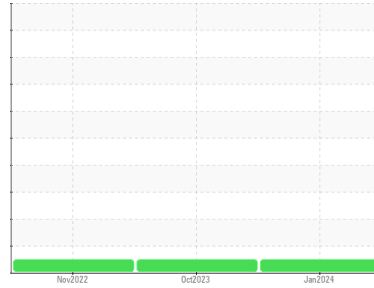


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**213160**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- QTS)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

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>PCA0057406</b>	PCA0057313	PCA0057246
Sample Date	Client Info		<b>11 Jan 2024</b>	16 Oct 2023	15 Nov 2022
Machine Age	mls	Client Info	<b>205620</b>	183560	143239
Oil Age	mls	Client Info	<b>16232</b>	25289	17250
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</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>7</b>	5	7
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	3	5
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
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	<b>6</b>	5	11
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>58</b>	59	98
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 950	<b>906</b>	936	723
Calcium	ppm	ASTM D5185m 1050	<b>1084</b>	1045	1477
Phosphorus	ppm	ASTM D5185m 995	<b>919</b>	1008	740
Zinc	ppm	ASTM D5185m 1180	<b>1164</b>	1250	949
Sulfur	ppm	ASTM D5185m 2600	<b>3112</b>	2843	2708

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>14</b>	9	9
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185m >20	<b>9</b>	8	6

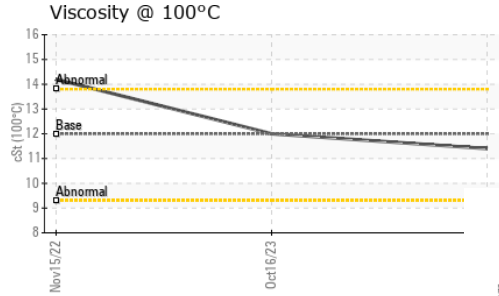
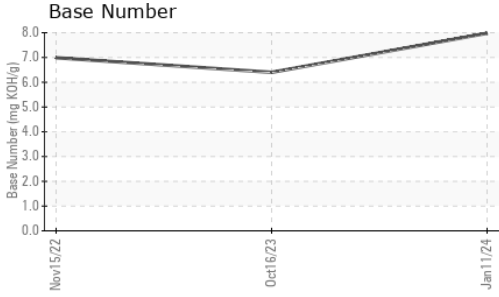
### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.2</b>	0.2	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.2</b>	8.4	10.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>24.7</b>	22.6	24.7

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>26.7</b>	22.1	20.6
Base Number (BN)	mg KOH/g	ASTM D2896	<b>7.98</b>	6.4	6.99

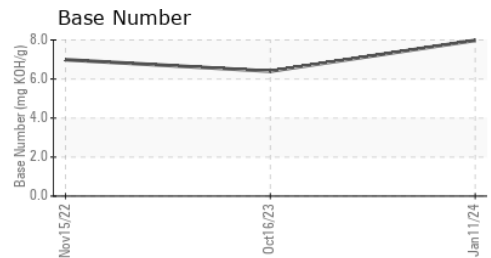
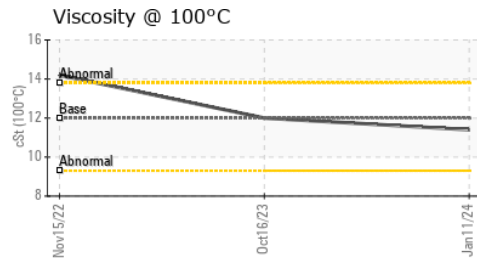
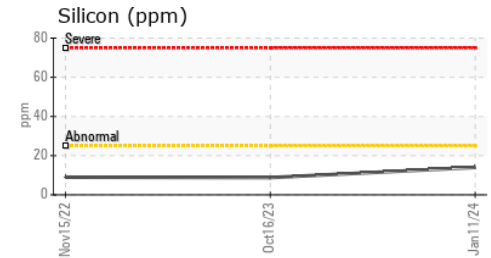
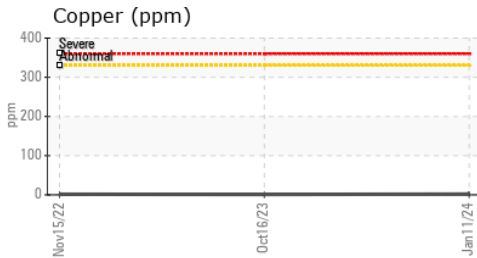
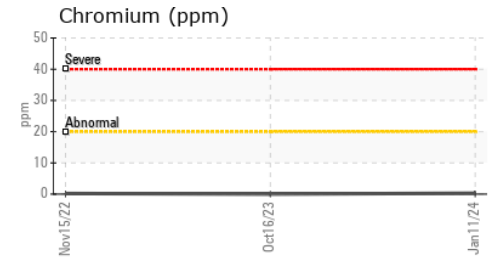
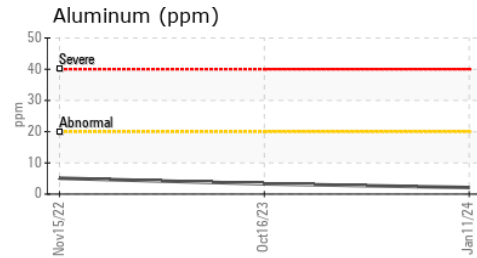
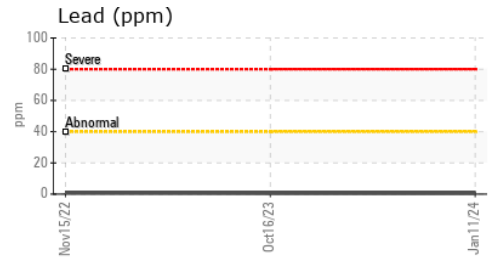
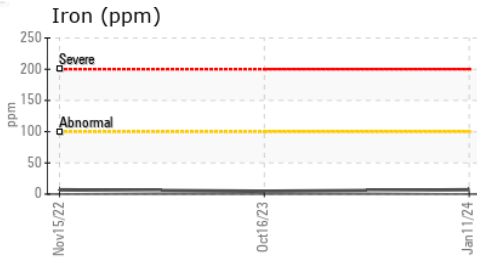
# OIL ANALYSIS REPORT



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	12.00	11.4	12.0

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0057406 **Recieved** : 23 Jan 2024  
**Lab Number** : 06069158 **Diagnosed** : 25 Jan 2024  
**Unique Number** : 10845835 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 2

**VALLEY PACIFIC PETROLEUM SERVICES**  
 152 FRANK WEST CIRCLE  
 STOCKTON, CA  
 US 95206  
 Contact: FRANCISCO JIMENEZ  
 francisco.jimenez@vpps.net  
 T: (209)948-9412  
 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)