



# OIL ANALYSIS REPORT

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

Area

**BARTO**

Machine Id

**6320 [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>SBP0006519</b>	SBP0005056	SBP0005680
Sample Date		Client Info		<b>31 May 2024</b>	10 Feb 2024	10 Oct 2023
Machine Age	mls	Client Info		<b>726176</b>	704023	680322
Oil Age	mls	Client Info		<b>22153</b>	23701	23624
Filter Age	mls	Client Info		<b>22153</b>	23701	23624
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>29</b>	25	30
Chromium	ppm	ASTM D5185m	>5	<b>1</b>	1	1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>2</b>	3	2
Lead	ppm	ASTM D5185m	>30	<b>1</b>	4	4
Copper	ppm	ASTM D5185m	>150	<b>2</b>	1	2
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

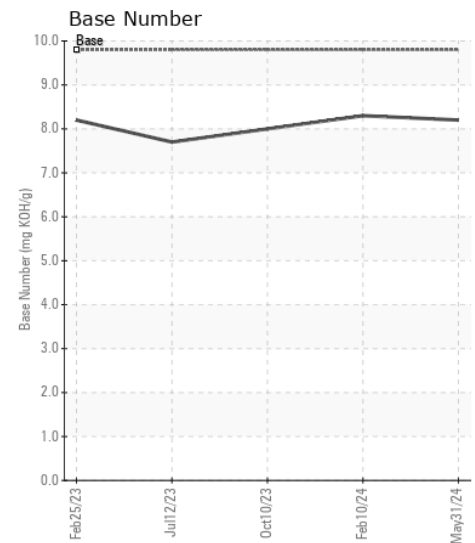
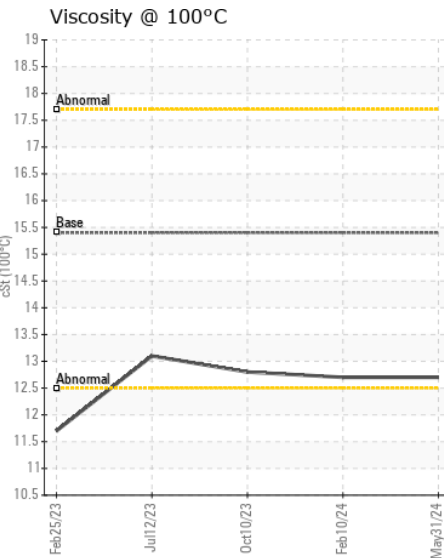
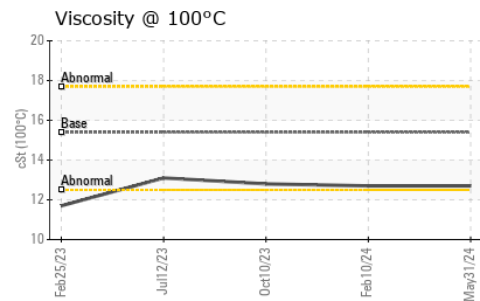
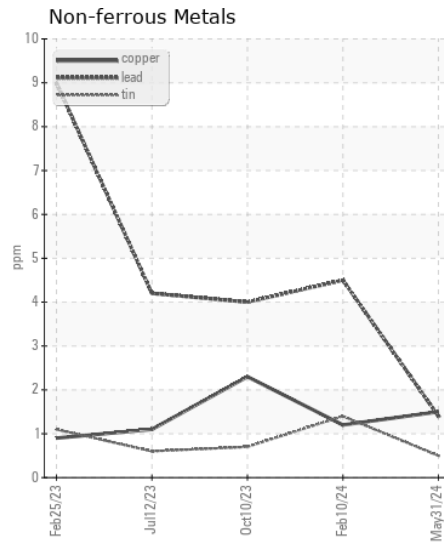
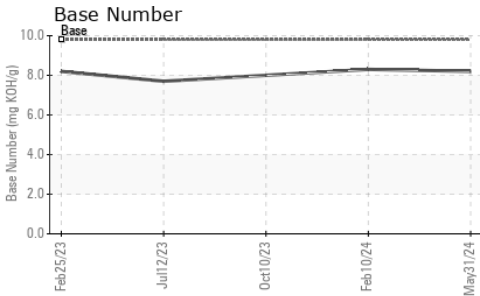
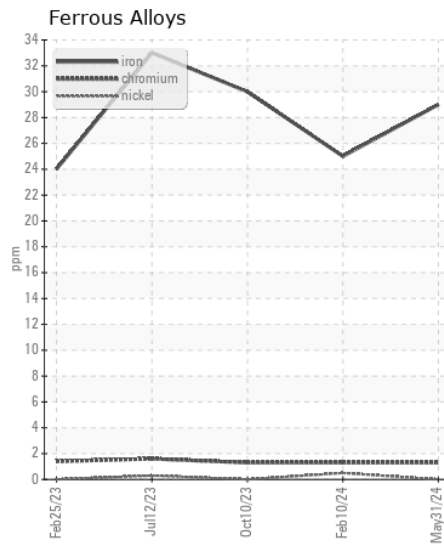
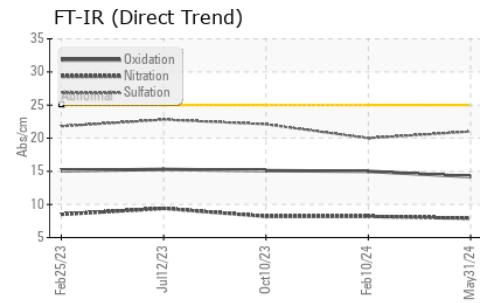
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>8</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	3
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>1.8</b>	1.4	2.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.9</b>	8.2	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.0</b>	20.0	22.1
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>4</b>	5	2
Boron	ppm	ASTM D5185m	0	<b>3</b>	0	<1
Barium	ppm	ASTM D5185m	0	<b>0</b>	1	0
Molybdenum	ppm	ASTM D5185m	60	<b>60</b>	67	60
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>962</b>	1025	981
Calcium	ppm	ASTM D5185m	1070	<b>1085</b>	1230	1077
Phosphorus	ppm	ASTM D5185m	1150	<b>1068</b>	1138	1010
Zinc	ppm	ASTM D5185m	1270	<b>1252</b>	1343	1249
Sulfur	ppm	ASTM D5185m	2060	<b>3415</b>	3504	2908
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.2</b>	15.0	15.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.2</b>	8.3	8.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.7</b>	12.7	12.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0006519  
**Lab Number** : 06212888  
**Unique Number** : 11085752  
**Test Package** : FLEET

**Received** : 17 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 19 Jun 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)

T:  
F: