



# OIL ANALYSIS REPORT

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

Area  
**BARTO**  
 Machine Id  
**7066 [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>SBP0005058</b>	SBP0004376	SBP0002241
Sample Date		Client Info		<b>26 Jan 2024</b>	28 Jul 2023	24 Feb 2023
Machine Age	mls	Client Info		<b>356105</b>	319639	280443
Oil Age	mls	Client Info		<b>36466</b>	39197	40000
Filter Age	mls	Client Info		<b>36466</b>	39197	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changed
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	>100	<b>25</b>	25	42
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>5</b>	2	12
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	2
Copper	ppm	ASTM D5185m	>330	<b>2</b>	2	4
Tin	ppm	ASTM D5185m	>15	<b>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

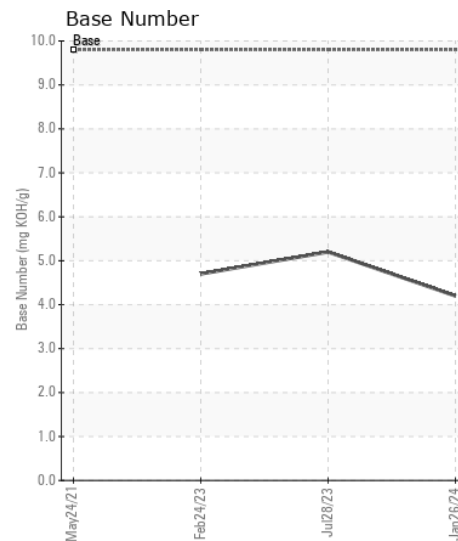
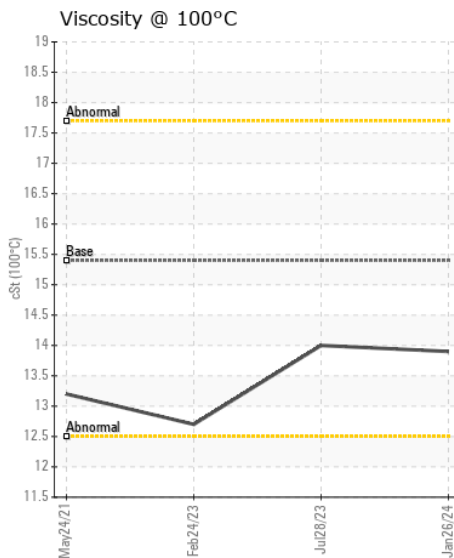
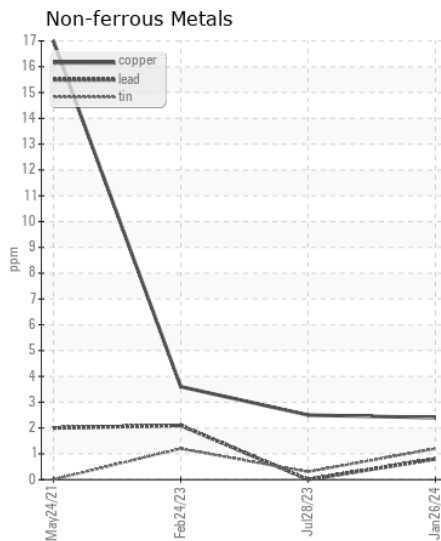
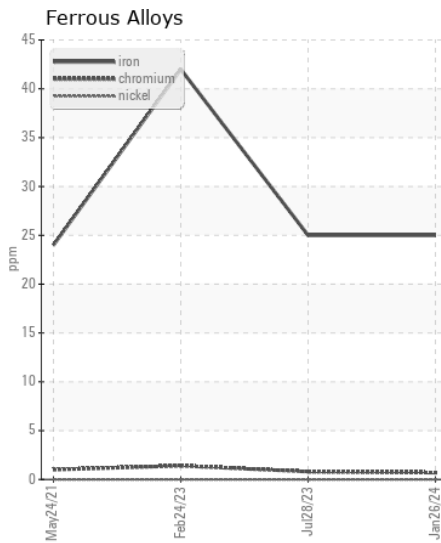
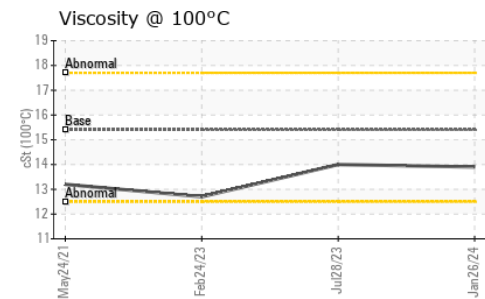
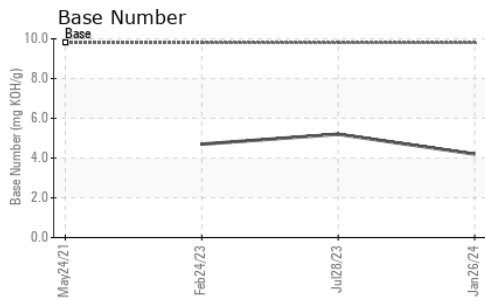
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	4	10
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	4	7
Chlorine	ppm	ASTM D5185m		<b>---</b>	---	---
Fuel		WC Method	>6.0	<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>0.7</b>	0.6	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.7</b>	11.2	14.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.1</b>	24.0	30.6
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>10</b>	6	9
Boron	ppm	ASTM D5185m	0	<b>0</b>	<1	6
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>61</b>	59	45
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	1010	<b>992</b>	967	554
Calcium	ppm	ASTM D5185m	1070	<b>1089</b>	1229	2146
Phosphorus	ppm	ASTM D5185m	1150	<b>1029</b>	1039	1025
Zinc	ppm	ASTM D5185m	1270	<b>1288</b>	1302	1281
Sulfur	ppm	ASTM D5185m	2060	<b>2632</b>	3255	3723
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>23.5</b>	21.1	23.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>4.2</b>	5.2	4.7
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.9</b>	14.0	12.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0005058  
**Lab Number** : 06084170  
**Unique Number** : 10871615  
**Test Package** : FLEET

**Received** : 08 Feb 2024  
**Tested** : 09 Feb 2024  
**Diagnosed** : 09 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)

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F: