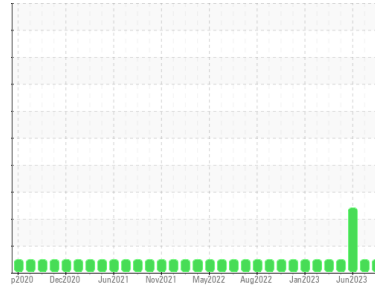


# OIL ANALYSIS REPORT



Machine Id  
**10039**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

Sample Rating Trend



**NORMAL**



## 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>PCA0102978</b>	PCA0098113	PCA0098126
Sample Date	Client Info		<b>25 Aug 2023</b>	08 Jun 2023	02 Jun 2023
Machine Age	hrs	Client Info	<b>9884</b>	9318	9286
Oil Age	hrs	Client Info	<b>566</b>	314	282
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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 >120	<b>8</b>	12	22
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >5	<b>2</b>	<1	<1
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>1</b>	<1	▲ 7
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	1	2
Copper	ppm	ASTM D5185m >330	<b>6</b>	2	3
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</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>0</b>	<1	2
Barium	ppm	ASTM D5185m 0	<b>0</b>	2	2
Molybdenum	ppm	ASTM D5185m 60	<b>66</b>	70	101
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>1057</b>	964	1426
Calcium	ppm	ASTM D5185m 1070	<b>1166</b>	1123	1650
Phosphorus	ppm	ASTM D5185m 1150	<b>992</b>	1028	1447
Zinc	ppm	ASTM D5185m 1270	<b>1261</b>	1281	1865
Sulfur	ppm	ASTM D5185m 2060	<b>3164</b>	3089	4553

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	7	▲ 32
Sodium	ppm	ASTM D5185m	<b>13</b>	12	20
Potassium	ppm	ASTM D5185m >20	<b>0</b>	3	5

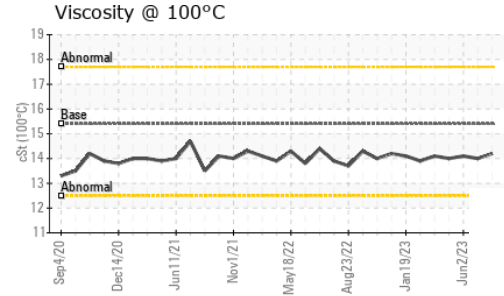
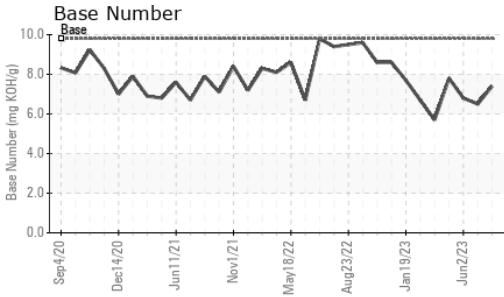
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	<b>0.6</b>	0.5	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.0</b>	8.6	8.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.6</b>	21.0	20.9

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.6</b>	17.6	17.4
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.4</b>	6.5	6.8

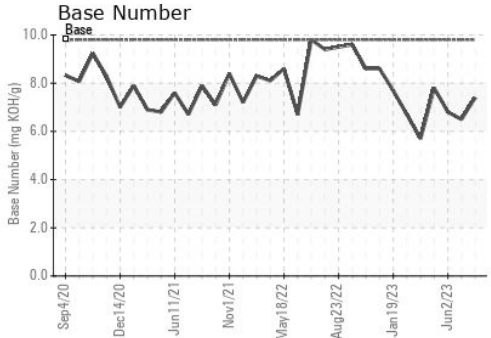
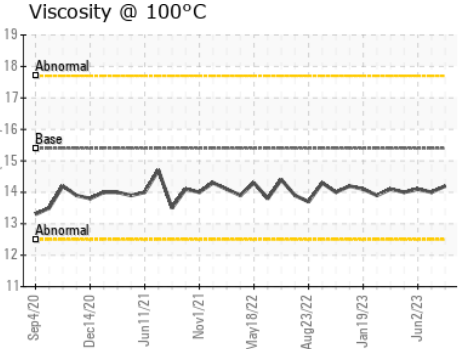
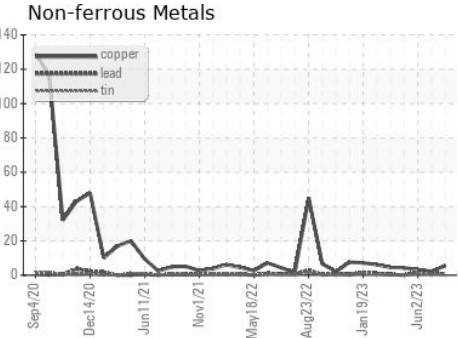
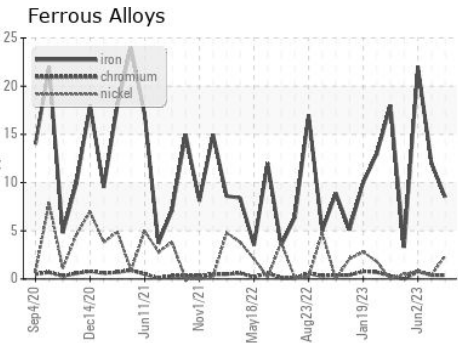
# OIL ANALYSIS REPORT



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>14.2</b>	14.0	14.1

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0102978  
**Lab Number** : **05941713**  
**Unique Number** : 10632325  
**Test Package** : FLEET

**LRS - BETHEL HEIGHTS (NWA AR)**  
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 BETHEL HEIGHTS, AR  
 US 72764  
 Contact: ROBERT HEATH  
 rheath@lrsrecycles.com  
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 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)