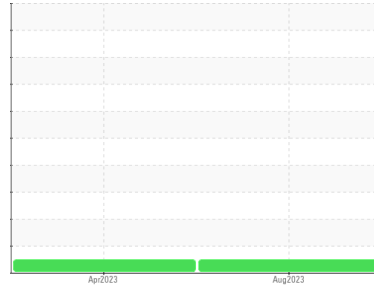




# OIL ANALYSIS REPORT

## Sample Rating Trend

**NORMAL**



Area  
**BARTO**  
 Machine Id  
**7067 [BARTO]**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

### 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>SBP0005078</b>	SBP0004195	---
Sample Date	Client Info			<b>10 Aug 2023</b>	07 Apr 2023	---
Machine Age	mls Client Info			<b>278539</b>	240032	---
Oil Age	mls Client Info			<b>38507</b>	35742	---
Oil Changed	Client Info			<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	<b>19</b>	22	---
Chromium	ppm	ASTM D5185m	>5	<b>2</b>	2	---
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m		<b>10</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m	>30	<b>13</b>	11	---
Lead	ppm	ASTM D5185m	>30	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>150	<b>16</b>	17	---
Tin	ppm	ASTM D5185m	>5	<b>1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>5</b>	7	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	2	---
Molybdenum	ppm	ASTM D5185m	60	<b>56</b>	59	---
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	1010	<b>934</b>	813	---
Calcium	ppm	ASTM D5185m	1070	<b>1245</b>	1350	---
Phosphorus	ppm	ASTM D5185m	1150	<b>985</b>	895	---
Zinc	ppm	ASTM D5185m	1270	<b>1328</b>	1209	---
Sulfur	ppm	ASTM D5185m	2060	<b>3213</b>	2694	---

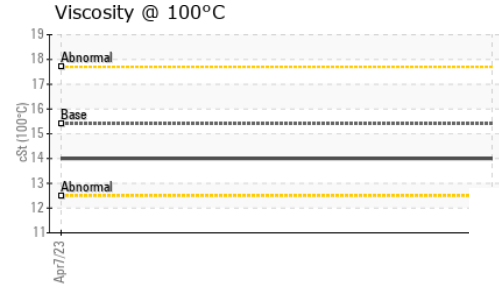
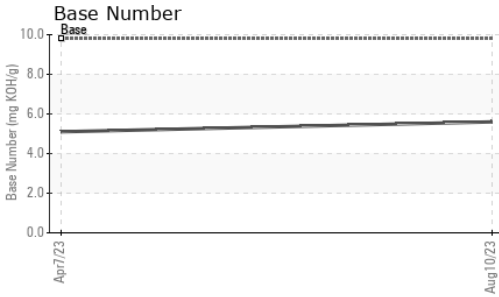
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<b>6</b>	6	---
Sodium	ppm	ASTM D5185m		<b>3</b>	4	---
Potassium	ppm	ASTM D5185m	>20	<b>17</b>	19	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.6	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.0</b>	10.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.2</b>	20.9	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.4</b>	17.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>5.6</b>	5.1	---



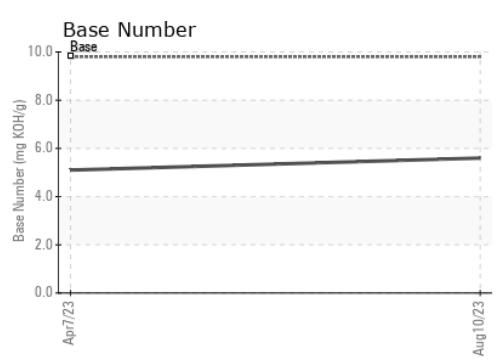
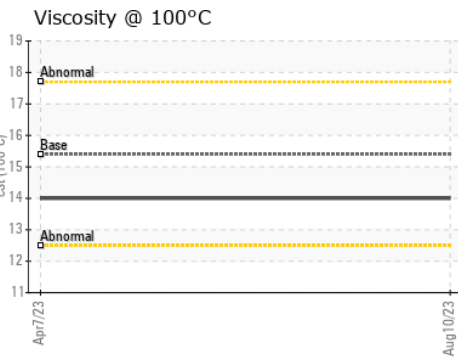
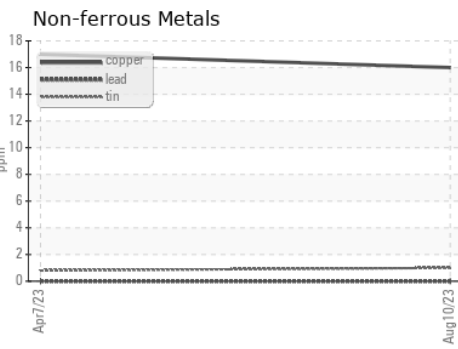
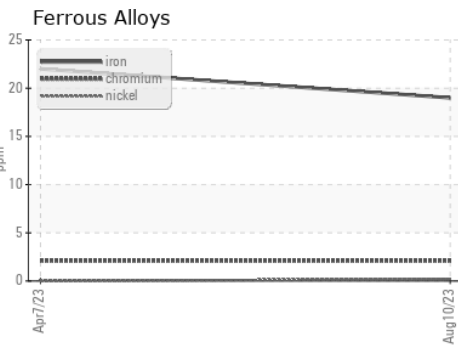
# OIL ANALYSIS REPORT



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>14.0</b>	14.0	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0005078 **Received** : 15 Aug 2023  
**Lab Number** : **05925387** **Diagnosed** : 16 Aug 2023  
**Unique Number** : 10605334 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**SCHMIDT TRANSPORTATION - BARTO**  
 108 E Bay Road  
 Plattsmouth, NE  
 US 68048  
 Contact: Service Manager

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)