



# OIL ANALYSIS REPORT

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



Area  
**N**  
Machine Id  
**Cat XQ425 (S/N NF300423)**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON UHP 5W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0934075</b>	WC0810893	WC0696114
Sample Date		Client Info		<b>08 May 2024</b>	18 May 2023	11 May 2022
Machine Age	hrs	Client Info		<b>322</b>	309	298
Oil Age	hrs	Client Info		<b>24</b>	14	298
Filter Age	hrs	Client Info		<b>0</b>	14	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>5</b>	4	4
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185m	>40	<b>3</b>	2	<1
Copper	ppm	ASTM D5185m	>330	<b>114</b>	97	50
Tin	ppm	ASTM D5185m	>15	<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

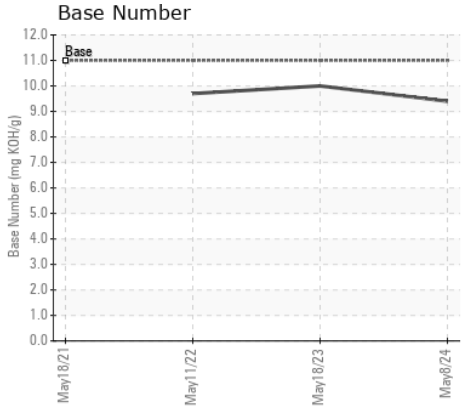
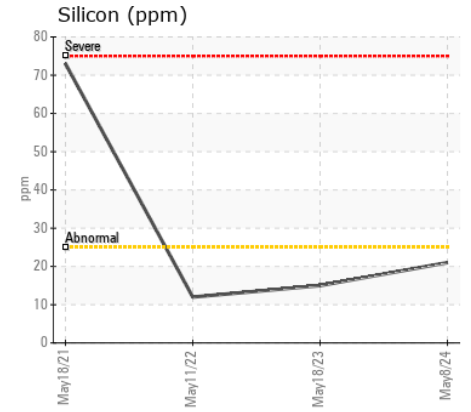
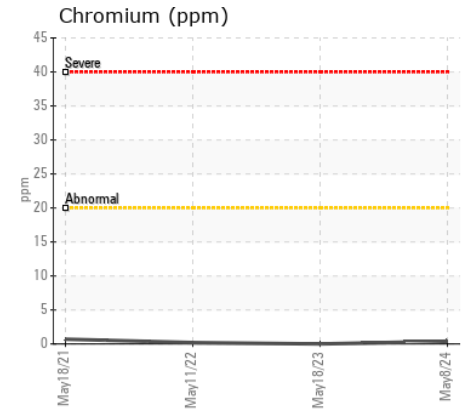
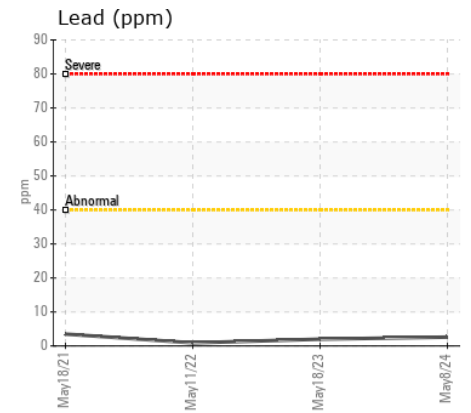
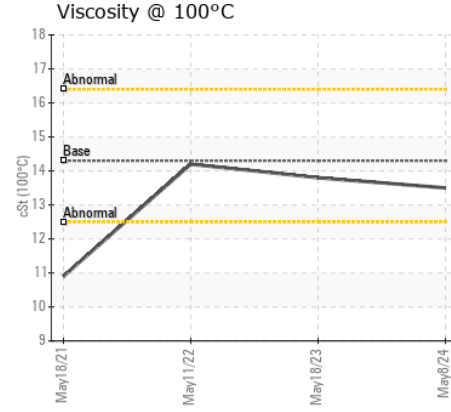
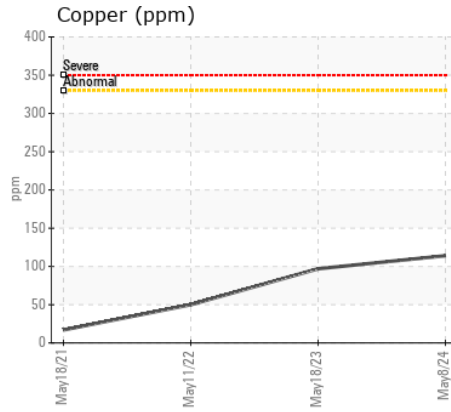
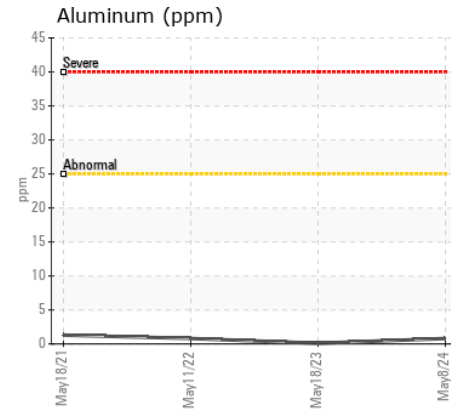
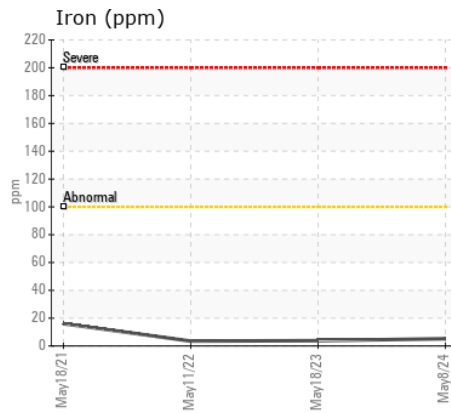
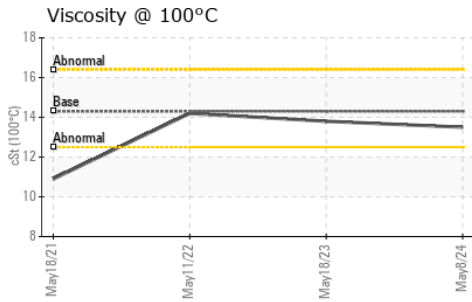
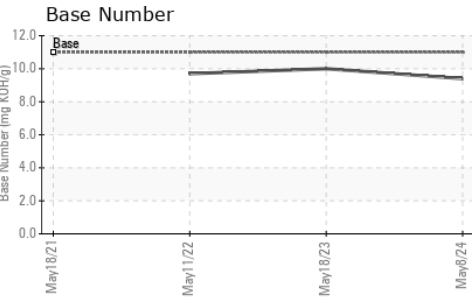
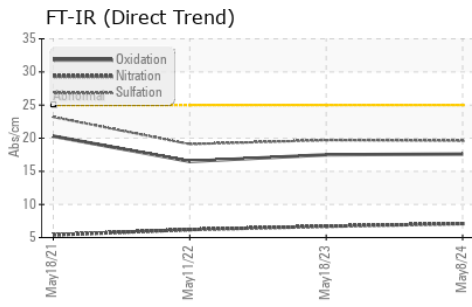
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>21</b>	15	12
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
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>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.1</b>	6.7	6.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.6</b>	19.7	19.1
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>	3	3
Boron	ppm	ASTM D5185m	65	<b>64</b>	70	75
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	65	<b>59</b>	54	57
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1160	<b>1168</b>	1070	1161
Calcium	ppm	ASTM D5185m	820	<b>945</b>	878	950
Phosphorus	ppm	ASTM D5185m	1160	<b>1114</b>	1008	1103
Zinc	ppm	ASTM D5185m	1260	<b>1354</b>	1280	1258
Sulfur	ppm	ASTM D5185m	3000	<b>4169</b>	3688	3095
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.6</b>	17.5	16.5
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	<b>9.4</b>	10.0	9.7
Visc @ 100°C	cSt	ASTM D445	14.3	<b>13.5</b>	13.8	14.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0934075 **Received** : 13 May 2024  
**Lab Number** : 06176907 **Tested** : 14 May 2024  
**Unique Number** : 11022960 **Diagnosed** : 14 May 2024 - Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MONROE COUNTY WATER AUTHORITY**  
 4799 DEWEY AVE  
 ROCHESTER, NY  
 US 14612  
 Contact: SCOTT TRAIL  
 scott.trail@mcwa.com  
 T: (585)775-5257  
 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)