



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(EQ4229) W

Machine Id

Corfu Water Treatment Plant Site (S/N 21816661)

Component

Diesel Engine

Fluid

PETRO CANADA DURON UHP 5W40 (12 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0934066	WC0810884	WC0696105
Sample Date		Client Info		08 May 2024	18 May 2023	11 May 2022
Machine Age	hrs	Client Info		657	627	542
Oil Age	hrs	Client Info		115	108	0
Filter Age	hrs	Client Info		0	108	0
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	8	6	3
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	40	38	40
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	<1	<1
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	0	0	<1
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

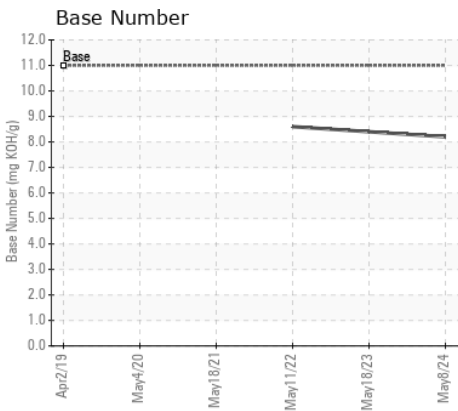
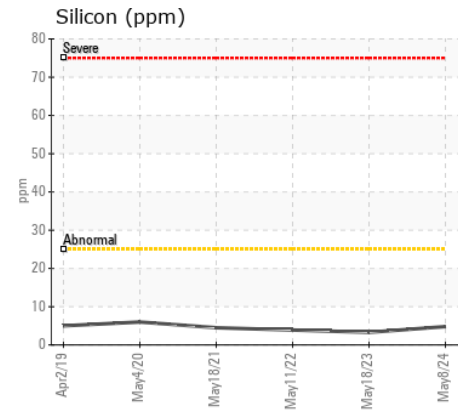
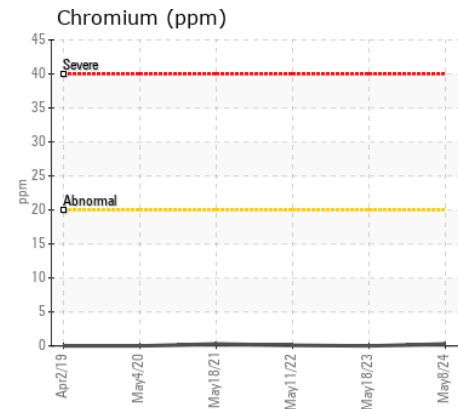
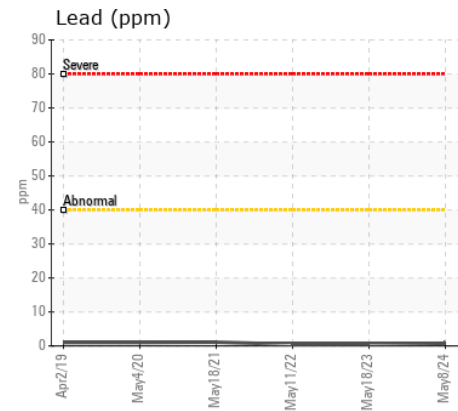
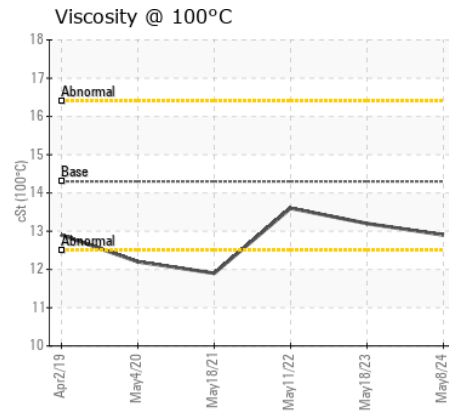
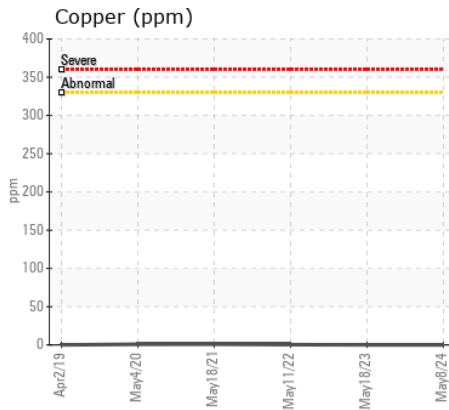
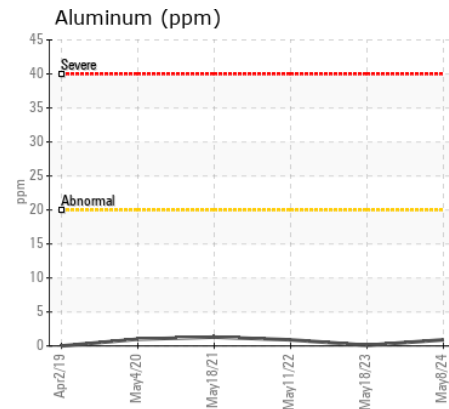
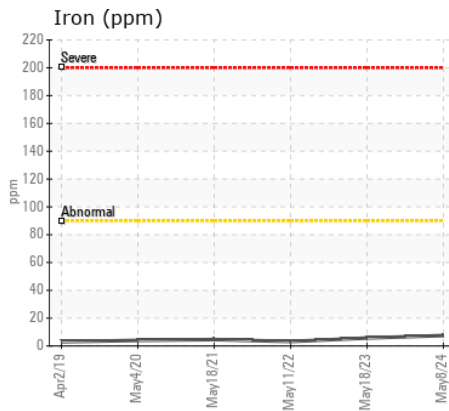
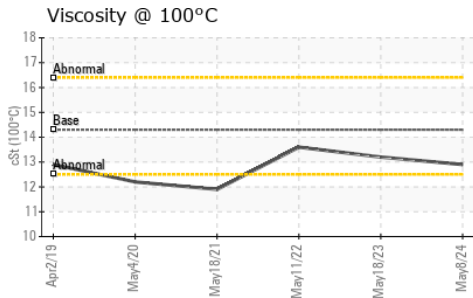
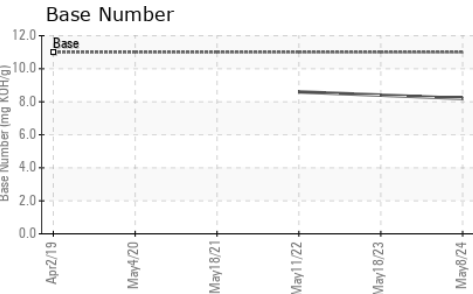
