



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**PETER NORNES**

Component  
**Main Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (10 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>WC0806330</b>	WC0806328	WC0664608
Sample Date		Client Info		<b>15 Feb 2024</b>	20 Aug 2023	05 Mar 2023
Machine Age	hrs	Client Info		<b>2145</b>	1845	971
Oil Age	hrs	Client Info		<b>350</b>	600	500
Filter Age	hrs	Client Info		<b>350</b>	600	500
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>26</b>	39	25
Chromium	ppm	ASTM D5185m	>8	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>1</b>	0	<1
Lead	ppm	ASTM D5185m	>18	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>80	<b>30</b>	▲ 118	106
Tin	ppm	ASTM D5185m	>14	<b>&lt;1</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

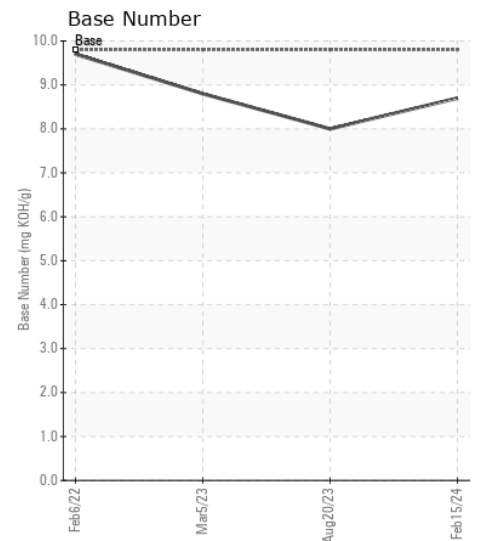
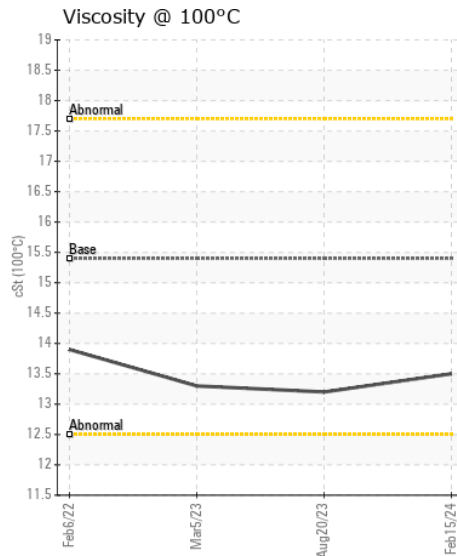
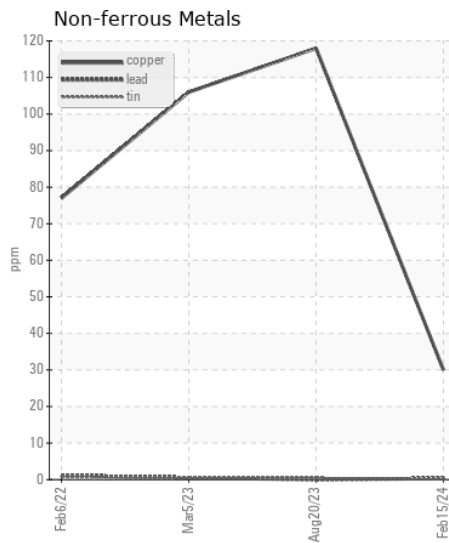
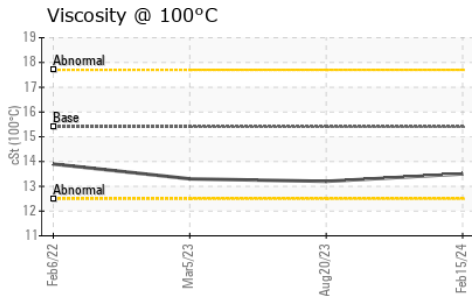
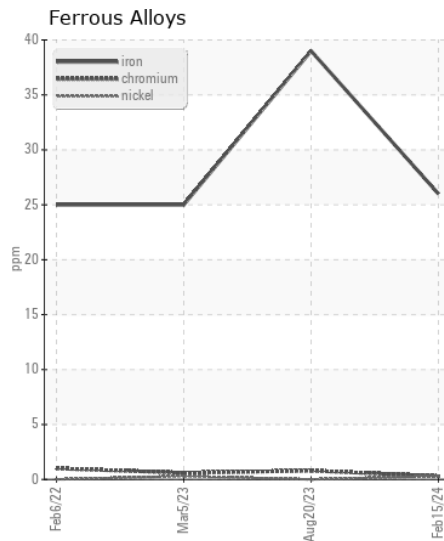
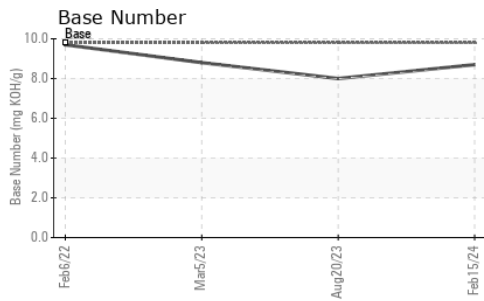
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>3</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	2
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.5</b>	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.3</b>	8.2	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.2</b>	18.9	19.3
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	>0.1	<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	>75	<b>2</b>	2	2
Boron	ppm	ASTM D5185m	0	<b>4</b>	2	3
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>68</b>	65	57
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>1019</b>	977	879
Calcium	ppm	ASTM D5185m	1070	<b>1140</b>	1205	1014
Phosphorus	ppm	ASTM D5185m	1150	<b>1143</b>	1015	963
Zinc	ppm	ASTM D5185m	1270	<b>1354</b>	1302	1148
Sulfur	ppm	ASTM D5185m	2060	<b>3276</b>	4078	2618
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.7</b>	14.5	14.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.7</b>	8.0	8.8
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.5</b>	13.2	13.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0806330 **Received** : 28 Feb 2024  
**Lab Number** : 06103542 **Tested** : 01 Mar 2024  
**Unique Number** : 10901772 **Diagnosed** : 01 Mar 2024 - Wes Davis  
**Test Package** : MAR 2

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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)