



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
9165
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (24 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0094424	GFL0094382	GFL0063924
Sample Date		Client Info		17 Apr 2024	30 Nov 2023	03 Feb 2023
Machine Age	hrs	Client Info		21855	21099	14710
Oil Age	hrs	Client Info		21855	1200	14710
Filter Age	hrs	Client Info		21855	1200	14710
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	27	19	29
Chromium	ppm	ASTM D5185(m)	>4	1	1	2
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	4	3	7
Lead	ppm	ASTM D5185(m)	>30	0	1	9
Copper	ppm	ASTM D5185(m)	>35	3	4	10
Tin	ppm	ASTM D5185(m)	>4	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

There is no indication of any contamination in the oil.

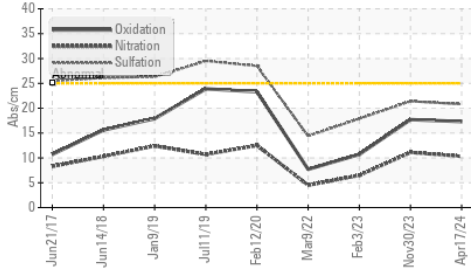
Silicon	ppm	ASTM D5185(m)	>+100	3	4	5
Potassium	ppm	ASTM D5185(m)	>20	0	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	10.3	11.1	6.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.8	21.4	17.9
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

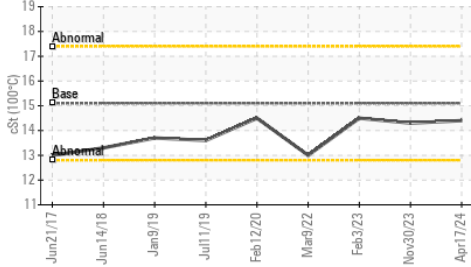
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		5	3	6
Boron	ppm	ASTM D5185(m)	50	10	9	8
Barium	ppm	ASTM D5185(m)	5	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	50	53	57
Manganese	ppm	ASTM D5185(m)	0	<1	0	<1
Magnesium	ppm	ASTM D5185(m)	560	514	519	571
Calcium	ppm	ASTM D5185(m)	1510	1456	1506	1650
Phosphorus	ppm	ASTM D5185(m)	780	651	665	821
Zinc	ppm	ASTM D5185(m)	870	875	882	948
Sulfur	ppm	ASTM D5185(m)	2040	1915	1941	2084
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.3	17.7	10.7
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	14.4	14.3	14.5

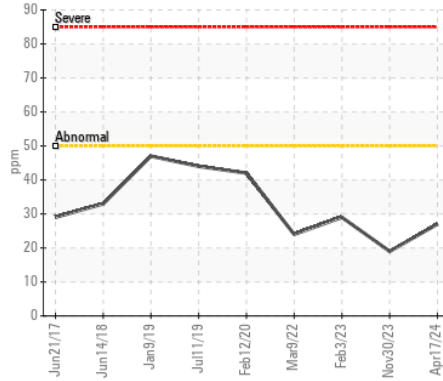
FT-IR (Direct Trend)



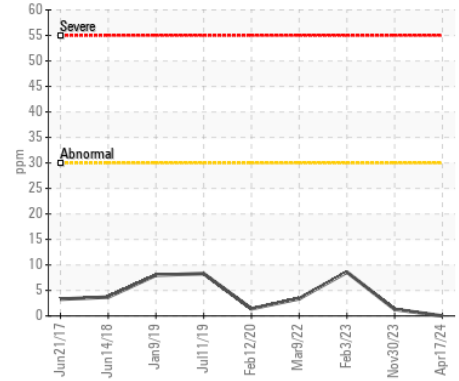
Viscosity @ 100°C



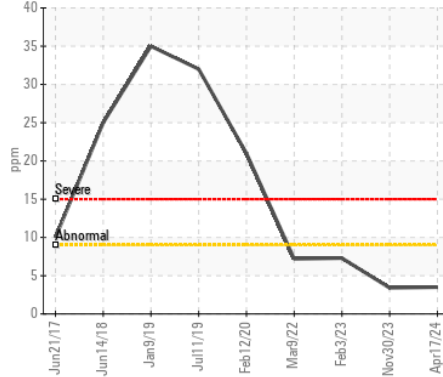
Iron (ppm)



