



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
OR643
Component
Diesel Engine
Fluid
PETRO CANADA SUPREME SYNTHETIC 5W40 (24 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0088283	PC0072947	PC0064409
Sample Date		Client Info		23 May 2024	24 Mar 2023	23 Jun 2022
Machine Age	hrs	Client Info		9779	8860	8431
Oil Age	hrs	Client Info		0	500	400
Filter Age	hrs	Client Info		0	500	400
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)	>51	24	46	42
Chromium	ppm	ASTM D5185(m)	>11	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>31	1	3	3
Lead	ppm	ASTM D5185(m)	>26	0	<1	1
Copper	ppm	ASTM D5185(m)	>26	4	1	1
Tin	ppm	ASTM D5185(m)	>4	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

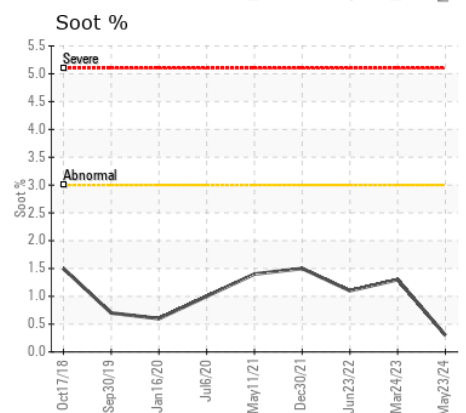
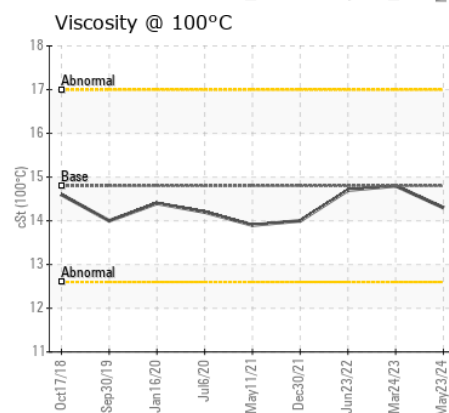
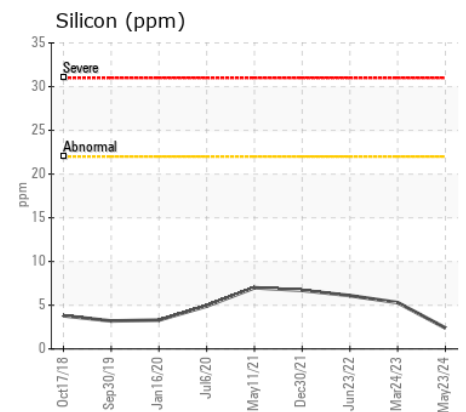
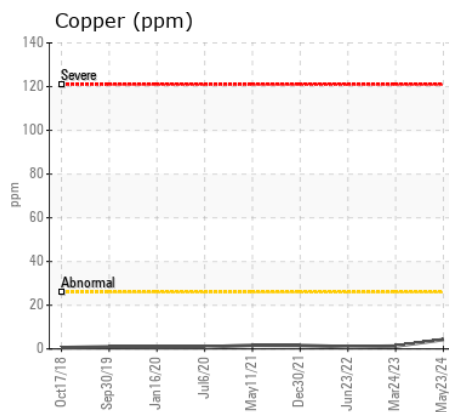
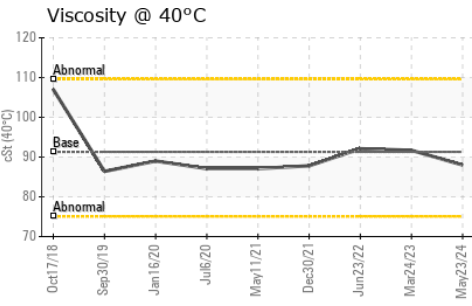
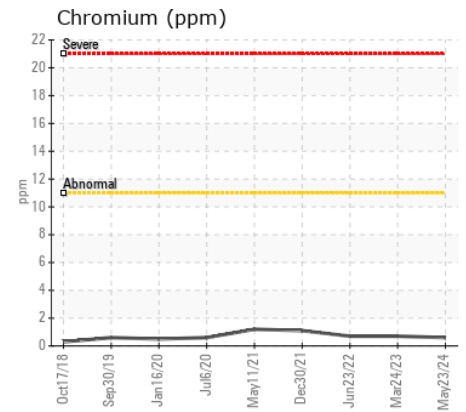
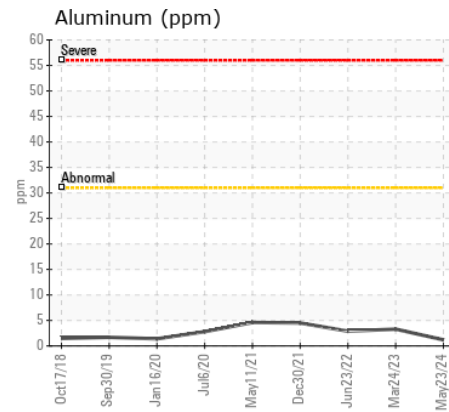
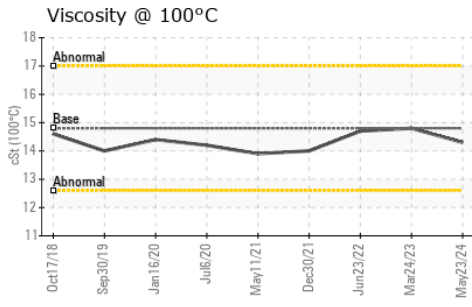
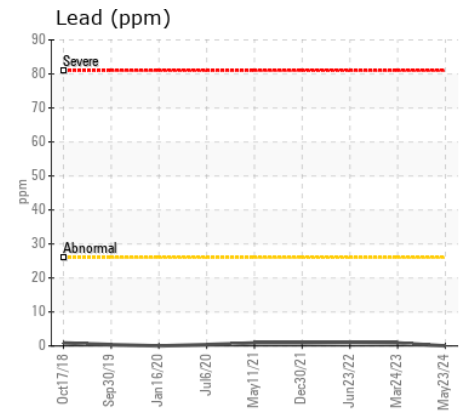
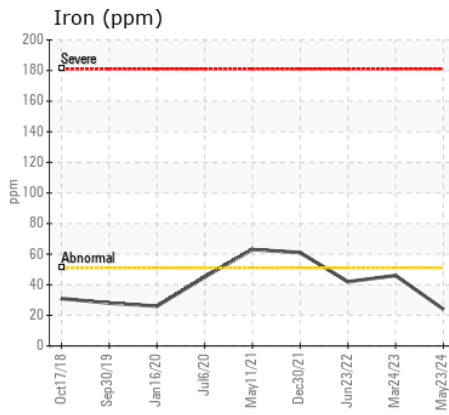
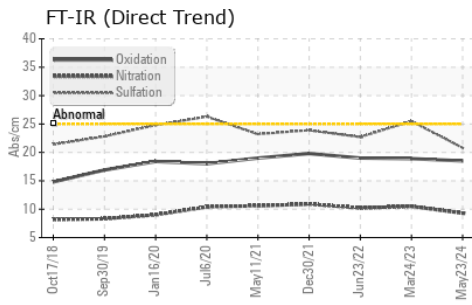
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>22	2	5	6
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.3	1.3	1.1
Nitration	Abs/cm	ASTM D7624*	>20	9.3	10.5	10.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.8	25.5	22.7
Emulsified Water	scalar	Visual*	>0.21	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>31	4	5	5
Boron	ppm	ASTM D5185(m)	190	39	39	43
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	79	54	62	60
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	564	1057	1103	1114
Calcium	ppm	ASTM D5185(m)	993	805	891	848
Phosphorus	ppm	ASTM D5185(m)	763	982	1076	1023
Zinc	ppm	ASTM D5185(m)	835	1147	1186	1211
Sulfur	ppm	ASTM D5185(m)	2536	2613	2790	2859
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.5	18.9	19.0
Visc @ 40°C	cSt	ASTM D7279(m)	91.3	88.0	91.7	92.1
Visc @ 100°C	cSt	ASTM D7279(m)	14.8	14.3	14.8	14.7
Viscosity Index (VI)	Scale	ASTM D2270*	170	168	169	166



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0088283
Lab Number : 02637901
Unique Number : 5787063
Test Package : MOB 1 (Additional Tests: KV40, VI)
Received : 28 May 2024
Tested : 28 May 2024
Diagnosed : 28 May 2024 - Wes Davis

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