



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
DR176
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP 5W40 (42 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0078302	PC0082671	PC0082039
Sample Date		Client Info		12 Feb 2024	12 Jan 2024	19 Nov 2023
Machine Age	hrs	Client Info		9709	5541	9661
Oil Age	hrs	Client Info		0	500	250
Filter Age	hrs	Client Info		0	500	250
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	10	6	34
Chromium	ppm	ASTM D5185(m)	>20	0	0	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	2	3
Lead	ppm	ASTM D5185(m)	>40	<1	<1	2
Copper	ppm	ASTM D5185(m)	>330	1	<1	4
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

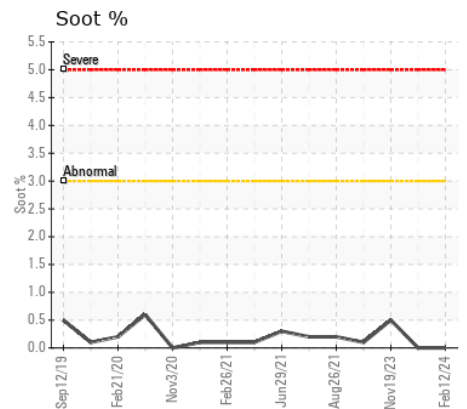
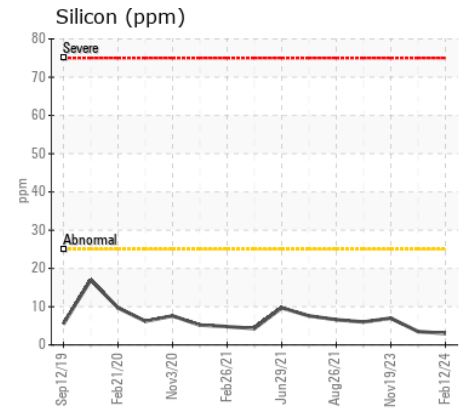
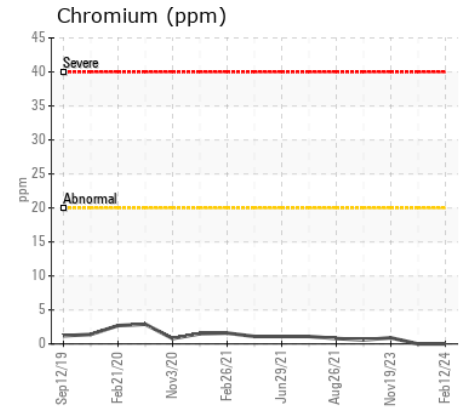
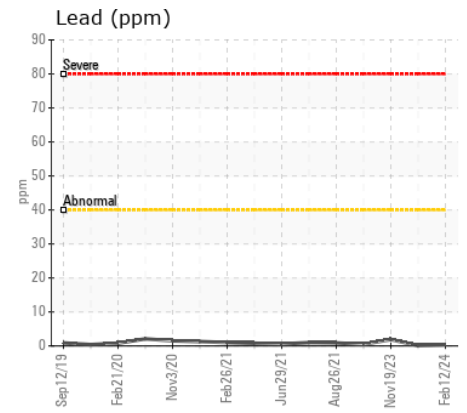
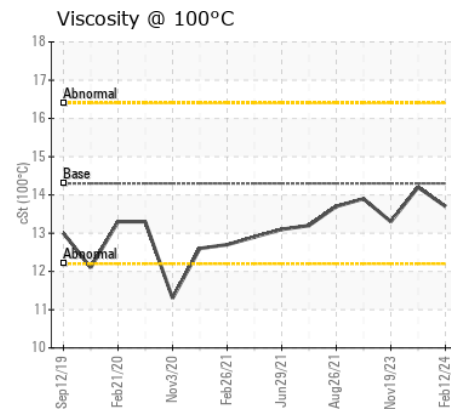
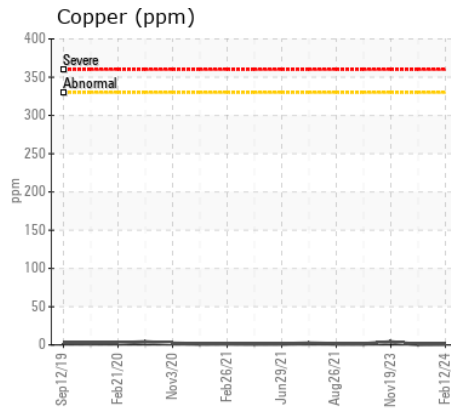
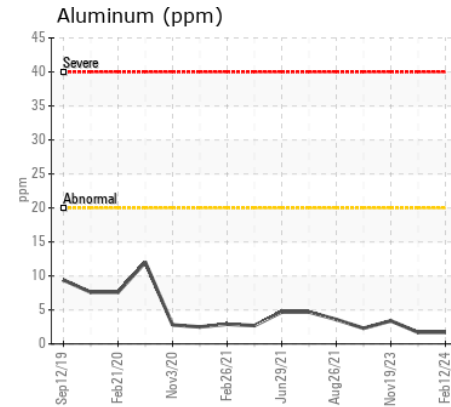
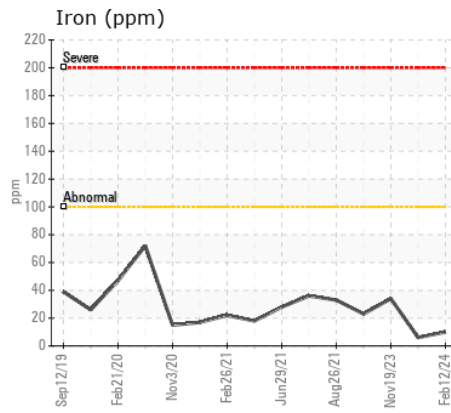
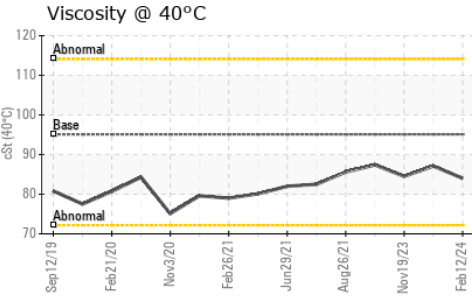
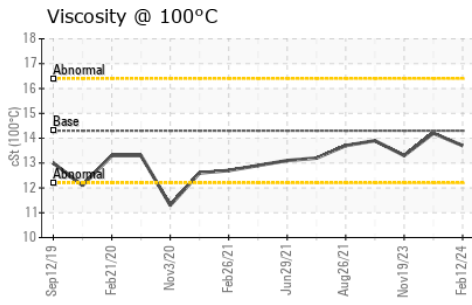
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	4	7
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	3
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	0.0
Soot %	%	ASTM D7844*	>3	0	0	0.5
Nitration	Abs/cm	ASTM D7624*	>20	8.9	7.7	12.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.6	20.3	24.2
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)		27	20	▲ 231
Boron	ppm	ASTM D5185(m)	65	44	51	16
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	59	58	96
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	1160	1091	1082	1117
Calcium	ppm	ASTM D5185(m)	820	825	815	847
Phosphorus	ppm	ASTM D5185(m)	1160	1022	1011	1010
Zinc	ppm	ASTM D5185(m)	1260	1173	1162	1227
Sulfur	ppm	ASTM D5185(m)	3000	2949	2990	2866
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.2	18.3	22.2
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	84.0	87.1	84.5
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	13.7	14.2	13.3
Viscosity Index (VI)	Scale	ASTM D2270*	169	167	168	159



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0078302
Lab Number : 02617407
Unique Number : 5734517
Test Package : MOB 1 (Additional Tests: KV40, VI)

Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations
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 Stouffville, ON
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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.