



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**BARTO**  
 Machine Id  
**7084 [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>SBP0006587</b>	SBP0005623	SBP0004383
Sample Date		Client Info		<b>09 Feb 2024</b>	10 Oct 2023	25 May 2023
Machine Age	mls	Client Info		<b>193390</b>	158136	117329
Oil Age	mls	Client Info		<b>35254</b>	40807	41025
Filter Age	mls	Client Info		<b>35254</b>	40807	41025
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

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>80	<b>25</b>	25	37
Chromium	ppm	ASTM D5185m	>5	<b>2</b>	2	3
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>30	<b>6</b>	9	13
Lead	ppm	ASTM D5185m	>30	<b>0</b>	0	1
Copper	ppm	ASTM D5185m	>150	<b>5</b>	10	25
Tin	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

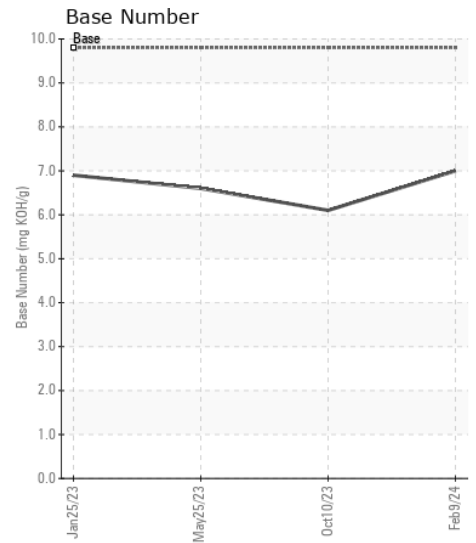
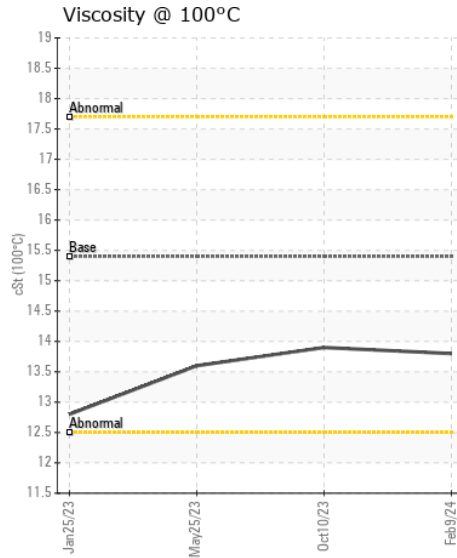
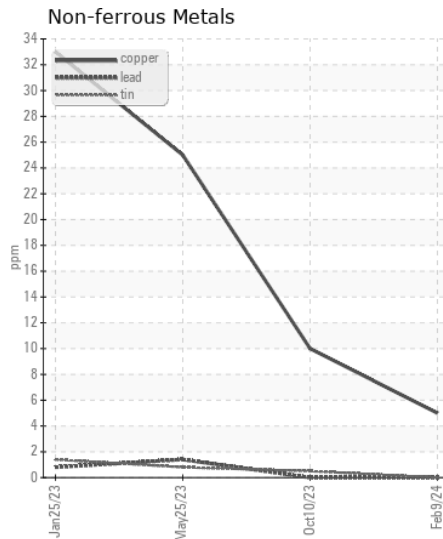
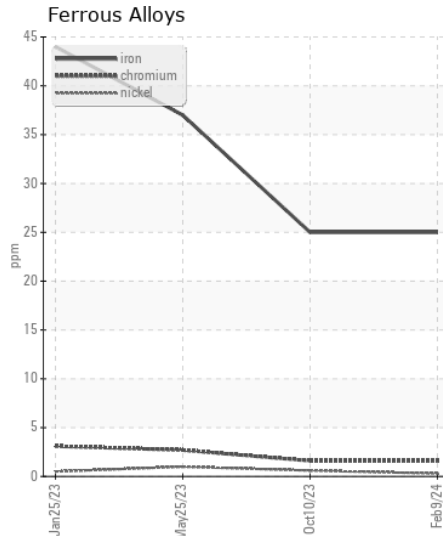
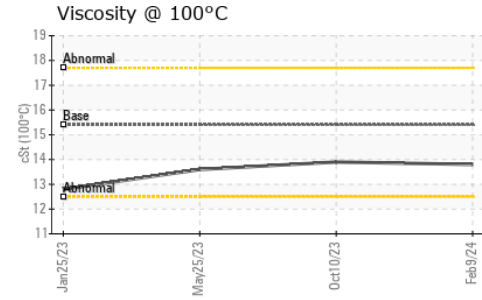
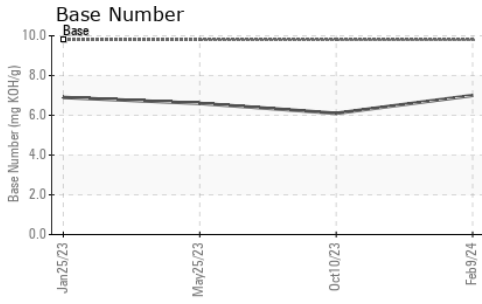
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>5</b>	7	7
Potassium	ppm	ASTM D5185m	>20	<b>9</b>	17	25
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>0.6</b>	0.8	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.3</b>	9.9	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.4</b>	22.5	23.2
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>1</b>	3	5
Boron	ppm	ASTM D5185m	0	<b>2</b>	2	4
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>65</b>	61	59
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	1	1
Magnesium	ppm	ASTM D5185m	1010	<b>948</b>	953	899
Calcium	ppm	ASTM D5185m	1070	<b>1084</b>	1106	1401
Phosphorus	ppm	ASTM D5185m	1150	<b>906</b>	1021	1011
Zinc	ppm	ASTM D5185m	1270	<b>1276</b>	1307	1321
Sulfur	ppm	ASTM D5185m	2060	<b>2532</b>	2354	2965
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.7</b>	20.4	20.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.0</b>	6.1	6.6
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.8</b>	13.9	13.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0006587  
**Lab Number** : 06089249  
**Unique Number** : 10876694  
**Test Package** : FLEET

**Received** : 14 Feb 2024  
**Tested** : 15 Feb 2024  
**Diagnosed** : 15 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: