



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
18 REAN
Component
Diesel Engine
Fluid
PETRO CANADA XR 4 SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0897592	WC0768101	WC0555540
Sample Date		Client Info		02 Feb 2024	02 Feb 2023	31 Jan 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	2	1	2
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>4	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	<1	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	<1	<1
Lead	ppm	ASTM D5185(m)	>40	2	2	2
Copper	ppm	ASTM D5185(m)	>330	7	3	8
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	---	NONE

CONTAMINATION

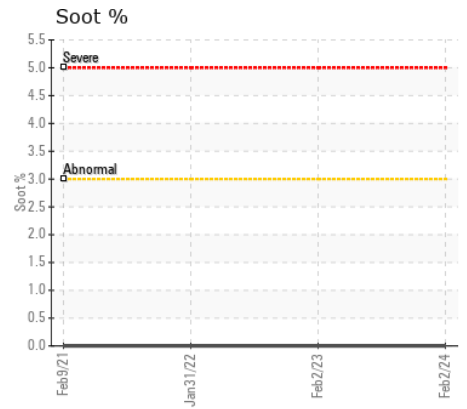
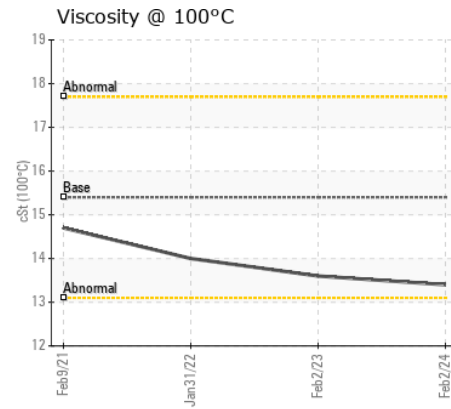
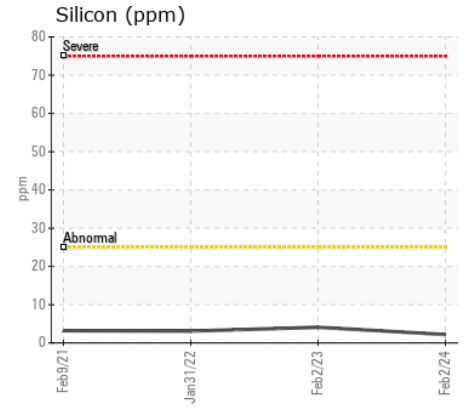
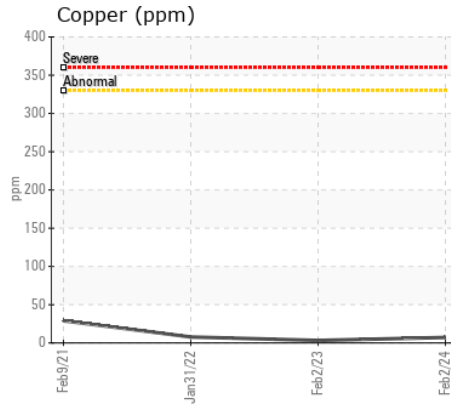
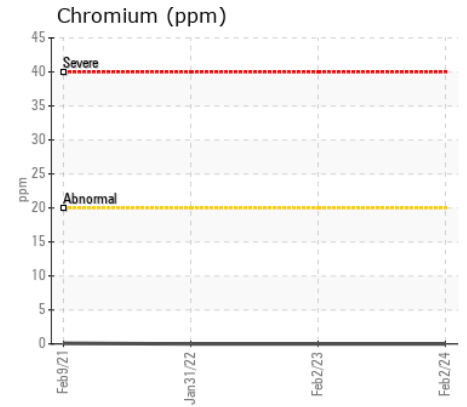
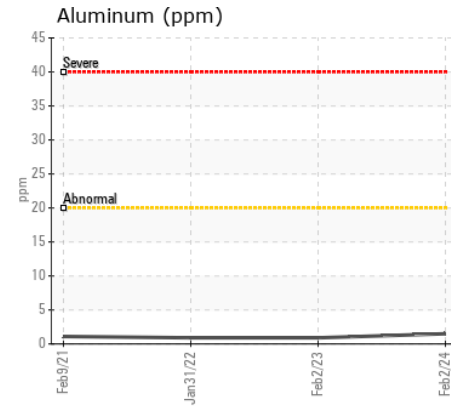
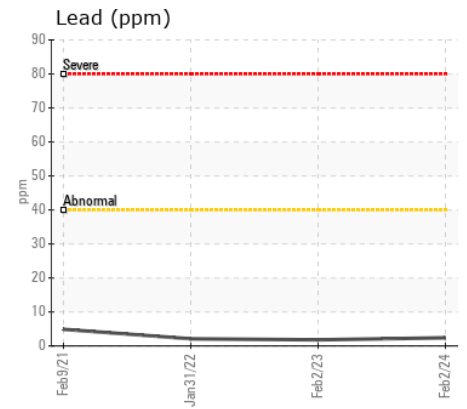
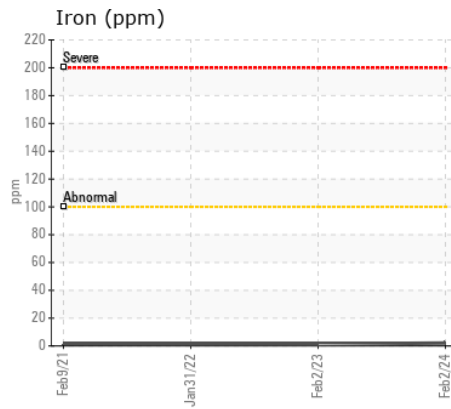
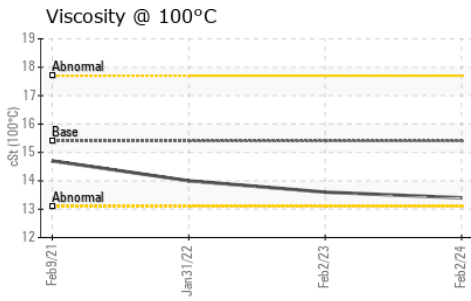
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	4	3
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
Fuel		WC Method	>5	<1.0	<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	5.1	4.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	17.6	21.5	20.2
Silt	scalar	Visual*	NONE	NONE	---	NONE
Debris	scalar	Visual*	NONE	VLITE	---	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	---	NONE
Appearance	scalar	Visual*	NORML	NORML	---	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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	3	5	6
Barium	ppm	ASTM D5185(m)	1	0	0	0
Molybdenum	ppm	ASTM D5185(m)	1	59	59	58
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	10	982	987	1001
Calcium	ppm	ASTM D5185(m)	3032	1060	1088	1029
Phosphorus	ppm	ASTM D5185(m)	1054	1060	1095	1076
Zinc	ppm	ASTM D5185(m)	1332	1163	1175	1212
Sulfur	ppm	ASTM D5185(m)	3985	2947	2720	2760
Oxidation	Abs/.1mm	ASTM D7414*	>25	12.7	14.2	14.1
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.4	13.6	14.0



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0897592
Lab Number : 02619228
Unique Number : 5736338
Test Package : MOB 1 (Additional Tests: Visual)
Received : 01 Mar 2024
Tested : 01 Mar 2024
Diagnosed : 01 Mar 2024 - Wes Davis

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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.