



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**BARTO**  
 Machine Id  
**6326 [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>SBP0006654</b>	SBP0005924	SBP0002562
Sample Date		Client Info		<b>21 Feb 2024</b>	10 Nov 2023	27 Apr 2023
Machine Age	mls	Client Info		<b>597078</b>	573659	550204
Oil Age	mls	Client Info		<b>23419</b>	24098	29372
Filter Age	mls	Client Info		<b>23419</b>	24098	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>	ABNORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>19</b>	41	47
Chromium	ppm	ASTM D5185m	>5	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
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>5</b>	4	4
Copper	ppm	ASTM D5185m	>150	<b>&lt;1</b>	3	2
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

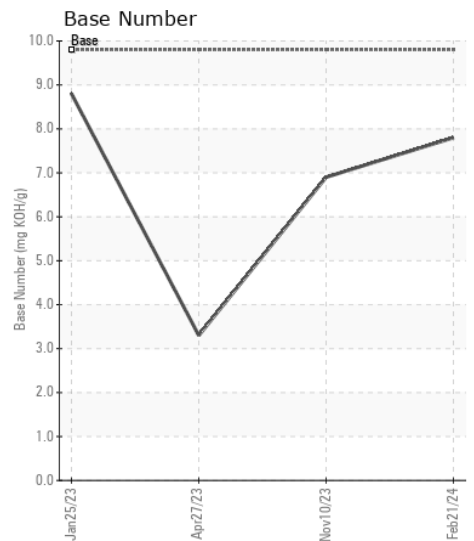
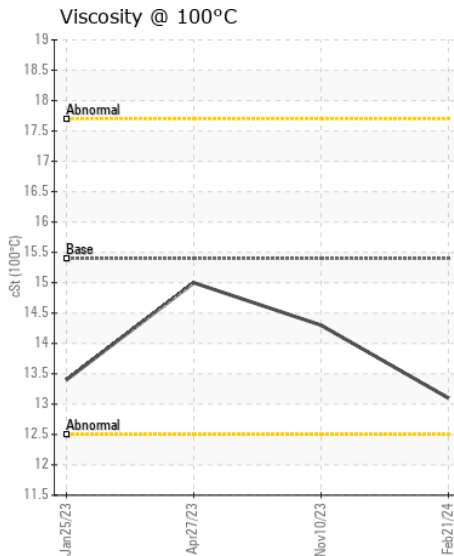
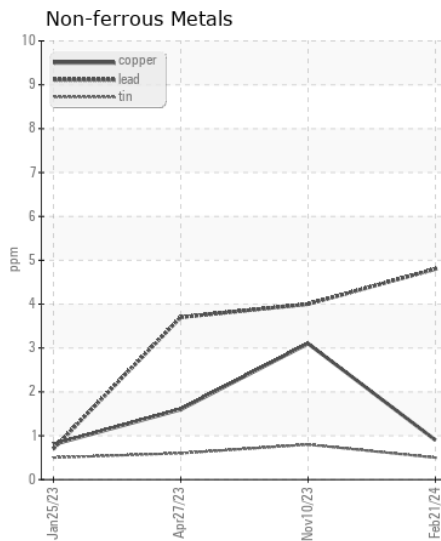
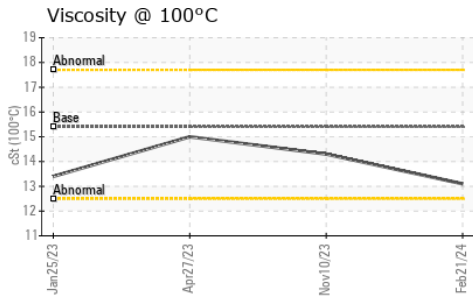
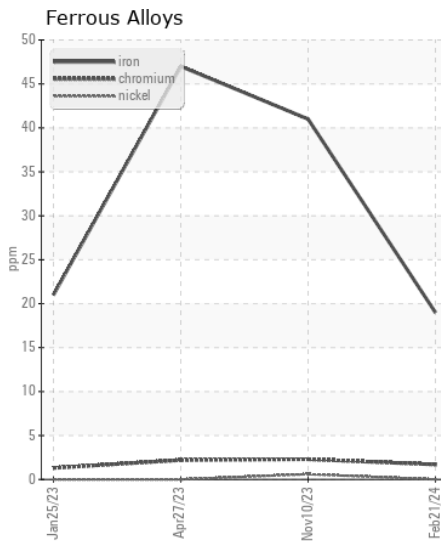
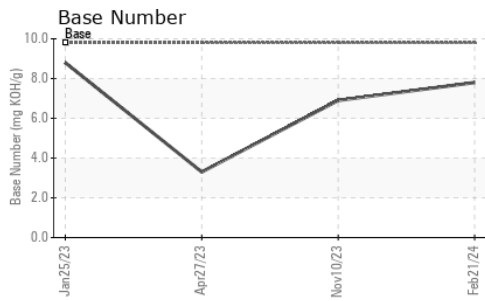
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>3</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	5	1
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>2.3</b>	▲ 3.6	▲ 3.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.5</b>	9.7	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.8</b>	24.9	26.9
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>7</b>	<1	4
Boron	ppm	ASTM D5185m	0	<b>0</b>	1	10
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>62</b>	58	56
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>1019</b>	916	879
Calcium	ppm	ASTM D5185m	1070	<b>1196</b>	1054	1382
Phosphorus	ppm	ASTM D5185m	1150	<b>1112</b>	878	968
Zinc	ppm	ASTM D5185m	1270	<b>1324</b>	1167	1205
Sulfur	ppm	ASTM D5185m	2060	<b>3059</b>	3050	3516
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.2</b>	15.7	16.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.8</b>	6.9	▲ 3.3
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.1</b>	14.3	15.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0006654  
**Lab Number** : 06100765  
**Unique Number** : 10898995  
**Test Package** : FLEET

**Received** : 26 Feb 2024  
**Tested** : 27 Feb 2024  
**Diagnosed** : 27 Feb 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: