



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**192517**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (--- QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0118062</b>	PCA0057266	PCA0020944
Sample Date		Client Info		<b>15 May 2024</b>	28 Nov 2023	24 Jan 2022
Machine Age	mls	Client Info		<b>383015</b>	361180	22735
Oil Age	mls	Client Info		<b>21779</b>	17550	22735
Filter Age	mls	Client Info		<b>0</b>	0	22735
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>11</b>	9	2
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	2	3
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>1</b>	2	1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

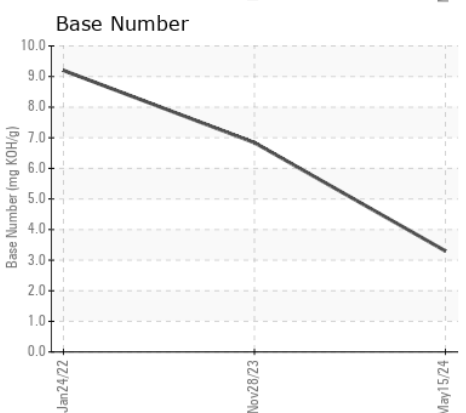
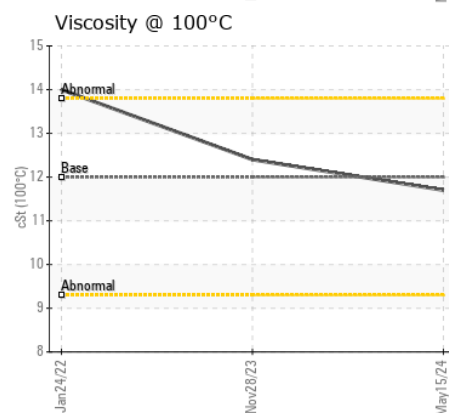
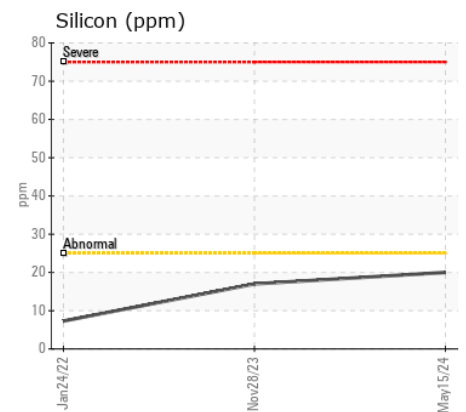
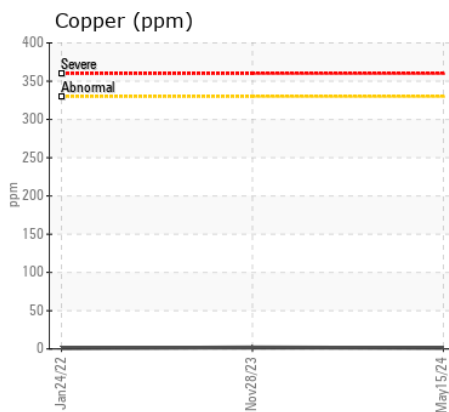
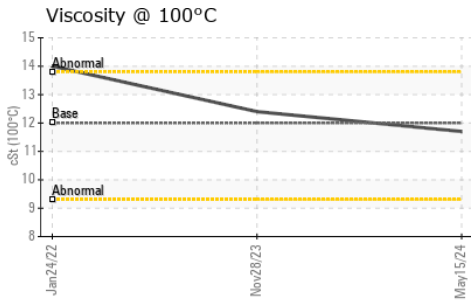
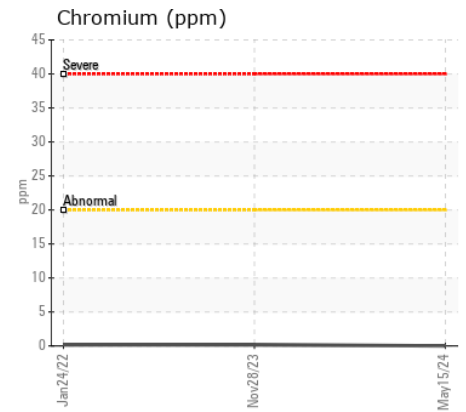
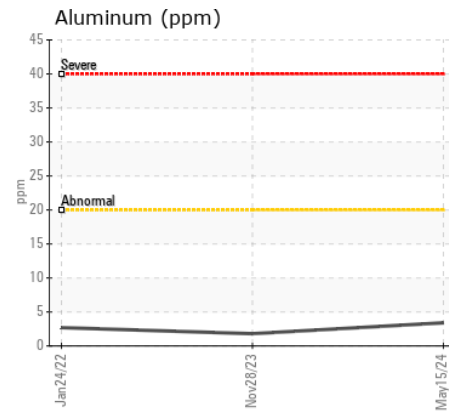
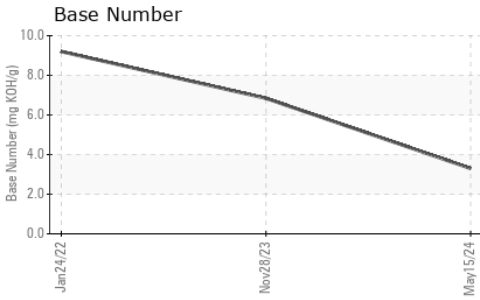
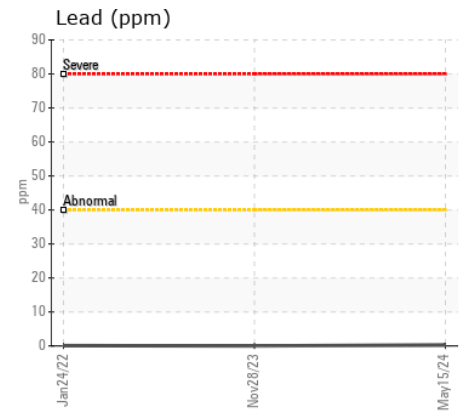
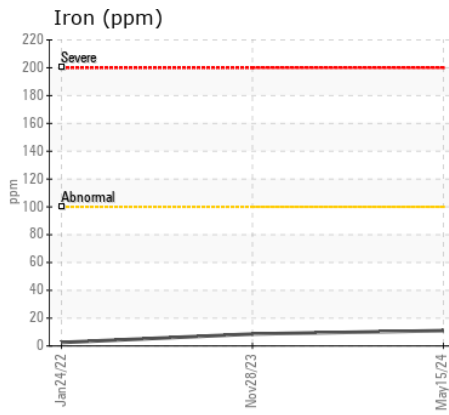
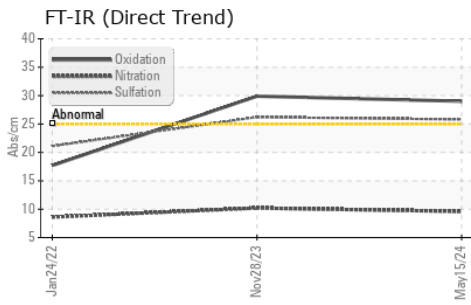
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>20</b>	17	7
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	5	8
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
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.6</b>	10.2	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.8</b>	26.2	21.1
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**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.

