



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

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

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		WC0940158	WC0829992	WC0647778
Sample Date		Client Info		04 Jun 2024	20 Jun 2023	07 Feb 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	4	6
Chromium	ppm	ASTM D5185(m)	>20	0	0	<1
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	<1	2	2
Lead	ppm	ASTM D5185(m)	>40	1	3	5
Copper	ppm	ASTM D5185(m)	>330	22	53	53
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

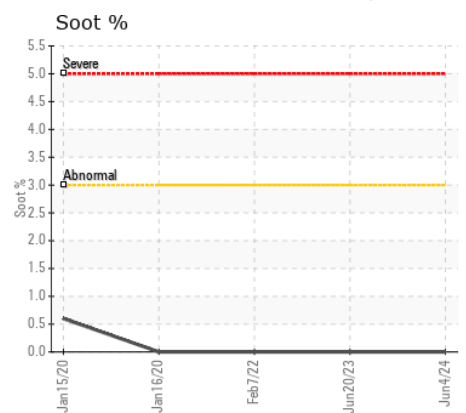
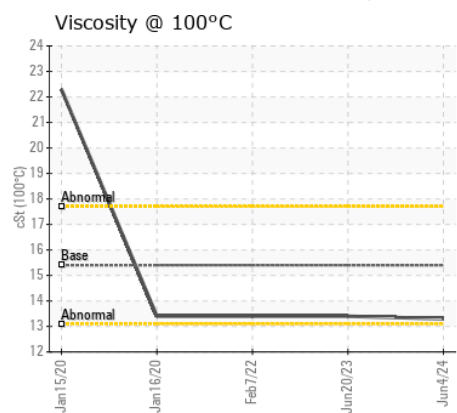
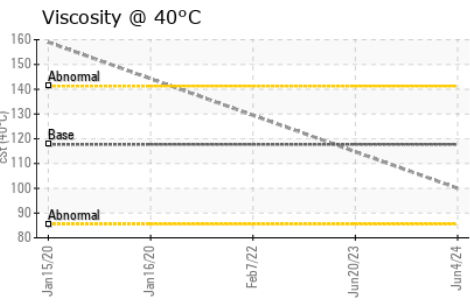
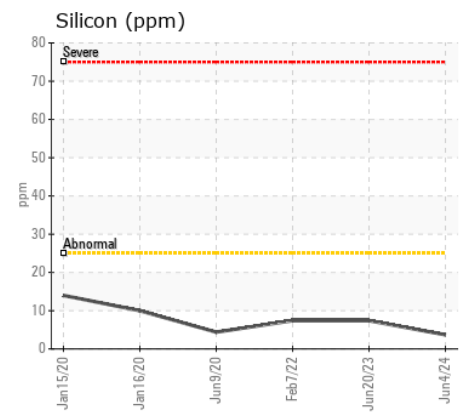
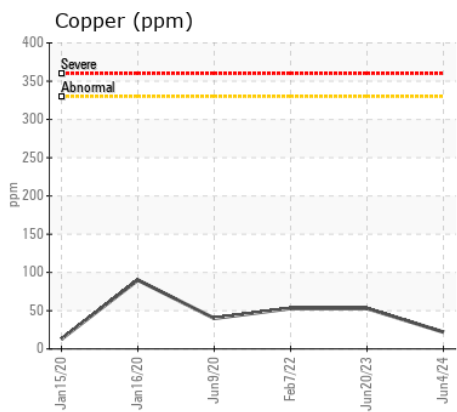
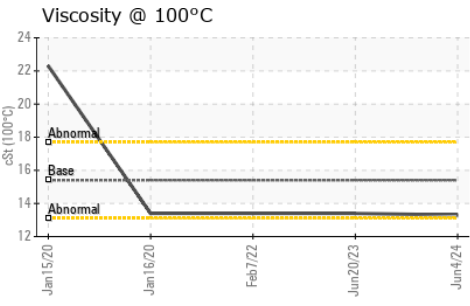
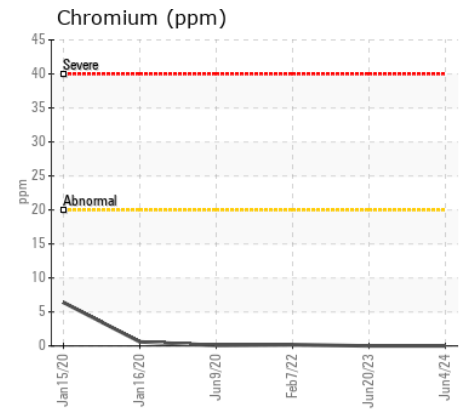
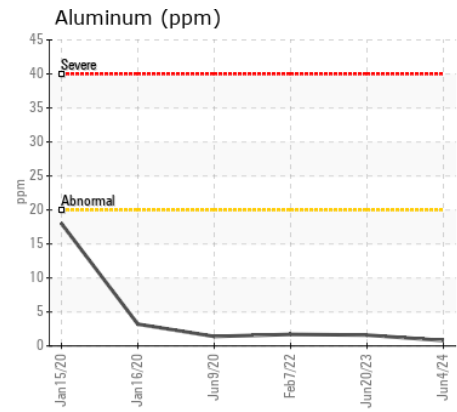
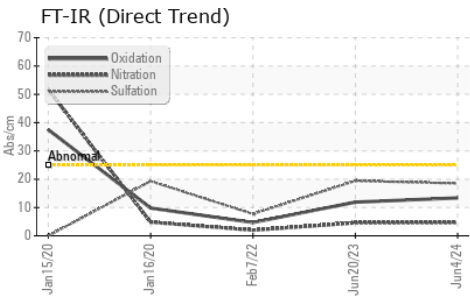
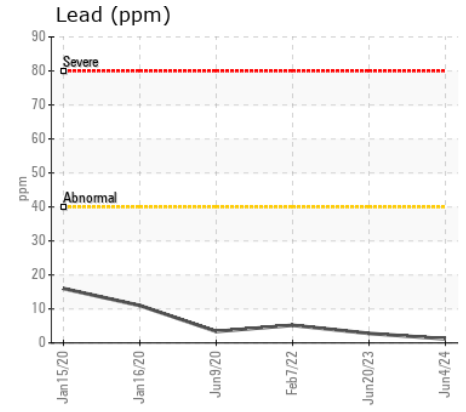
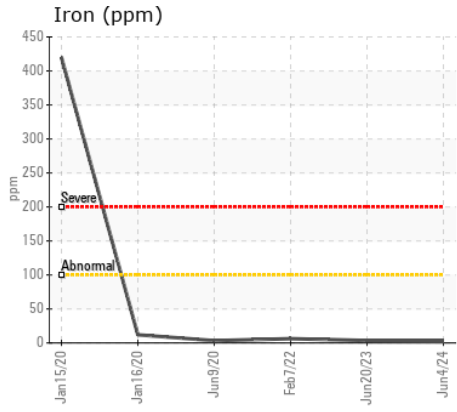
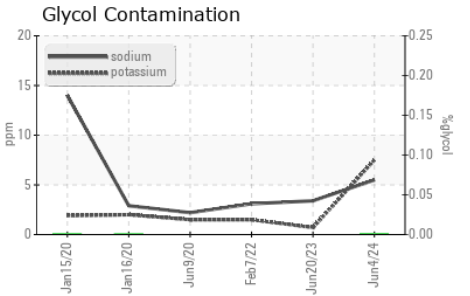
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	7	7
Potassium	ppm	ASTM D5185(m)	>20	8	<1	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	4.7	4.6	2.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.5	19.4	7.7
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)		6	3	3
Boron	ppm	ASTM D5185(m)	1	55	320	13
Barium	ppm	ASTM D5185(m)	1	0	0	1
Molybdenum	ppm	ASTM D5185(m)	1	61	87	79
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	10	823	444	739
Calcium	ppm	ASTM D5185(m)	3032	1076	1456	1279
Phosphorus	ppm	ASTM D5185(m)	1054	945	986	974
Zinc	ppm	ASTM D5185(m)	1332	1106	1073	1105
Sulfur	ppm	ASTM D5185(m)	3985	2976	2643	2731
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.4	11.9	4.7
Visc @ 40°C	cSt	ASTM D7279(m)	117.7	100	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.3	13.4	13.4
Viscosity Index (VI)	Scale	ASTM D2270*	138	131	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0940158
Lab Number : 02643119
Unique Number : 5800658
Test Package : MOB 1 (Additional Tests: Glycol, KV40, VI)
Received : 20 Jun 2024
Tested : 20 Jun 2024
Diagnosed : 20 Jun 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.