

# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**300-64**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### 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>PCA0089577</b>	---	---
Sample Date	Client Info			<b>15 Aug 2023</b>	---	---
Machine Age	hrs	Client Info		<b>1801</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>22</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	---	---
Lead	ppm	ASTM D5185m	>40	<b>4</b>	---	---
Copper	ppm	ASTM D5185m	>330	<b>1</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

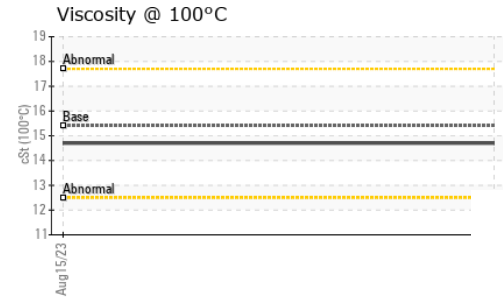
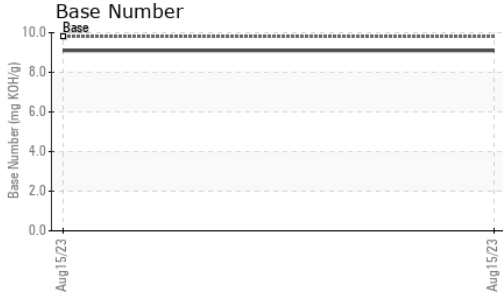
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>5</b>	---	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	60	<b>62</b>	---	---
Manganese	ppm	ASTM D5185m	0	<b>1</b>	---	---
Magnesium	ppm	ASTM D5185m	1010	<b>1066</b>	---	---
Calcium	ppm	ASTM D5185m	1070	<b>1207</b>	---	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1114</b>	---	---
Zinc	ppm	ASTM D5185m	1270	<b>1421</b>	---	---
Sulfur	ppm	ASTM D5185m	2060	<b>4035</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	---	---
Sodium	ppm	ASTM D5185m		<b>1</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.0</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.7</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.1</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.1</b>	---	---

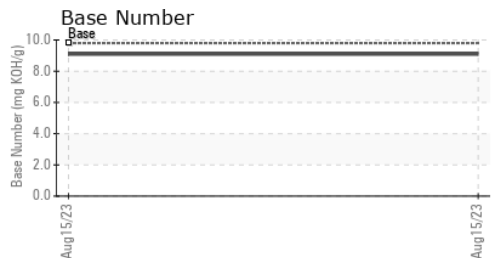
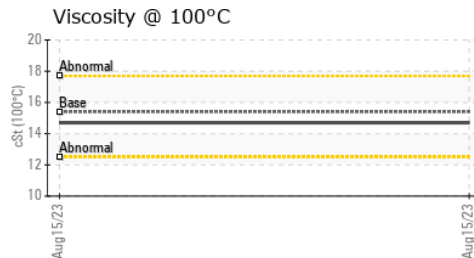
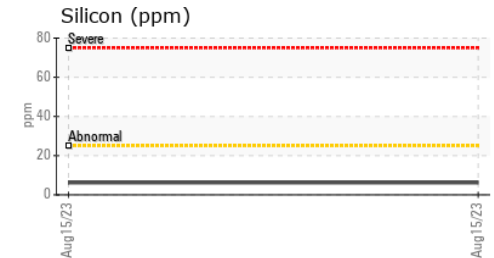
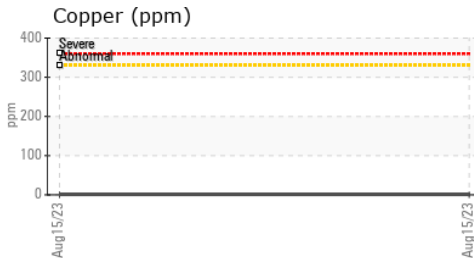
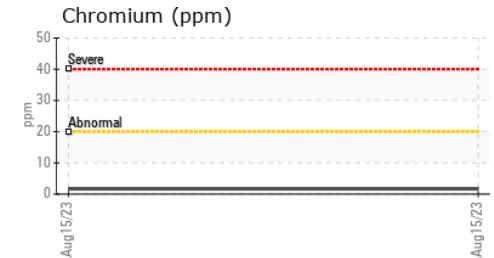
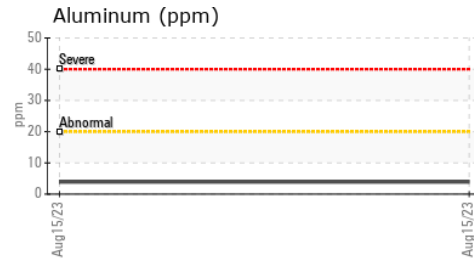
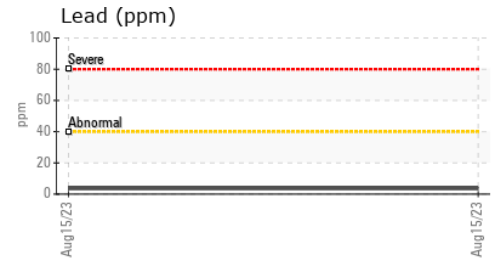
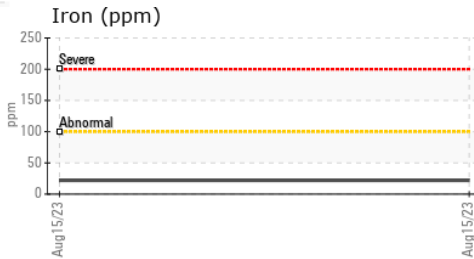
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.7</b>	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0089577 **Received** : 11 Sep 2023  
**Lab Number** : 05946924 **Diagnosed** : 12 Sep 2023  
**Unique Number** : 10642883 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**GE MARSHALL EXCAVATION**  
 1351 JOLIET RD  
 VALPARAISO, IN  
 US 46385  
 Contact: MARK STEFFEL  
 mark.steffel@gemarshall.com

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)

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