



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id  
**8765**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		NL0001839	---	---
Sample Date		Client Info		15 Jan 2024	---	---
Machine Age	mls	Client Info		36034	---	---
Oil Age	mls	Client Info		36000	---	---
Filter Age	mls	Client Info		36000	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ATTENTION	---	---

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	40	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	6	---	---
Lead	ppm	ASTM D5185m	>40	0	---	---
Copper	ppm	ASTM D5185m	>330	179	---	---
Tin	ppm	ASTM D5185m	>15	4	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

## CONTAMINATION

Fuel content negligible. There is no indication of any contamination in the oil.

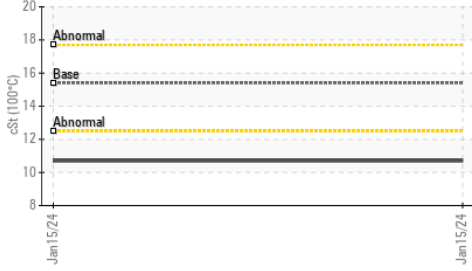
Silicon	ppm	ASTM D5185m	>25	40	---	---
Potassium	ppm	ASTM D5185m	>20	17	---	---
Fuel	%	ASTM D3524	>5	0.6	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.5	---	---
Nitration	Abs/cm	*ASTM D7624	>20	10.5	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.0	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

## FLUID CONDITION

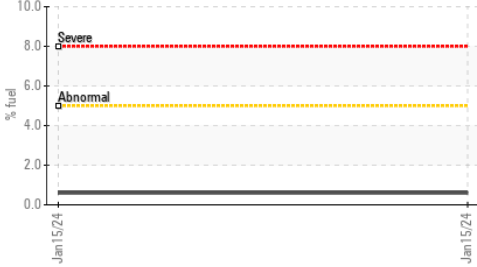
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		0	---	---
Boron	ppm	ASTM D5185m	0	85	---	---
Barium	ppm	ASTM D5185m	0	<1	---	---
Molybdenum	ppm	ASTM D5185m	60	108	---	---
Manganese	ppm	ASTM D5185m	0	2	---	---
Magnesium	ppm	ASTM D5185m	1010	685	---	---
Calcium	ppm	ASTM D5185m	1070	1343	---	---
Phosphorus	ppm	ASTM D5185m	1150	742	---	---
Zinc	ppm	ASTM D5185m	1270	865	---	---
Sulfur	ppm	ASTM D5185m	2060	2289	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.4	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.7	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 10.7	---	---

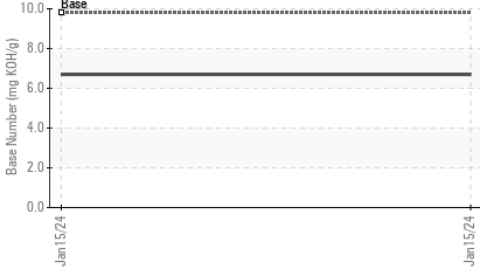
▲ Viscosity @ 100°C



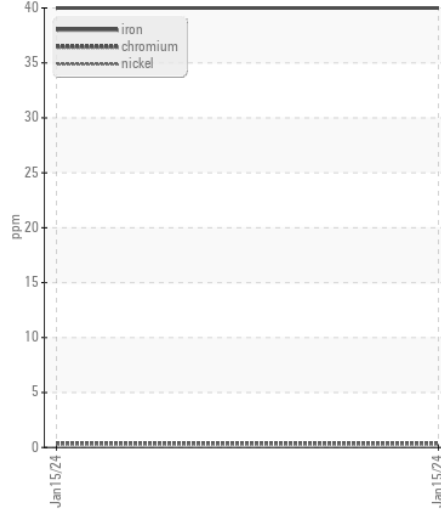
Fuel Dilution



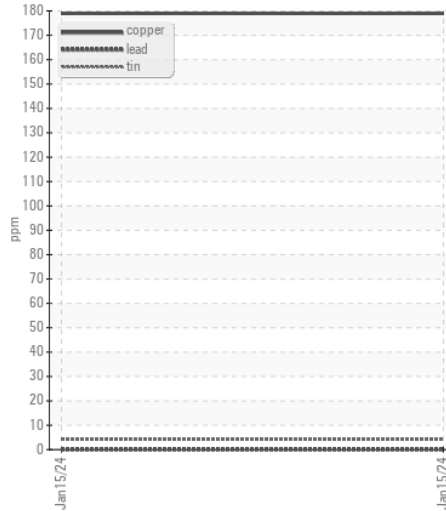
Base Number



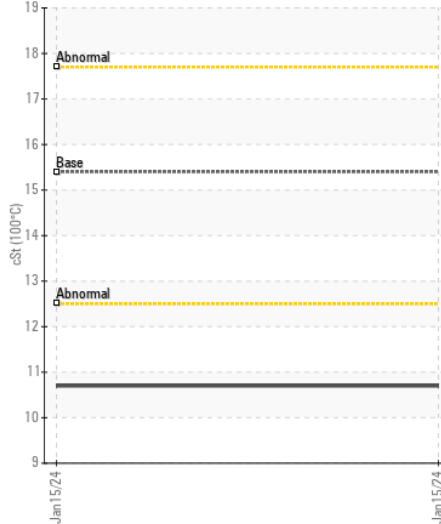
Ferrous Alloys



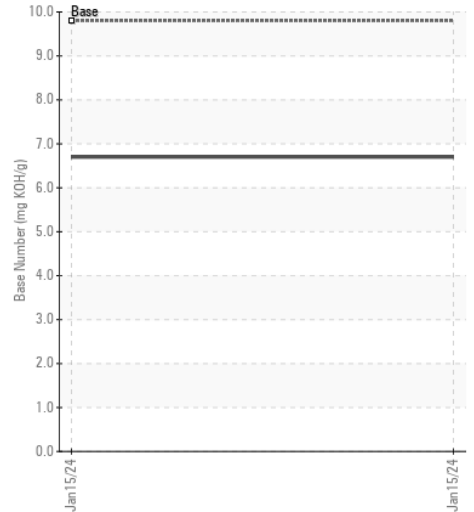
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : NL0001839

Lab Number : 06076697

Unique Number : 10858788

Test Package : FLEET ( Additional Tests: FuelDilution, PercentFuel )

Received : 01 Feb 2024

Tested : 05 Feb 2024

Diagnosed : 05 Feb 2024 - Jonathan Hester

FOX & JAMES NATIONALEASE - Manassas

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US 20109

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F:

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)