



# OIL ANALYSIS REPORT

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

Area

**BARTO**

Machine Id

**7077 [BARTO]**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>SBP0006493</b>	SBP0004381	SBP0002553
Sample Date		Client Info		<b>20 Mar 2024</b>	12 Jul 2023	27 Apr 2023
Machine Age	mls	Client Info		<b>231666</b>	148961	112318
Oil Age	mls	Client Info		<b>35481</b>	40000	40000
Filter Age	mls	Client Info		<b>35481</b>	40000	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>25</b>	23	31
Chromium	ppm	ASTM D5185m	>5	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>30	<b>6</b>	8	13
Lead	ppm	ASTM D5185m	>30	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>150	<b>7</b>	26	27
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

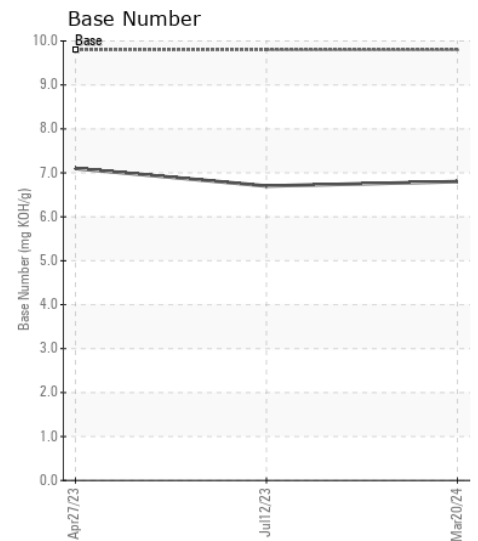
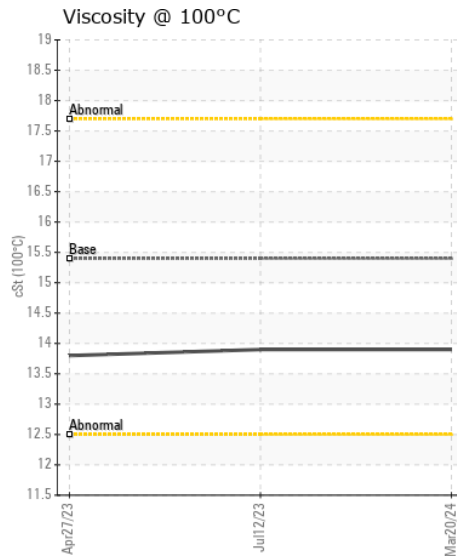
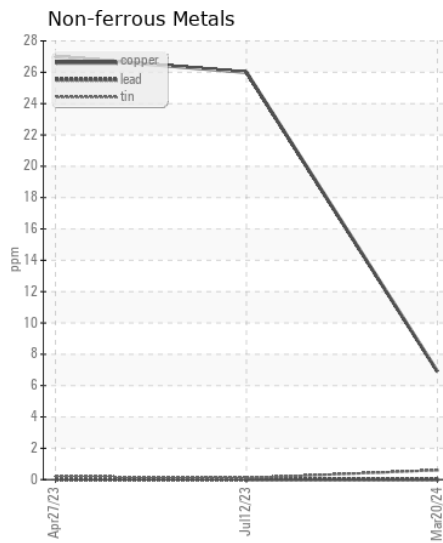
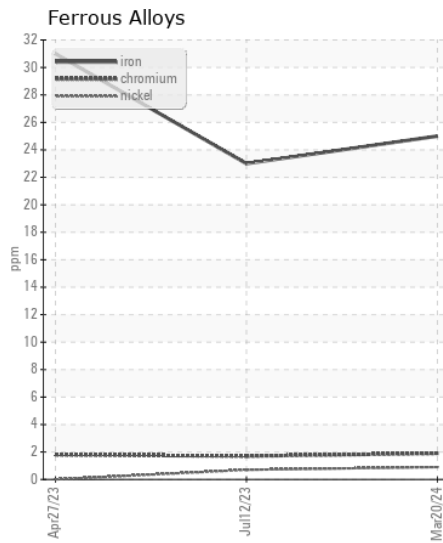
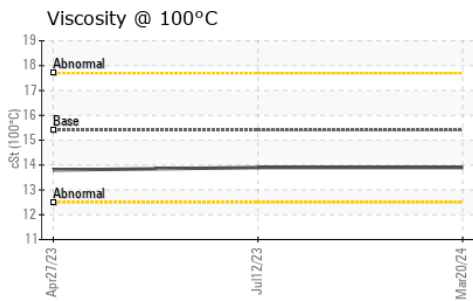
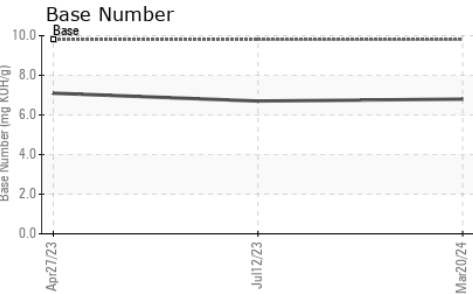
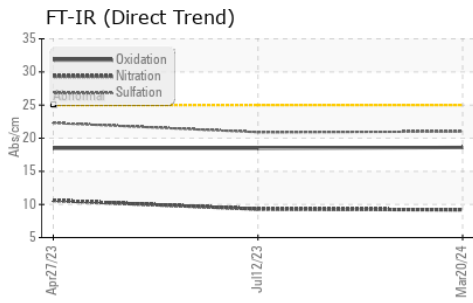
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>6</b>	5	6
Potassium	ppm	ASTM D5185m	>20	<b>7</b>	11	27
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>0.5</b>	0.5	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.2</b>	9.3	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.0</b>	20.9	22.3
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>3</b>	<1	5
Boron	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	3
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	1	0
Molybdenum	ppm	ASTM D5185m	60	<b>63</b>	63	57
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>979</b>	953	894
Calcium	ppm	ASTM D5185m	1070	<b>1110</b>	1217	1444
Phosphorus	ppm	ASTM D5185m	1150	<b>971</b>	975	894
Zinc	ppm	ASTM D5185m	1270	<b>1286</b>	1259	1262
Sulfur	ppm	ASTM D5185m	2060	<b>2633</b>	2488	2861
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.6</b>	18.5	18.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.8</b>	6.7	7.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.9</b>	13.9	13.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0006493  
**Lab Number** : 06156603  
**Unique Number** : 10992026  
**Test Package** : FLEET

**Received** : 22 Apr 2024  
**Tested** : 23 Apr 2024  
**Diagnosed** : 23 Apr 2024 - Wes Davis

**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)

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