



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**8764**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>NL0002244</b>	NL0002075	NL0001840
Sample Date		Client Info		<b>13 Jun 2024</b>	03 Apr 2024	26 Jan 2024
Machine Age	mls	Client Info		<b>187766</b>	148121	107771
Oil Age	mls	Client Info		<b>45000</b>	45000	45000
Filter Age	mls	Client Info		<b>45000</b>	45000	45000
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	>100	<b>27</b>	27	20
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>16</b>	16	15
Lead	ppm	ASTM D5185m	>40	<b>1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>24</b>	50	66
Tin	ppm	ASTM D5185m	>15	<b>2</b>	2	2
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.

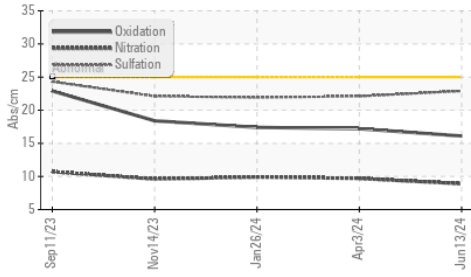
Silicon	ppm	ASTM D5185m	>25	<b>7</b>	6	4
Potassium	ppm	ASTM D5185m	>20	<b>32</b>	32	38
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>1</b>	0.9	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.9</b>	9.7	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.9</b>	22.1	21.9
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

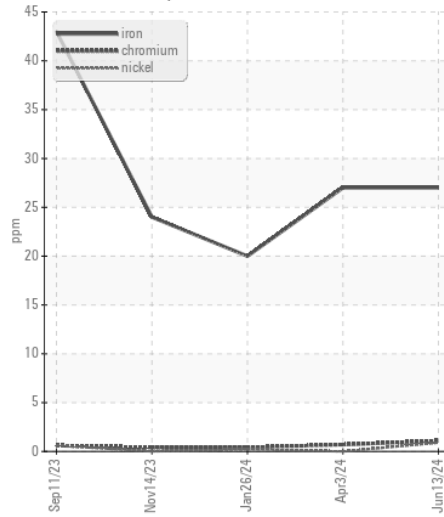
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	3	0
Boron	ppm	ASTM D5185m	0	<b>22</b>	13	2
Barium	ppm	ASTM D5185m	0	<b>1</b>	0	<1
Molybdenum	ppm	ASTM D5185m	60	<b>76</b>	66	61
Manganese	ppm	ASTM D5185m	0	<b>1</b>	1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>669</b>	896	847
Calcium	ppm	ASTM D5185m	1070	<b>1253</b>	1169	1071
Phosphorus	ppm	ASTM D5185m	1150	<b>957</b>	965	850
Zinc	ppm	ASTM D5185m	1270	<b>1198</b>	1246	1107
Sulfur	ppm	ASTM D5185m	2060	<b>2754</b>	3049	2412
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.1</b>	17.2	17.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>5.8</b>	6.0	6.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.4</b>	13.6	13.6

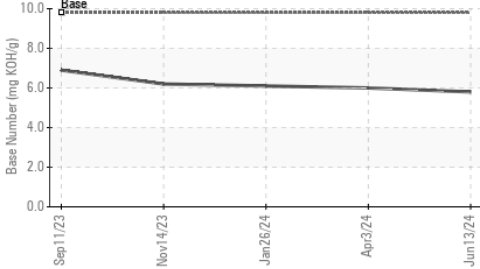
FT-IR (Direct Trend)



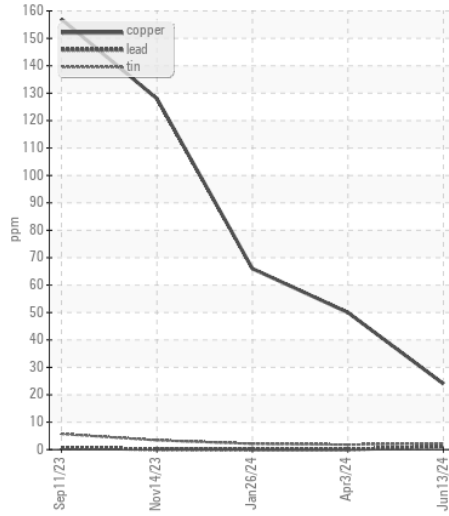
Ferrous Alloys



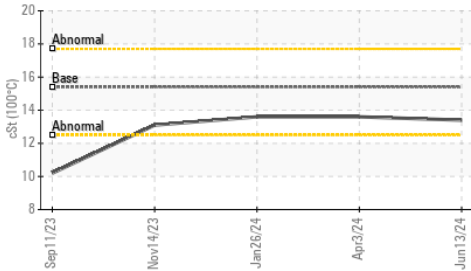
Base Number



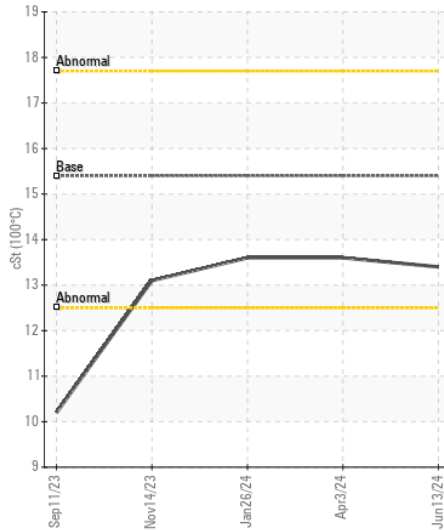
Non-ferrous Metals



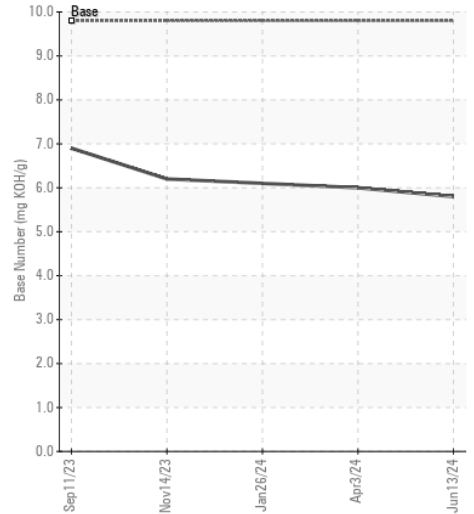
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : NL0002244  
 Lab Number : 06217836  
 Unique Number : 11096033  
 Test Package : FLEET

Received : 24 Jun 2024  
 Tested : 25 Jun 2024  
 Diagnosed : 25 Jun 2024 - Wes Davis

FOX & JAMES NATIONALEASE - Manassas  
 1145 INDUSTRIAL RD  
 MANASSAS, VA  
 US 20109  
 Contact: JOSH ROLAND  
 j.roland@foxandjames.com  
 T: (571)379-5296  
 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)