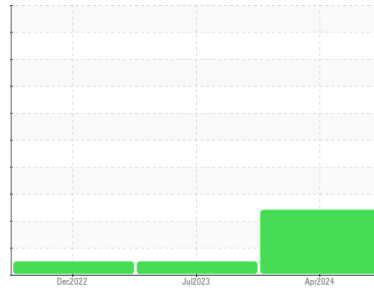




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id

38

Component

Diesel Engine

Fluid

PETRO CANADA DURON HP 15W40 (--- GAL)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

▲ Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

▲ Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0850980	WC0740601	WC0740625
Sample Date	Client Info		14 Apr 2024	04 Jul 2023	18 Dec 2022
Machine Age	mls	Client Info	0	0	0
Oil Age	mls	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
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	54	14	8
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	16	1	3
Lead	ppm	ASTM D5185m	>40	0	0	1
Copper	ppm	ASTM D5185m	>330	<1	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		32	34	32
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		89	75	67
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		608	380	645
Calcium	ppm	ASTM D5185m		1711	1662	1520
Phosphorus	ppm	ASTM D5185m		1197	975	1056
Zinc	ppm	ASTM D5185m		1361	1159	1292
Sulfur	ppm	ASTM D5185m		4238	4055	3936

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	5	2	5
Sodium	ppm	ASTM D5185m		▲ 33	10	1
Potassium	ppm	ASTM D5185m	>20	▲ 98	28	4
Glycol	%	*ASTM D2982		0.0	NEG	NEG

INFRA-RED

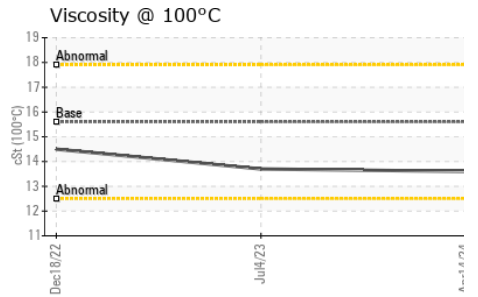
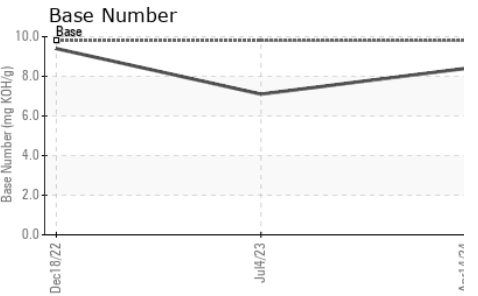
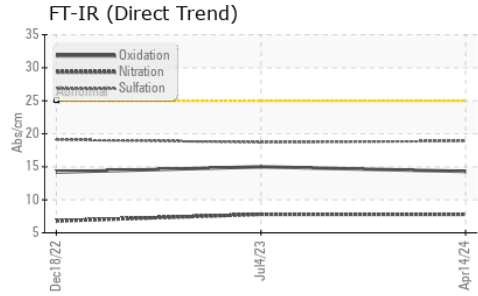
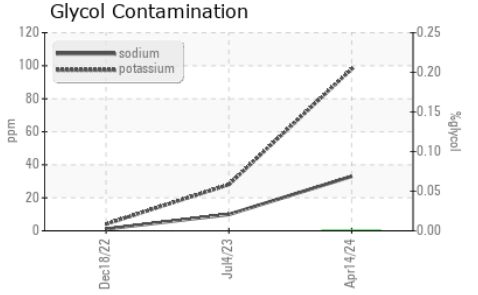
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.4	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.8	7.8	6.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.9	18.7	19.1

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.3	15.0	14.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.4	7.1	9.4



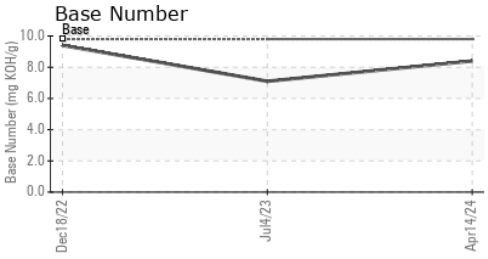
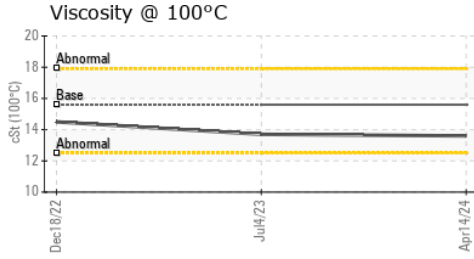
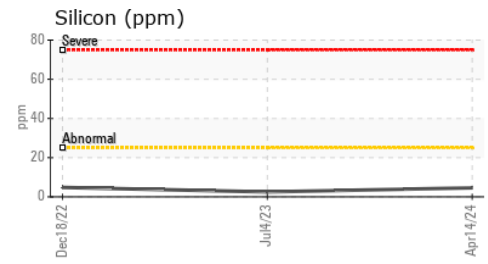
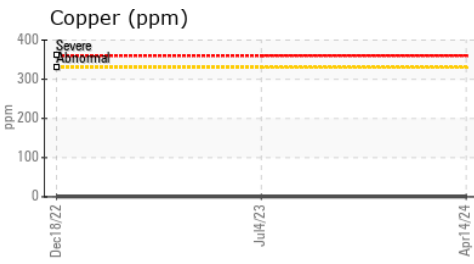
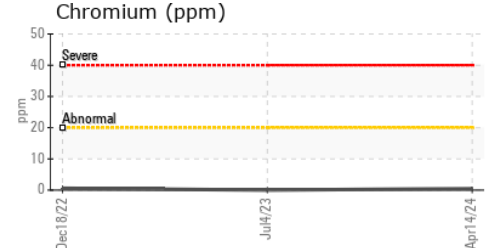
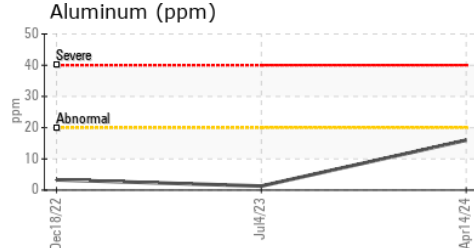
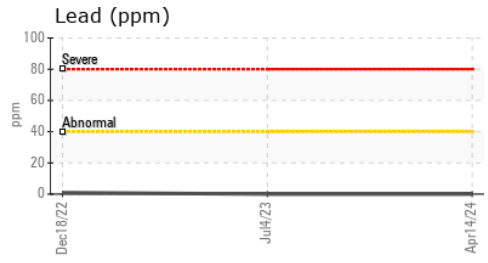
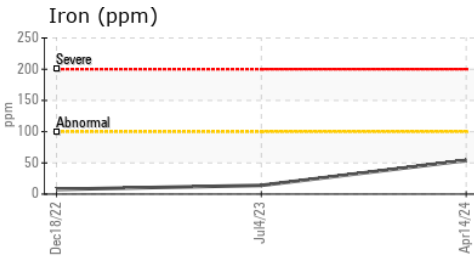
OIL ANALYSIS REPORT



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	13.6	13.7

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0850980 **Received** : 15 Apr 2024
Lab Number : 06149327 **Tested** : 17 Apr 2024
Unique Number : 10979405 **Diagnosed** : 17 Apr 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: Glycol, TBN)

ANSON CO SCHOOL BUS GARAGE
 89 BOGGAN CUT RD
 WADESBORO, NC
 US 28135
 Contact: MATT POWELL
 powell.berkeley@anson.k12.nc.us

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)