



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
DR167
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP 5W40 (40 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0089306	PC0078476	PC0082052
Sample Date		Client Info		10 May 2024	18 Mar 2024	30 Jan 2024
Machine Age	hrs	Client Info		15100	14829	14627
Oil Age	hrs	Client Info		0	0	250
Filter Age	hrs	Client Info		0	0	250
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	26	17	6
Chromium	ppm	ASTM D5185(m)	>20	<1	0	0
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	1	1
Lead	ppm	ASTM D5185(m)	>40	0	0	<1
Copper	ppm	ASTM D5185(m)	>330	3	2	1
Tin	ppm	ASTM D5185(m)	>15	<1	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

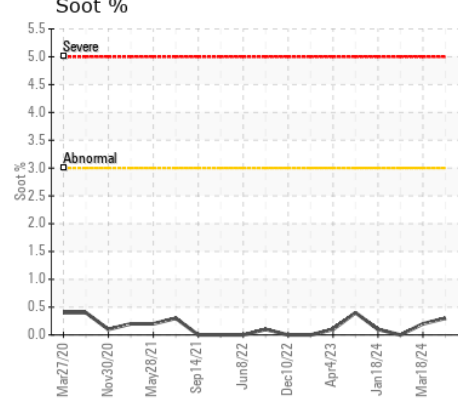
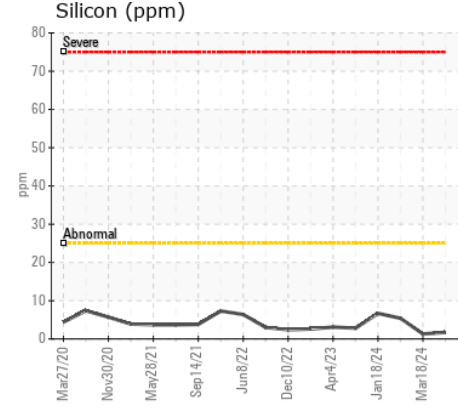
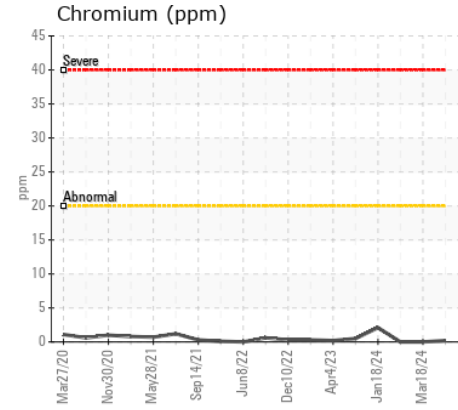
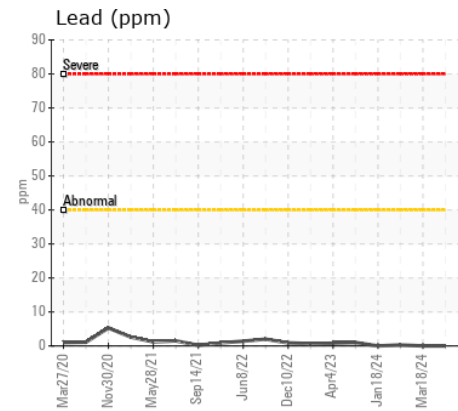
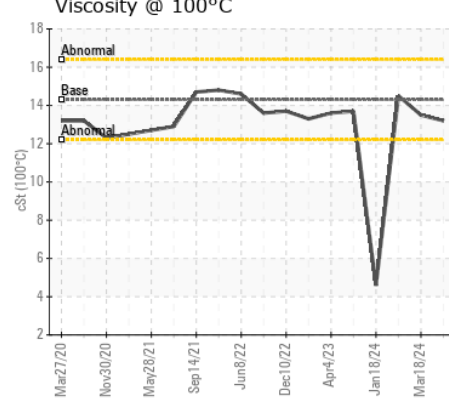
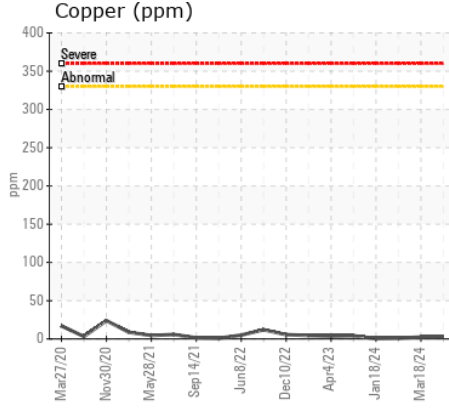
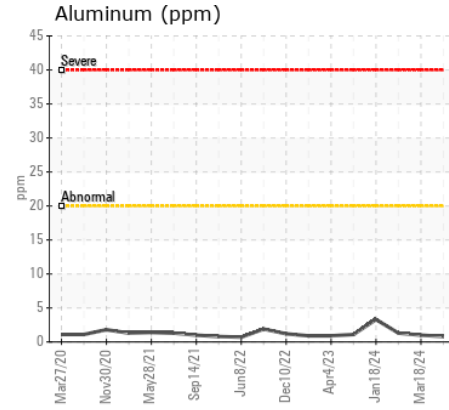
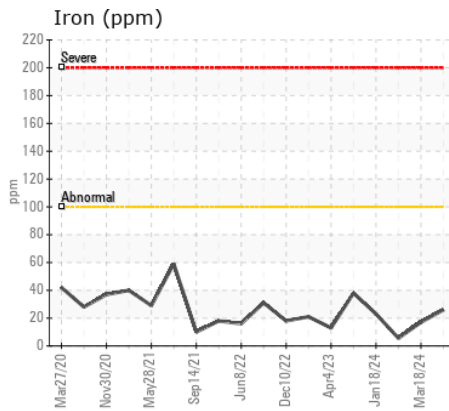
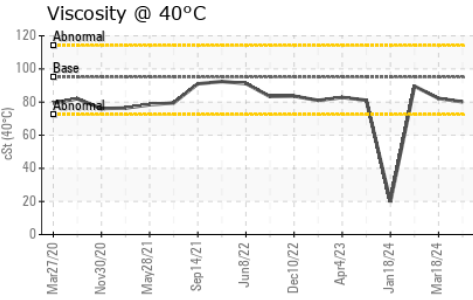
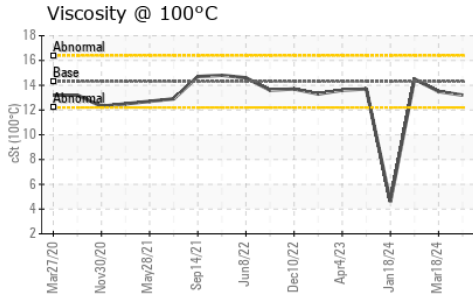
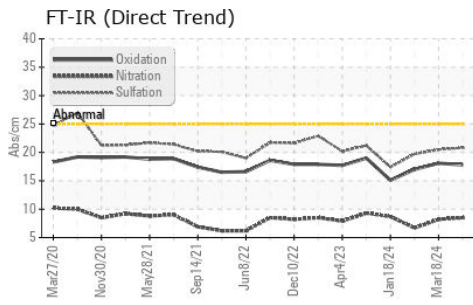
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	1	5
Potassium	ppm	ASTM D5185(m)	>20	0	0	<1
Fuel		WC Method	>5	<1.0	<1.0	1
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.3	0.2	0
Nitration	Abs/cm	ASTM D7624*	>20	8.5	8.2	6.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.8	20.5	19.7
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		3	3	3
Boron	ppm	ASTM D5185(m)	65	38	48	57
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	52	54	54
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	1160	1022	1071	1058
Calcium	ppm	ASTM D5185(m)	820	788	800	780
Phosphorus	ppm	ASTM D5185(m)	1160	940	959	987
Zinc	ppm	ASTM D5185(m)	1260	1097	1147	1111
Sulfur	ppm	ASTM D5185(m)	3000	2557	2653	2861
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.8	18.1	17.0
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	80.1	82.2	89.6
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	13.2	13.5	14.5
Viscosity Index (VI)	Scale	ASTM D2270*	169	167	167	168



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0089306
Lab Number : 02636336
Unique Number : 5785498
Test Package : MOB 1 (Additional Tests: KV40, VI)
Received : 17 May 2024
Tested : 17 May 2024
Diagnosed : 17 May 2024 - Wes Davis

Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations
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 CA L4A 2G8
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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.