



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Machine Id
315 MARGARET
 Component
Diesel Engine
 Fluid
PETRO CANADA XR 4 SAE 15W40 (--- LTR)

RECOMMENDATION

No corrective action is recommended at this time. 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		WC0910606	WC0794980	WC0647829
Sample Date		Client Info		15 Mar 2024	28 Mar 2023	28 Mar 2022
Machine Age	hrs	Client Info		0	0	493
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				MARGINAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	1	2	<1
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>4	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	2	<1
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

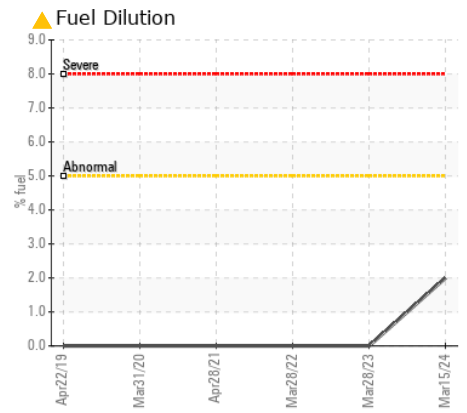
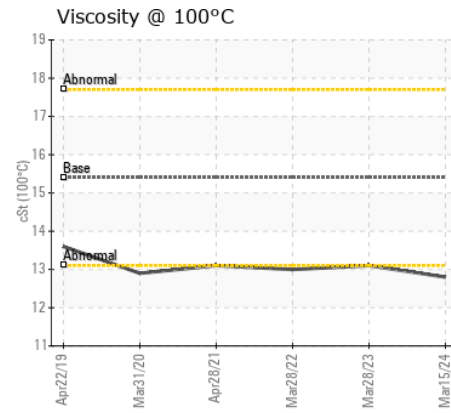
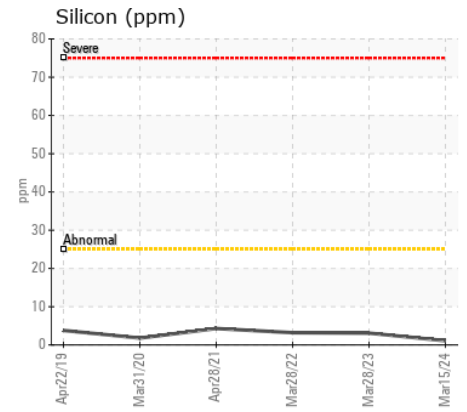
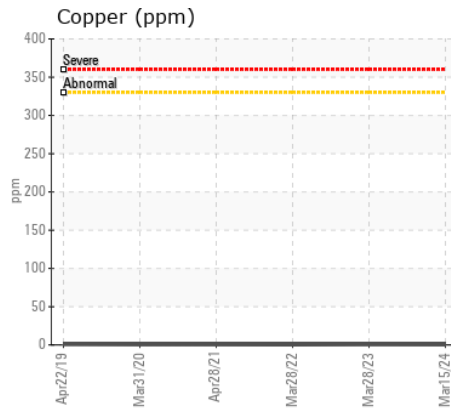
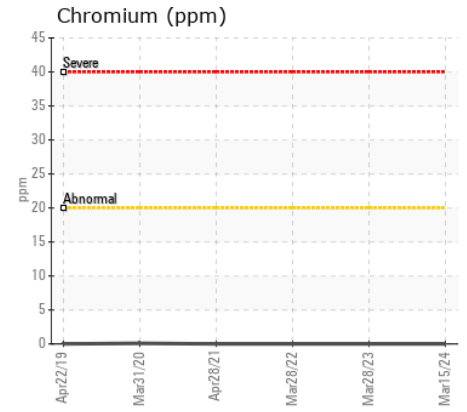
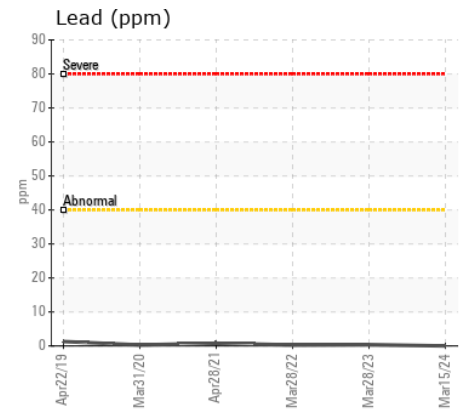
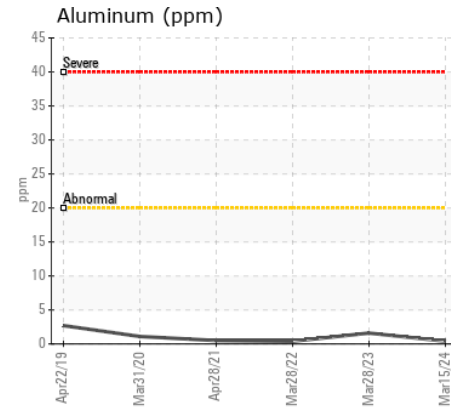
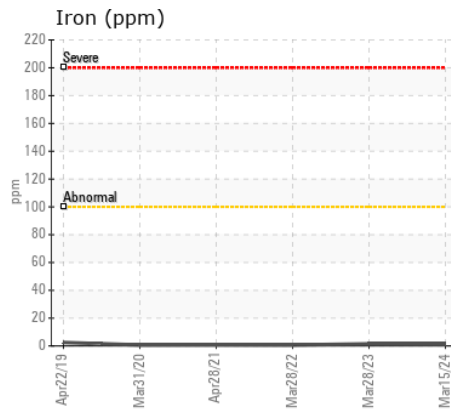
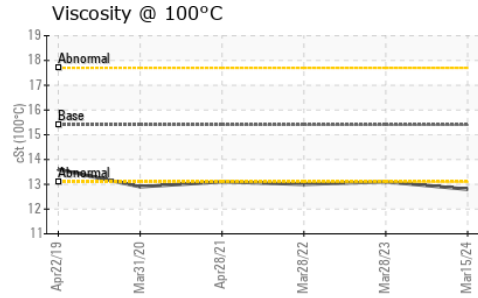
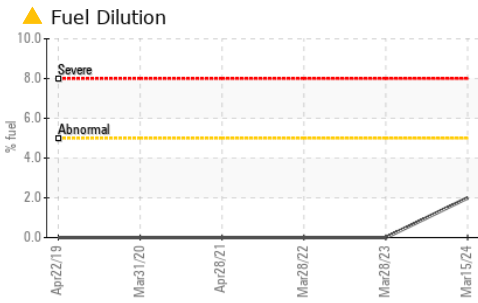
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>25	1	3	3
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
Fuel	%	ASTM D7593*	>5	▲ 2	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	4.6	4.9	4.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.0	21.7	20.4
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		1	2	1
Boron	ppm	ASTM D5185(m)	1	54	210	2
Barium	ppm	ASTM D5185(m)	1	0	0	0
Molybdenum	ppm	ASTM D5185(m)	1	60	70	57
Manganese	ppm	ASTM D5185(m)		0	<1	0
Magnesium	ppm	ASTM D5185(m)	10	879	669	989
Calcium	ppm	ASTM D5185(m)	3032	1069	1248	995
Phosphorus	ppm	ASTM D5185(m)	1054	995	1097	1036
Zinc	ppm	ASTM D5185(m)	1332	1142	1166	1199
Sulfur	ppm	ASTM D5185(m)	3985	2874	2822	2724
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.0	13.7	13.8
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	12.8	13.1	13.0



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0910606
Lab Number : 02625607
Unique Number : 5750726
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

Received : 01 Apr 2024
Tested : 02 Apr 2024
Diagnosed : 02 Apr 2024 - Wes Davis

NORTHERN GENERATOR CO. LTD.
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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.