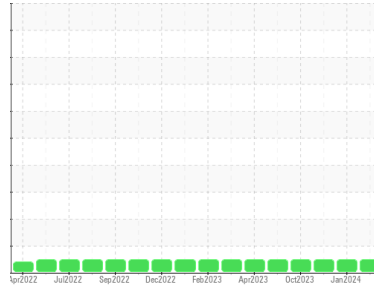


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Plymouth & Brockton
 Machine Id
11449
 Component
Diesel Engine
 Fluid
PETRO CANADA 15W40 (36 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0109872	PCA0104732	PCA0104487
Sample Date	Client Info			19 Feb 2024	09 Jan 2024	29 Nov 2023
Machine Age	mls	Client Info		215550	203792	191739
Oil Age	mls	Client Info		12000	24000	12000
Oil Changed	Client Info			Not Changed	Changed	Not Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>3.0		<1.0	<1.0	<1.0
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	12	16	14
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	1	2
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	1	2	3
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	<1	<1	<1
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

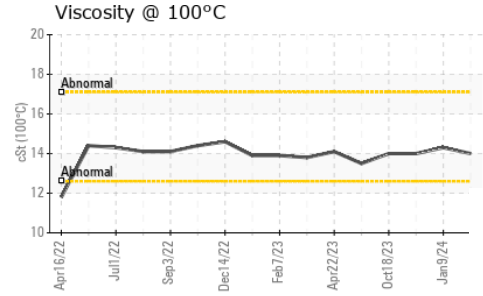
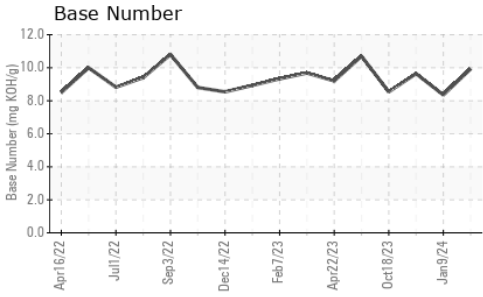
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		7	6	10
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		59	58	83
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		914	868	1311
Calcium	ppm	ASTM D5185m		1085	1012	1486
Phosphorus	ppm	ASTM D5185m		987	955	1350
Zinc	ppm	ASTM D5185m		1142	1173	1685
Sulfur	ppm	ASTM D5185m		3367	2690	4594

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	2	4	5
Sodium	ppm	ASTM D5185m		10	<1	1
Potassium	ppm	ASTM D5185m	>20	9	0	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	1.7	2.4	1.3
Nitration	Abs/cm	*ASTM D7624	>20	7.8	10.1	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4	23.2	19.9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.6	15.3	13.9
Base Number (BN)	mg KOH/g	ASTM D2896		9.93	8.35	9.64

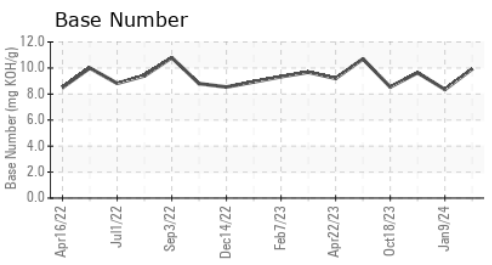
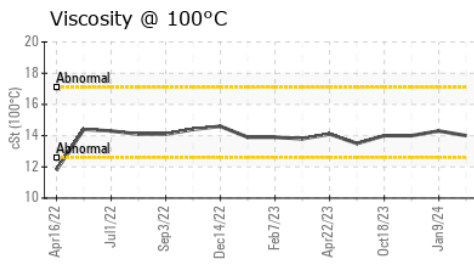
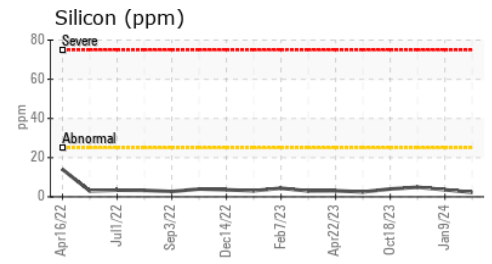
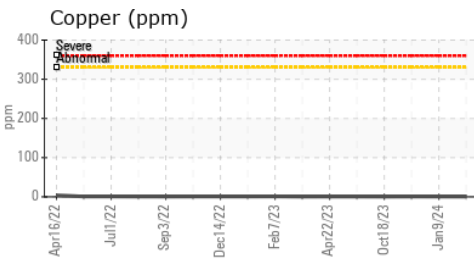
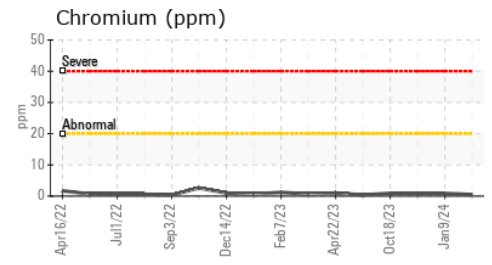
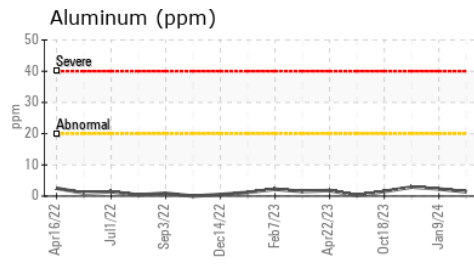
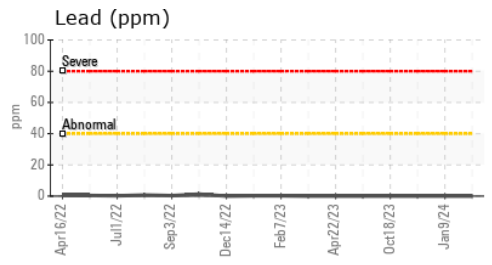
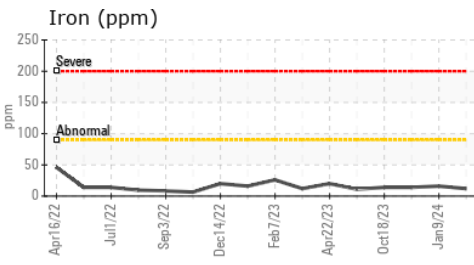
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.0	14.3	14.0

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0109872 **Received** : 12 Mar 2024
Lab Number : **06116038** **Tested** : 13 Mar 2024
Unique Number : 10924871 **Diagnosed** : 13 Mar 2024 - Wes Davis
Test Package : MOB 2

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 Dpelquin@P-B.com
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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)