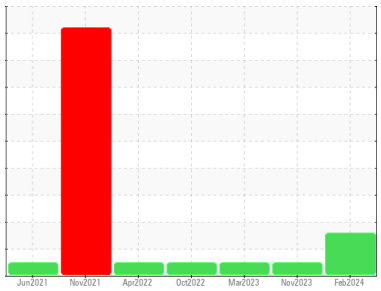
OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
8421
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate concentration of water present in the oil. Test for glycol is negative.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0102601**	GFL0097621	GFL0072851
Sample Date		Client Info		**18 Feb 2024**	14 Nov 2023	13 Mar 2023
Machine Age	hrs	Client Info		**13035**	12462	11395
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	Changed	Changed
Sample Status				**ABNORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	**13**	10	11
Chromium	ppm	ASTM D5185(m)	>4	**1**	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	**<1**	<1	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	<1
Silver	ppm	ASTM D5185(m)	>3	**0**	<1	0
Aluminum	ppm	ASTM D5185(m)	>9	**2**	2	2
Lead	ppm	ASTM D5185(m)	>30	**2**	<1	<1
Copper	ppm	ASTM D5185(m)	>35	**2**	2	3
Tin	ppm	ASTM D5185(m)	>4	**<1**	<1	<1
Antimony	ppm	ASTM D5185(m)		**0**	0	<1
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	50	**11**	8	11
Barium	ppm	ASTM D5185(m)	5	**0**	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	**54**	56	53
Manganese	ppm	ASTM D5185(m)	0	**<1**	<1	1
Magnesium	ppm	ASTM D5185(m)	560	**578**	568	535
Calcium	ppm	ASTM D5185(m)	1510	**1682**	1717	1719
Phosphorus	ppm	ASTM D5185(m)	780	**728**	676	707
Zinc	ppm	ASTM D5185(m)	870	**921**	941	906
Sulfur	ppm	ASTM D5185(m)	2040	**2142**	2084	2072
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

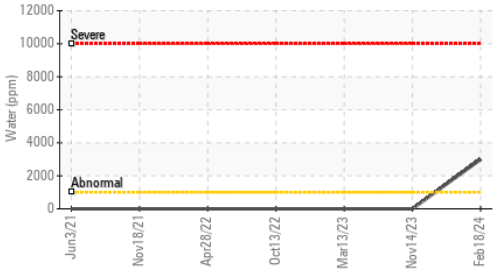
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	**4**	4	4
Sodium	ppm	ASTM D5185(m)		**10**	10	10
Potassium	ppm	ASTM D5185(m)	>20	**2**	0	<1
Water	%	ASTM D6304*	>0.1	▲ **0.299**	---	---
ppm Water	ppm	ASTM D6304*	>1000	▲ **2998**	---	---
Glycol	%	ASTM D7922*		**0.0**	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**12.8**	12.2	11.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	**22.6**	25.3	22.5

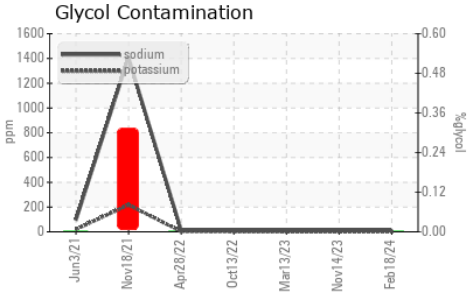
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**18.9**	20.5	18.6

OIL ANALYSIS REPORT

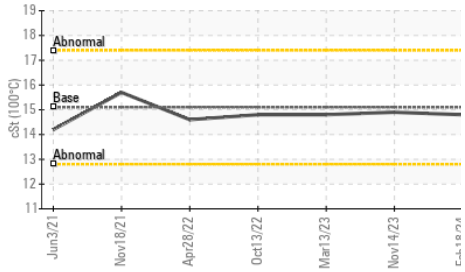
Water (KF)



Glycol Contamination



Viscosity @ 100°C

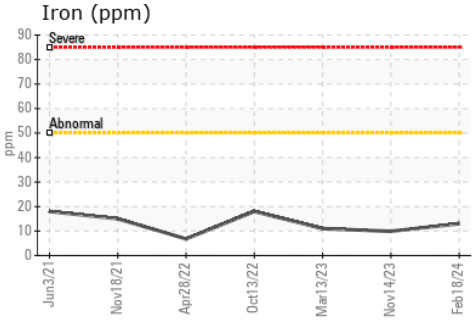


VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	▲ .2%	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

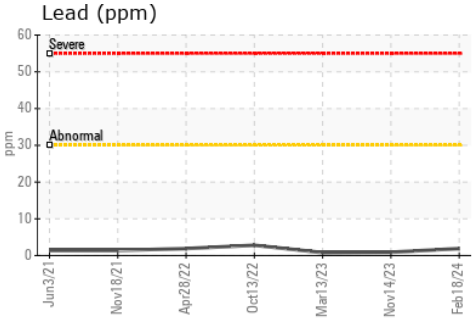
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	**14.8**	14.9	14.8

GRAPHS

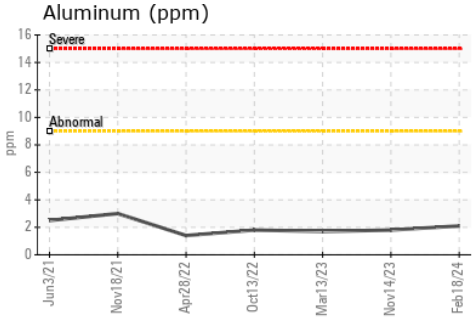
Iron (ppm)



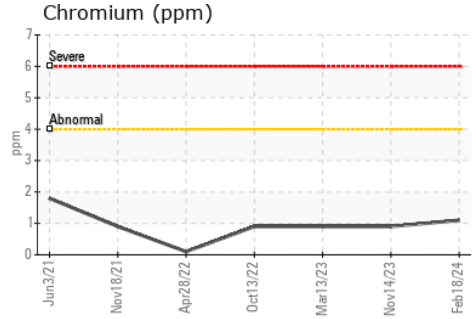
Lead (ppm)



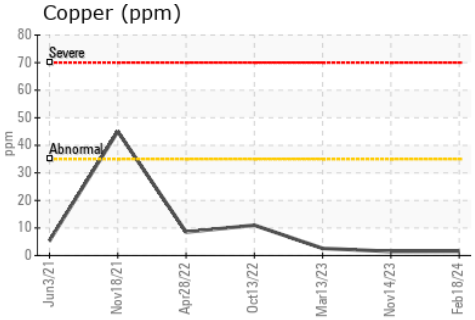
Aluminum (ppm)



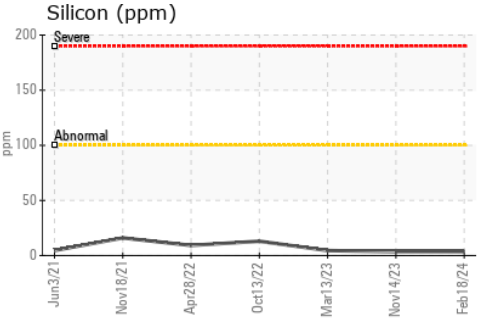
Chromium (ppm)



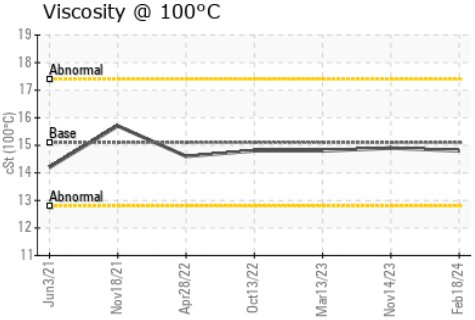
Copper (ppm)



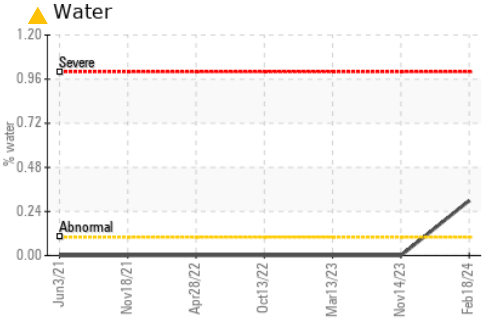
Silicon (ppm)



Viscosity @ 100°C



Water



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0102601
Lab Number : 02617611
Unique Number : 5734721
Test Package : MOB 1 (Additional Tests: Glycol, KF)

Received : 23 Feb 2024
Tested : 27 Feb 2024
Diagnosed : 27 Feb 2024 - Kevin Marson

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

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