



# OIL ANALYSIS REPORT

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

Machine Id  
**2600**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON HP 15W40 (--- QTS)**

## 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>RW0005350</b>	RW0004924	RW0004222
Sample Date		Client Info		<b>13 Jun 2024</b>	01 Dec 2023	13 Jan 2023
Machine Age	hrs	Client Info		<b>6634</b>	0	4812
Oil Age	hrs	Client Info		<b>263</b>	0	300
Filter Age	hrs	Client Info		<b>263</b>	0	300
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>9</b>	6	21
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	4	8
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	1	2
Tin	ppm	ASTM D5185m	>15	<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

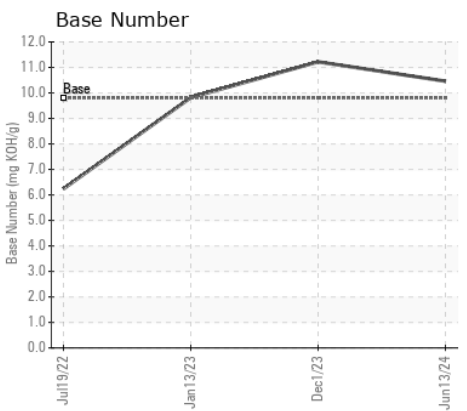
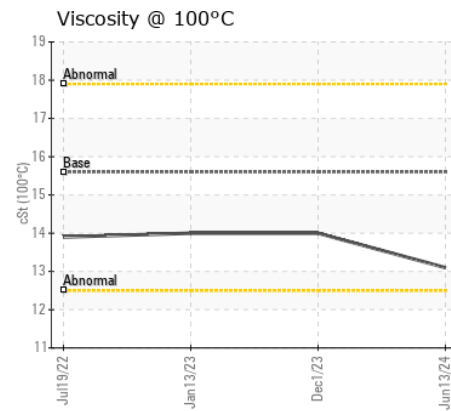
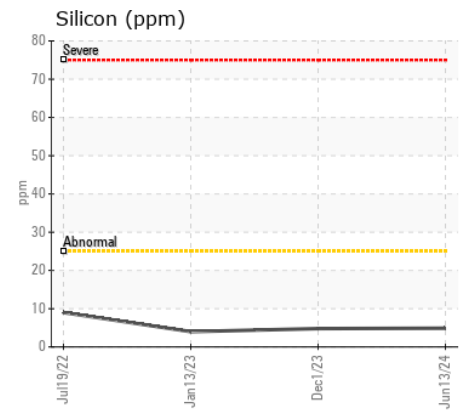
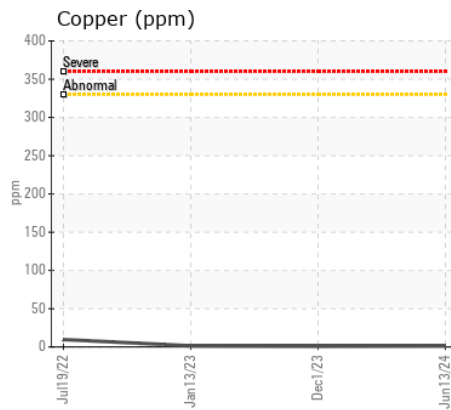
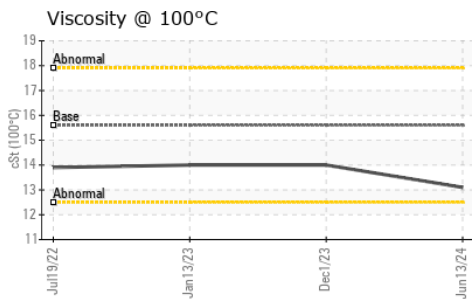
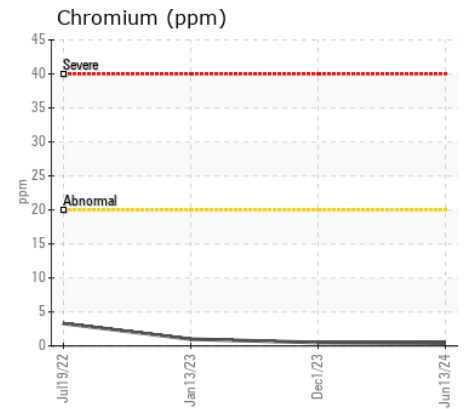
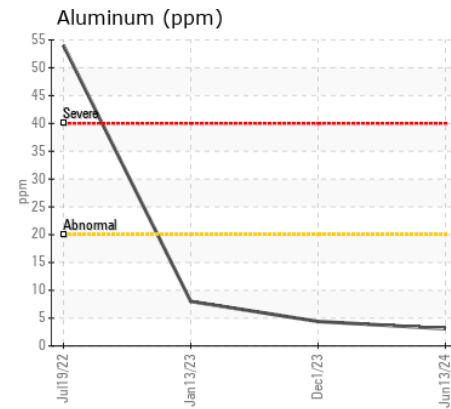
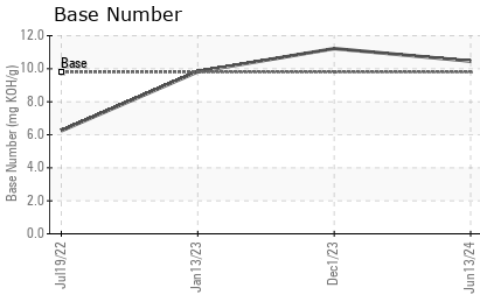
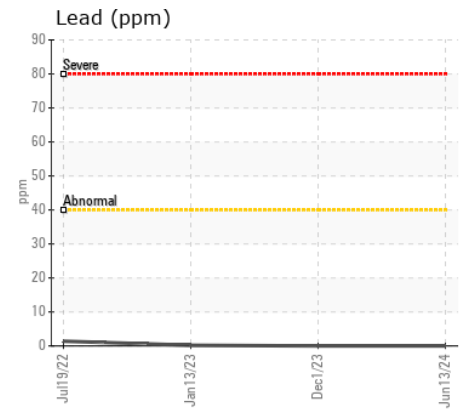
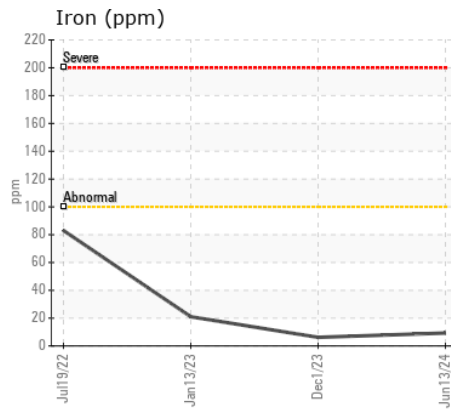
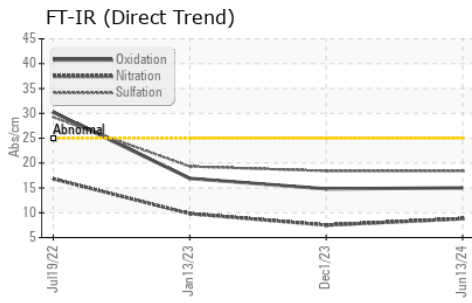
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	8	16
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>0.3</b>	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.8</b>	7.5	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.4</b>	18.4	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	>0.2	<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>4</b>	2	1
Boron	ppm	ASTM D5185m		<b>6</b>	6	6
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>59</b>	58	62
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>961</b>	892	821
Calcium	ppm	ASTM D5185m		<b>1253</b>	1045	1149
Phosphorus	ppm	ASTM D5185m		<b>1137</b>	1018	998
Zinc	ppm	ASTM D5185m		<b>1381</b>	1250	1194
Sulfur	ppm	ASTM D5185m		<b>3880</b>	3098	2831
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.0</b>	14.8	16.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>10.46</b>	11.22	9.82
Visc @ 100°C	cSt	ASTM D445	15.6	<b>13.1</b>	14.0	14.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RW0005350  
**Lab Number** : 06231591  
**Unique Number** : 11115084  
**Test Package** : MOB 2

**Received** : 09 Jul 2024  
**Tested** : 10 Jul 2024  
**Diagnosed** : 10 Jul 2024 - Wes Davis

**NEWKIRK ELECTRIC**  
 1875 ROBERTS ST.  
 MUSKEGON, MI  
 US 49442

Contact: ERIC KING  
 ewking@newkirk-electric.com

T: (231)206-6131  
 F: (231)724-4090

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)