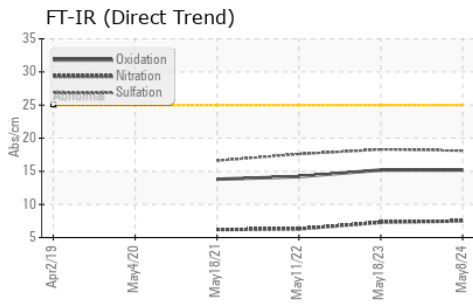
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	3	4
Potassium	ppm	ASTM D5185m	>20	1	1	<1
Fuel		WC Method	>3.0	<1.0	<1.0	1.8
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.5	7.3	6.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.1	18.3	17.6
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	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		6	5	5
Boron	ppm	ASTM D5185m	65	105	115	117
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	65	30	28	30
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1160	829	793	851
Calcium	ppm	ASTM D5185m	820	1245	1225	1295
Phosphorus	ppm	ASTM D5185m	1160	1033	993	1085
Zinc	ppm	ASTM D5185m	1260	1264	1266	1219
Sulfur	ppm	ASTM D5185m	3000	4262	4048	3343
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.2	15.2	14.2
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	8.2	8.4	8.6
Visc @ 100°C	cSt	ASTM D445	14.3	12.9	13.2	13.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0934066 **Received** : 13 May 2024
Lab Number : 06176875 **Tested** : 14 May 2024
Unique Number : 11022928 **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)