

Machine Id
OR638
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP 5W40 (30 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0078486	PC0082672	PC0078048
Sample Date		Client Info		16 Apr 2024	12 Jan 2024	23 Sep 2023
Machine Age	hrs	Client Info		18555	18127	15581
Oil Age	hrs	Client Info		0	500	500
Filter Age	hrs	Client Info		0	500	500
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)	>100	7	8	4
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<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	0	0
Aluminum	ppm	ASTM D5185(m)	>20	1	1	1
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
Copper	ppm	ASTM D5185(m)	>330	2	2	2
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

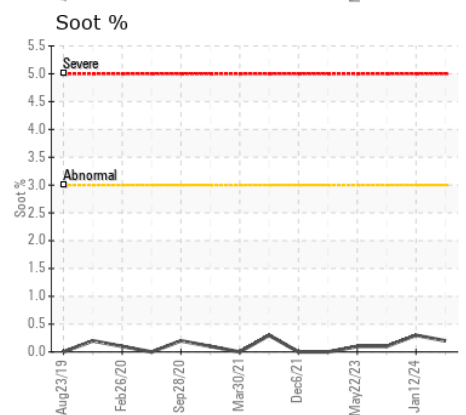
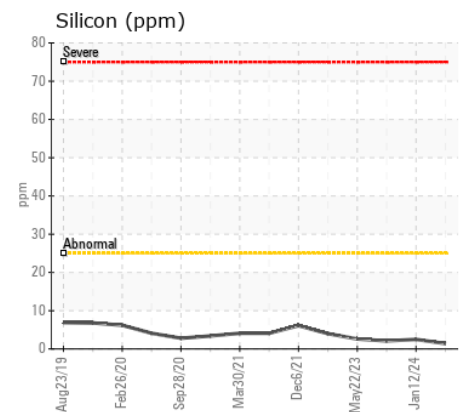
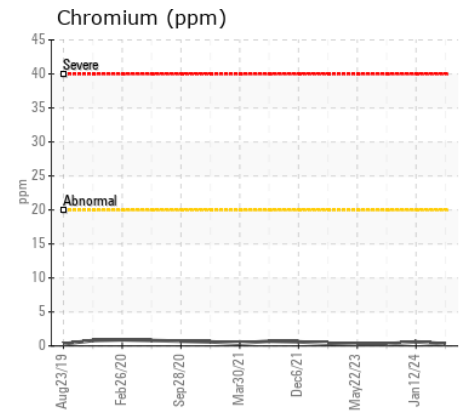
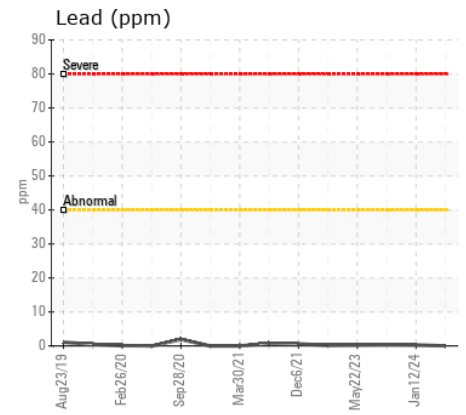
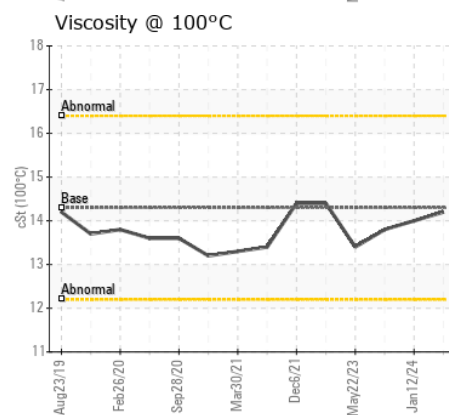
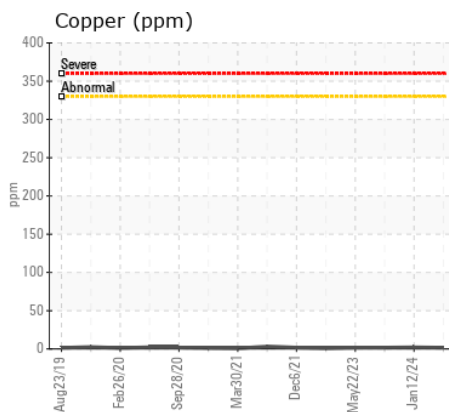
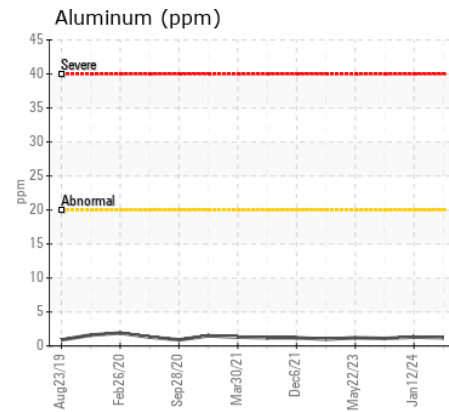
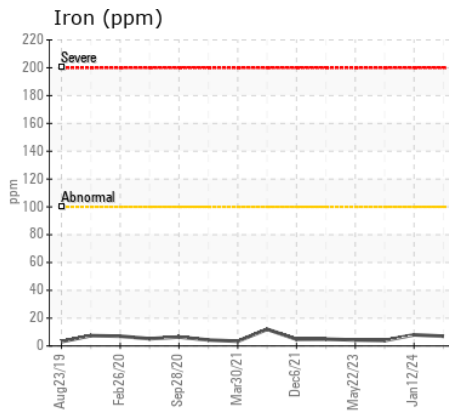
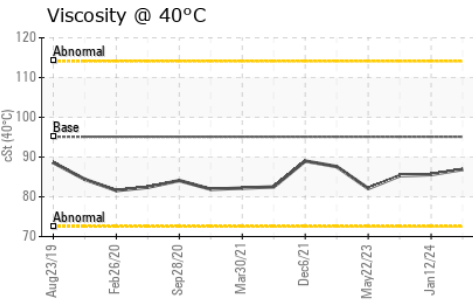
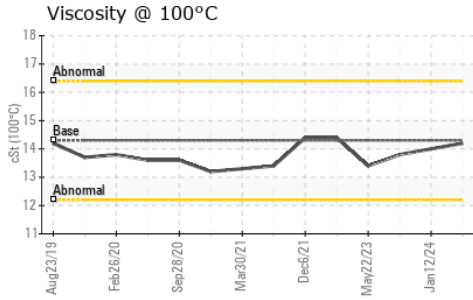
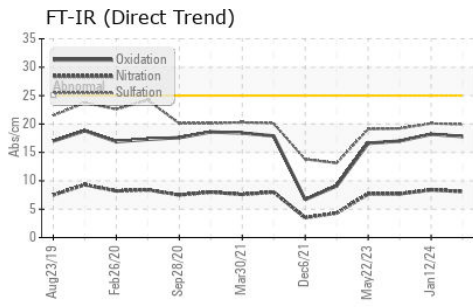
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	1	2	2
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.2	0.3	0.1
Nitration	Abs/cm	ASTM D7624*	>20	8.1	8.4	7.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.9	20.1	19.2
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)		4	5	6
Boron	ppm	ASTM D5185(m)	65	51	43	32
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	55	55	50
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	1160	1081	1067	1014
Calcium	ppm	ASTM D5185(m)	820	783	813	792
Phosphorus	ppm	ASTM D5185(m)	1160	978	1011	961
Zinc	ppm	ASTM D5185(m)	1260	1143	1154	1127
Sulfur	ppm	ASTM D5185(m)	3000	2686	2964	2751
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.8	18.2	17.0
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	86.9	85.6	85.3
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	14.2	14.0	13.8
Viscosity Index (VI)	Scale	ASTM D2270*	169	169	168	166



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0078486
Lab Number : 02630916
Unique Number : 5772069
Test Package : MOB 1 (Additional Tests: KV40, VI)

Received : 23 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 23 Apr 2024 - Wes Davis

Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations
 151 Ram Forest Rd,
 Stouffville, ON
 CA L4A 2G8
 Contact: Shannon Abbott
 sabbott@gipi.com
 T: (905)750-5900
 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.