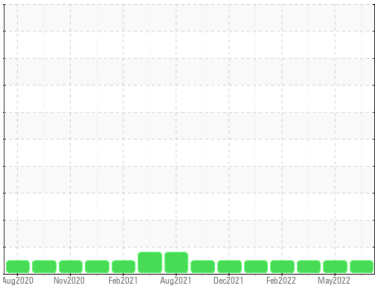
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
3644C AUTOCAR ISL
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (48 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	history 1	history 2
Sample Number		Client Info		**GFL0087112**	GFL0052424	GFL0048542
Sample Date		Client Info		**05 Jul 2023**	20 May 2022	13 Apr 2022
Machine Age	hrs	Client Info		**1756**	18148	17896
Oil Age	hrs	Client Info		**550**	570	318
Oil Changed		Client Info		**Changed**	Changed	Not Changd
Sample Status				**NORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>50	**16**	6	6
Chromium	ppm	ASTM D5185m	>4	**1**	<1	<1
Nickel	ppm	ASTM D5185m	>2	**<1**	<1	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m	>3	**0**	<1	<1
Aluminum	ppm	ASTM D5185m	>9	**<1**	1	2
Lead	ppm	ASTM D5185m	>30	**1**	<1	<1
Copper	ppm	ASTM D5185m	>35	**2**	2	2
Tin	ppm	ASTM D5185m	>4	**2**	<1	<1
Antimony	ppm	ASTM D5185m		**---**	---	---
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	50	**9**	30	38
Barium	ppm	ASTM D5185m	5	**<1**	0	0
Molybdenum	ppm	ASTM D5185m	50	**52**	47	53
Manganese	ppm	ASTM D5185m	0	**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	560	**594**	614	635
Calcium	ppm	ASTM D5185m	1510	**1646**	1558	1736
Phosphorus	ppm	ASTM D5185m	780	**697**	783	882
Zinc	ppm	ASTM D5185m	870	**952**	914	1003
Sulfur	ppm	ASTM D5185m	2040	**2669**	2213	2327

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>+100	**12**	6	6
Sodium	ppm	ASTM D5185m		**14**	3	4
Potassium	ppm	ASTM D5185m	>20	**17**	0	0

INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844		**0.1**	0	0
Nitration	Abs/cm	*ASTM D7624	>20	**10.0**	7.6	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	**21.2**	19.3	19.9

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**18.7**	16.2	16.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	**5.2**	8.5	9.5

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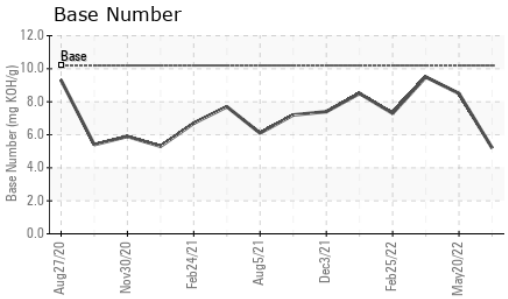
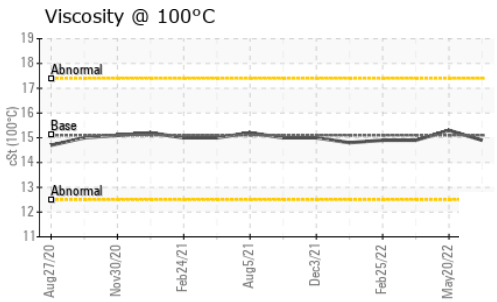
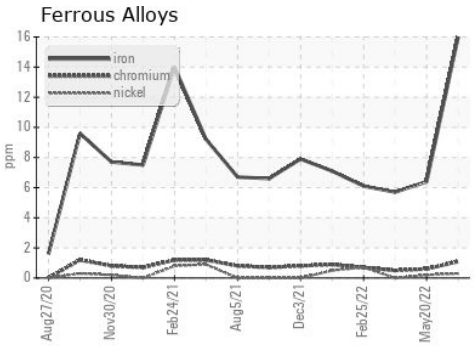


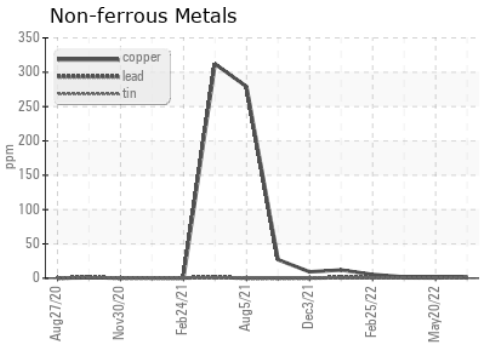


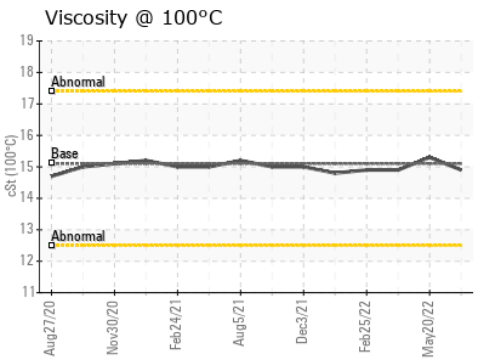
VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

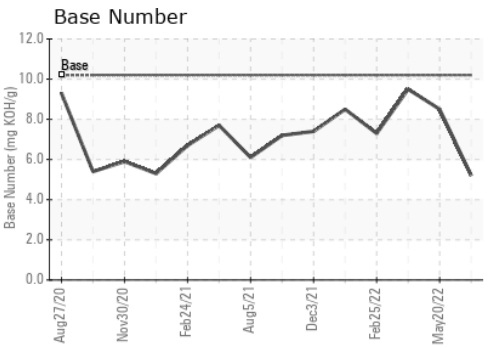
FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.1	**14.9**	15.3	14.9

GRAPHS









Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0087112
Lab Number : 05891043
Unique Number : 10546853
Test Package : FLEET

Received : 06 Jul 2023
Diagnosed : 06 Jul 2023
Diagnostician : Wes Davis

Certificate L2367

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)

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