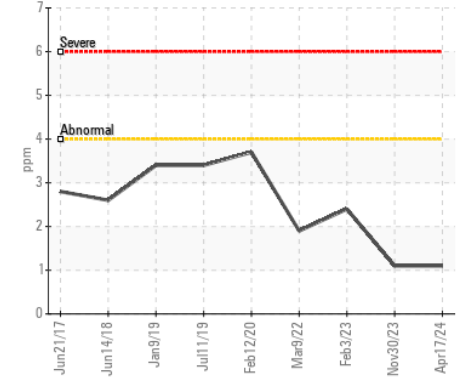
Lead (ppm)



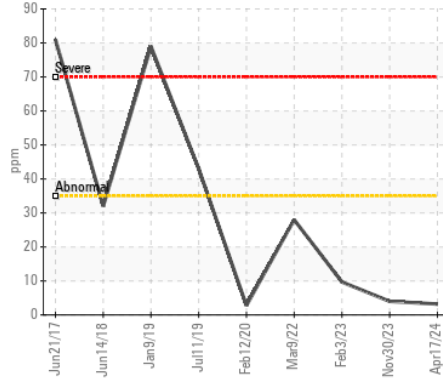
Aluminum (ppm)



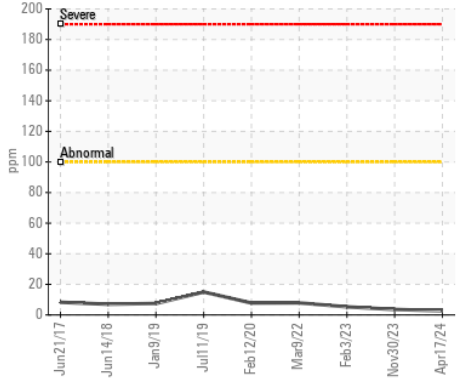
Chromium (ppm)



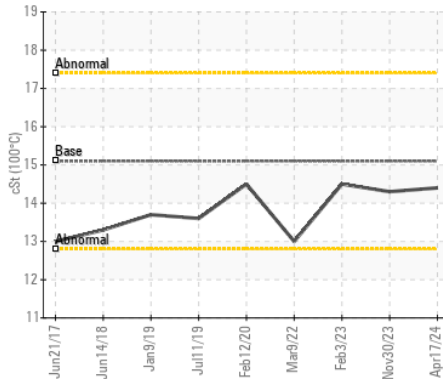
Copper (ppm)



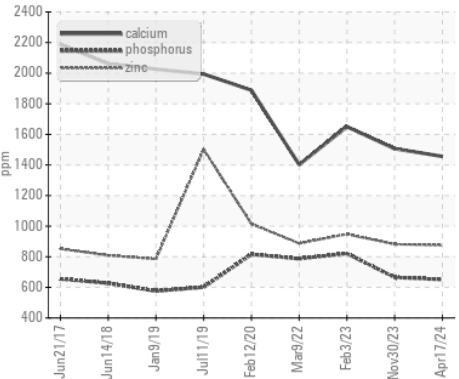
Silicon (ppm)



Viscosity @ 100°C



Additives



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : GFL0094424

Lab Number : 02629917

Unique Number : 5763049

Test Package : MOB 1

Received : 18 Apr 2024

Tested : 18 Apr 2024

Diagnosed : 18 Apr 2024 - Wes Davis

GFL Environmental - 222 - Sandhill

SANDHILL DISPOSAL & RECYCLING DIVIS, 19 COMMERCE ROAD

ORANGEVILLE, ON

CA L9W 3X5

Contact: GLENN COOK

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F:

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.