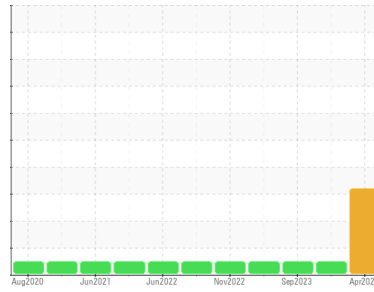


OIL ANALYSIS REPORT

Machine Id
582
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

Sample Rating Trend



GLYCOL



DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

Wear

An increase in the copper level is noted.

Contamination

Sodium and/or potassium levels are high.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0082723	PCA0082729	PCA0082811
Sample Date	Client Info			02 Apr 2024	06 Mar 2024	26 Sep 2023
Machine Age	hrs	Client Info		2516	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			Not Changed	Not Changed	Not Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Water	WC Method	>0.2		NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	8	14	12
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>40	2	1	1
Copper	ppm	ASTM D5185m	>330	▲ 145	1	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

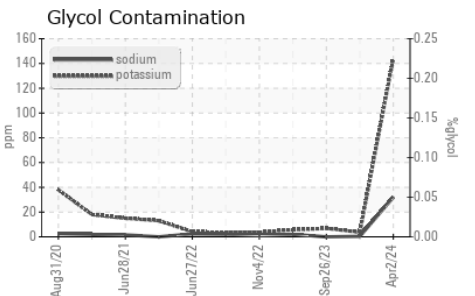
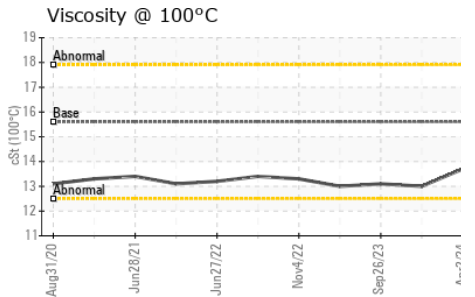
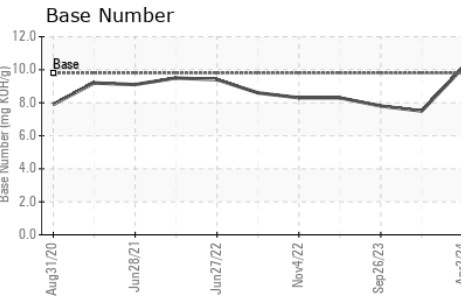
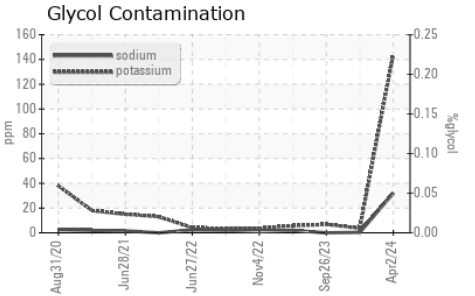
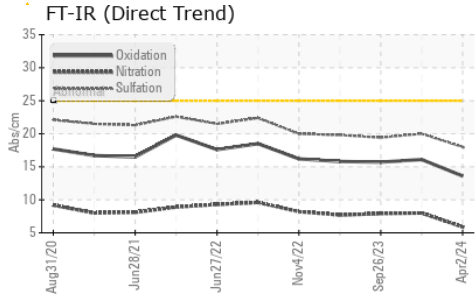
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		4	3	3
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		77	62	66
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		947	944	941
Calcium	ppm	ASTM D5185m		1083	1125	1130
Phosphorus	ppm	ASTM D5185m		1045	1010	1096
Zinc	ppm	ASTM D5185m		1212	1245	1258
Sulfur	ppm	ASTM D5185m		3283	3048	3685

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	7	6
Sodium	ppm	ASTM D5185m		▲ 32	<1	0
Potassium	ppm	ASTM D5185m	>20	▲ 144	4	7
Glycol	%	*ASTM D2982		NEG	NEG	NEG

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.2	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	5.9	8.0	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	20.0	19.4

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.6	16.1	15.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	10.1	7.5	7.8

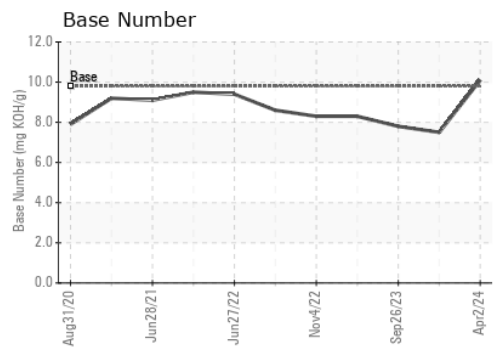
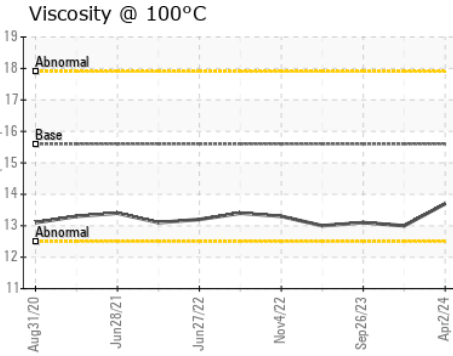
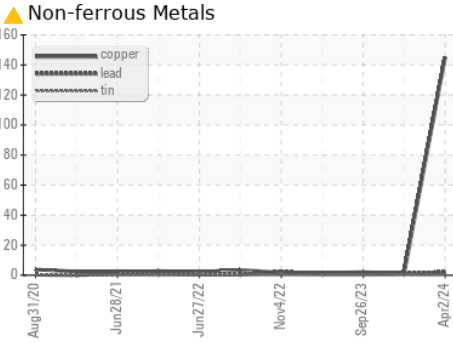
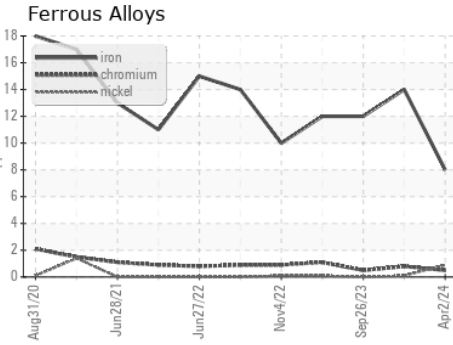
OIL ANALYSIS REPORT



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	15.6	13.7	13.0

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0082723
Lab Number : 06155053
Unique Number : 10990476
Test Package : FLEET (Additional Tests: Glycol)
Received : 19 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 24 Apr 2024 - Jonathan Hester

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 APPLE VALLEY, MN
 US 55124
 Contact: senia zimmer
 avrconcrete.senia@gmail.com
 T: (952)953-2992
 F: (952)953-2994

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)