Sodium	ppm	ASTM D5185m		<b>4</b>	7	1
Boron	ppm	ASTM D5185m	2	<b>5</b>	15	2
Barium	ppm	ASTM D5185m	0	<b>0</b>	10	0
Molybdenum	ppm	ASTM D5185m	50	<b>56</b>	42	64
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	950	<b>875</b>	504	1073
Calcium	ppm	ASTM D5185m	1050	<b>1183</b>	1359	1146
Phosphorus	ppm	ASTM D5185m	995	<b>833</b>	708	1069
Zinc	ppm	ASTM D5185m	1180	<b>1155</b>	806	1344
Sulfur	ppm	ASTM D5185m	2600	<b>3308</b>	2508	2841
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>29.0</b>	29.9	17.7
Base Number (BN)	mg KOH/g	ASTM D2896		<b>3.3</b>	6.84	9.2
Visc @ 100°C	cSt	ASTM D445	12.00	<b>11.7</b>	12.4	14.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0118062 **Received** : 24 May 2024  
**Lab Number** : 06190235 **Tested** : 29 May 2024  
**Unique Number** : 11046987 **Diagnosed** : 29 May 2024 - Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**VALLEY PACIFIC PETROLEUM SERVICES**  
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 US 95206  
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 F: (209)888-6196

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)