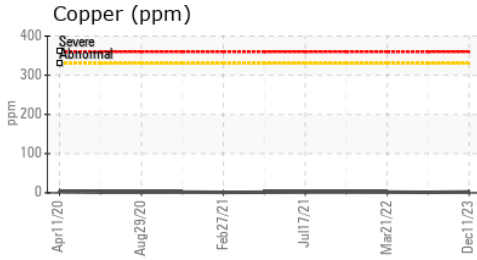
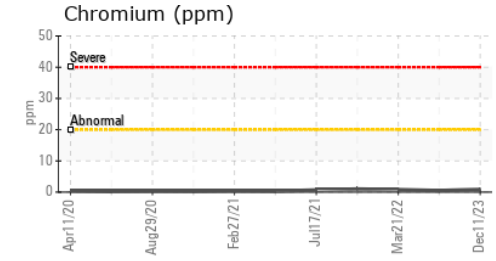
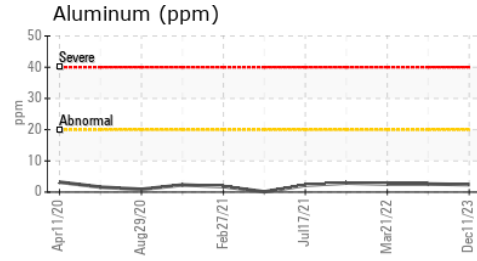
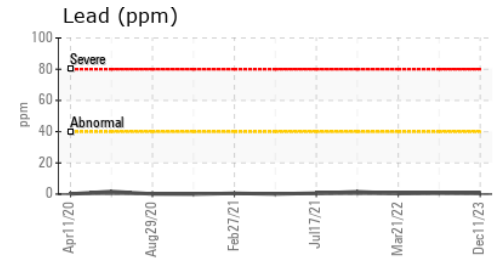
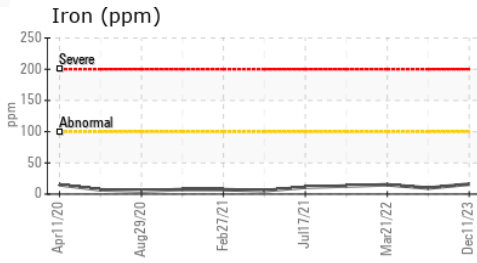
# OIL ANALYSIS REPORT



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	15.4	<b>13.1</b>	13.6

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0096390 **Received** : 02 Jan 2024  
**Lab Number** : **06049388** **Diagnosed** : 04 Jan 2024  
**Unique Number** : 10809996 **Diagnostician** : Jonathan Hester  
**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)