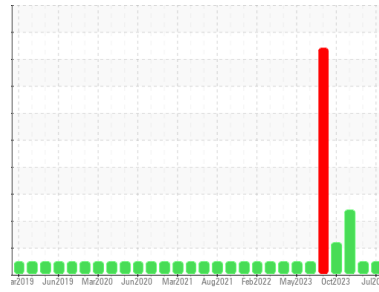




OIL ANALYSIS REPORT

Area
(P659749)
 Machine Id
10899C
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (11 GAL)

Sample Rating Trend



NORMAL

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	GFL0124435	GFL0096967	GFL0110374	
Sample Date	Client Info	09 Jul 2024	23 Feb 2024	13 Feb 2024	
Machine Age	hrs	Client Info	14438	13361	13305
Oil Age	hrs	Client Info	13305	56	12308
Oil Changed	Client Info	Changed	Not Changd	Changed	
Sample Status		NORMAL	NORMAL	ABNORMAL	

CONTAMINATION

method	limit/base	current	history1	history2	
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>50	13	4	15
Chromium	ppm	ASTM D5185m	>4	<1	<1	2
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>9	4	1	1
Lead	ppm	ASTM D5185m	>30	<1	<1	1
Copper	ppm	ASTM D5185m	>35	<1	<1	1
Tin	ppm	ASTM D5185m	>4	0	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	50	4	39	7
Barium	ppm	ASTM D5185m	5	0	<1	0
Molybdenum	ppm	ASTM D5185m	50	62	53	66
Manganese	ppm	ASTM D5185m	0	0	<1	1
Magnesium	ppm	ASTM D5185m	560	628	586	600
Calcium	ppm	ASTM D5185m	1510	1662	1463	1457
Phosphorus	ppm	ASTM D5185m	780	824	777	754
Zinc	ppm	ASTM D5185m	870	1044	887	985
Sulfur	ppm	ASTM D5185m	2040	2207	2376	2707

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>+100	5	4	8
Sodium	ppm	ASTM D5185m		12	8	32
Potassium	ppm	ASTM D5185m	>20	9	3	56

INFRA-RED

method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	11.8	6.6	11.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.0	18.8	23.5

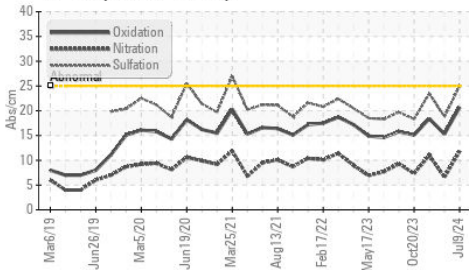
FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.7	15.3	18.4
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	3.6	7.9	3.5

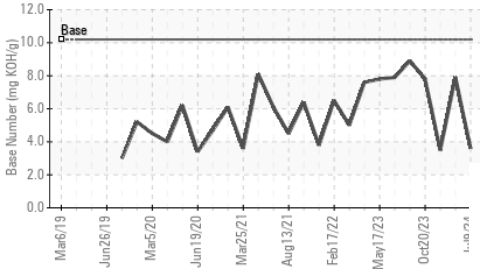


OIL ANALYSIS REPORT

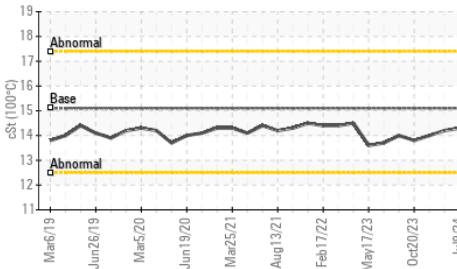
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

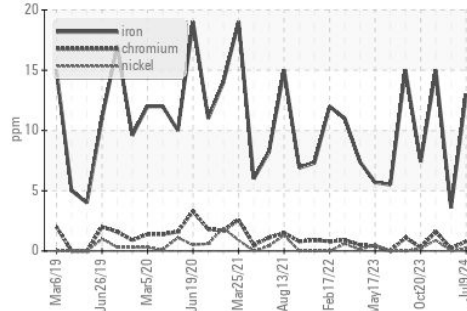


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

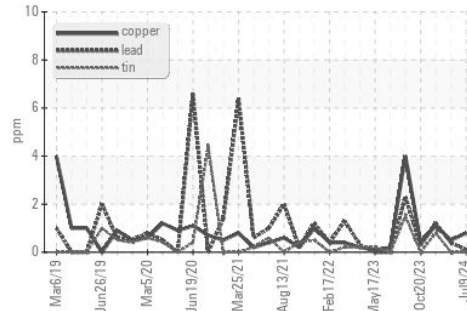
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.3	14.2

GRAPHS

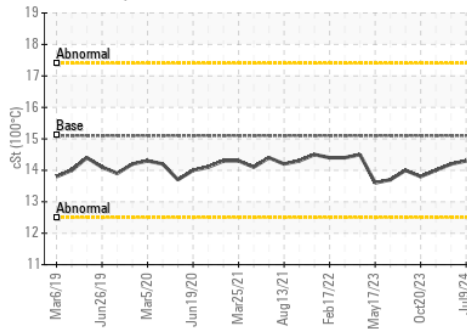
Ferrous Alloys



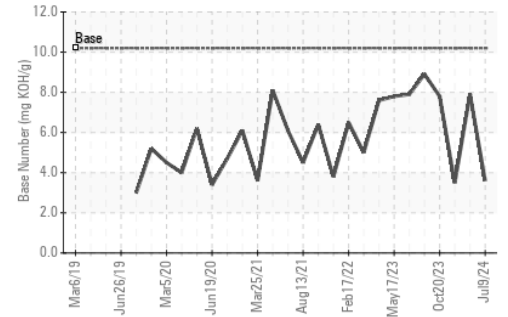
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0124435
 Lab Number : 06234688
 Unique Number : 11123522
 Test Package : FLEET

GFL Environmental - 031 - Greenville/Spartanburg
 1635 Antioch Church Rd
 Piedmont, SC
 US 29673
 Contact: TECHNICIAN ACCOUNT
 catherine.anastasio@wearcheck.com

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)

T:
F: