



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
DR148
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		PC0078017	PC0078076	PC0075309
Sample Date		Client Info		12 Dec 2023	26 Jun 2023	02 Jun 2023
Machine Age	hrs	Client Info		7163	0	10238
Oil Age	hrs	Client Info		250	0	300
Filter Age	hrs	Client Info		250	0	300
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	18	8	12
Chromium	ppm	ASTM D5185(m)	>20	2	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	0	0
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	1	2
Lead	ppm	ASTM D5185(m)	>40	3	<1	<1
Copper	ppm	ASTM D5185(m)	>330	2	2	3
Tin	ppm	ASTM D5185(m)	>15	<1	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

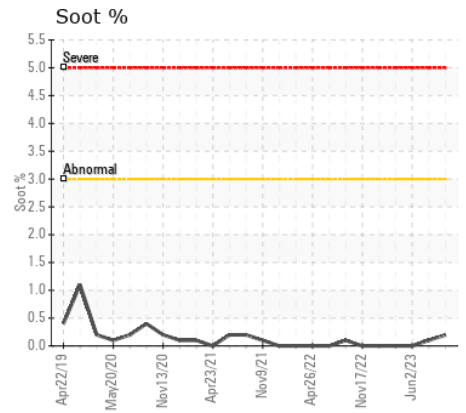
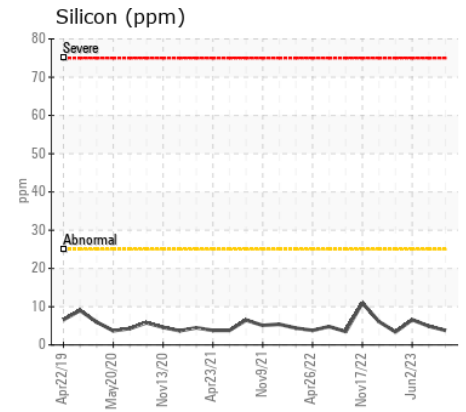
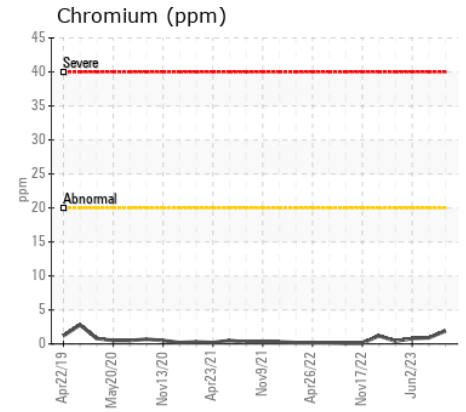
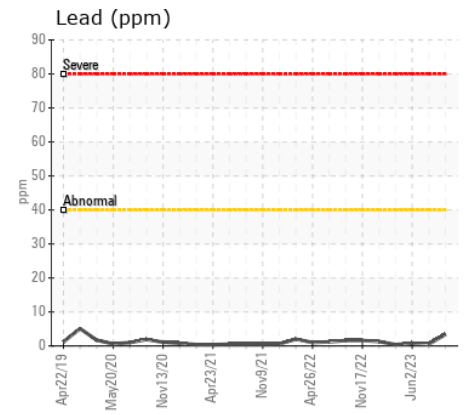
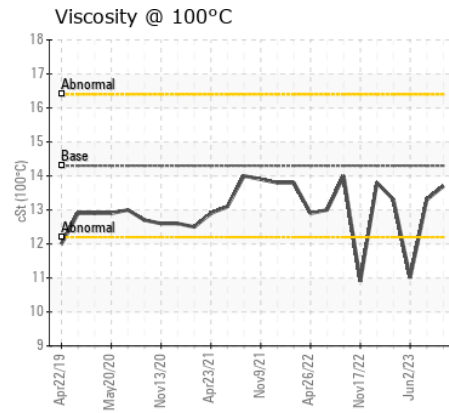
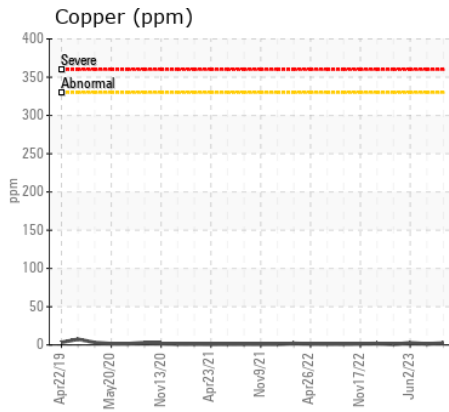
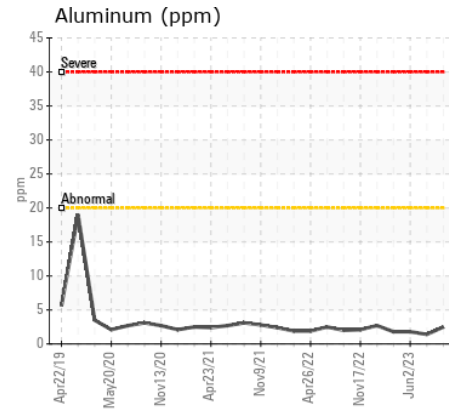
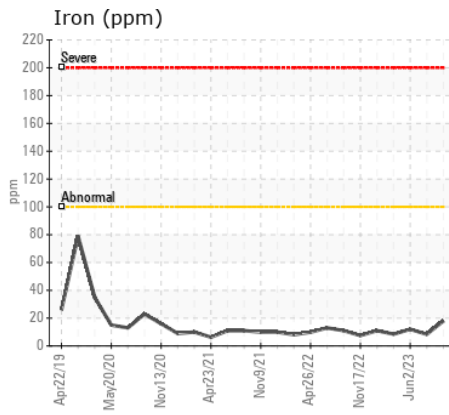
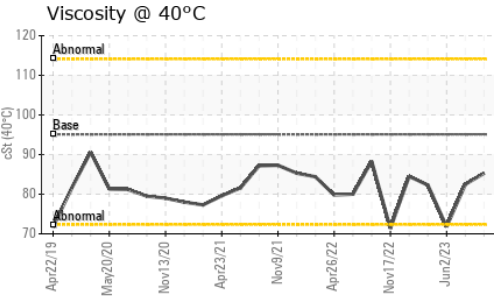
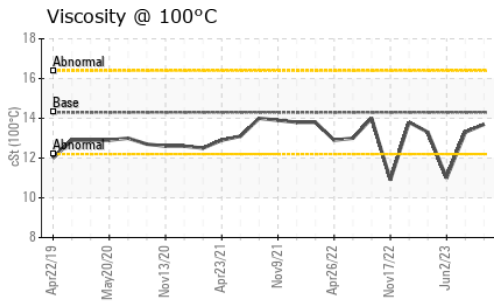
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	5	7
Potassium	ppm	ASTM D5185(m)	>20	3	2	6
Fuel		WC Method	>5	<1.0	<1.0	1.5
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.2	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	11.4	8.6	6.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.7	21.2	22.2
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)		5	4	6
Boron	ppm	ASTM D5185(m)	65	26	32	48
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	57	53	41
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1160	1089	1017	515
Calcium	ppm	ASTM D5185(m)	820	831	889	1646
Phosphorus	ppm	ASTM D5185(m)	1160	996	1033	964
Zinc	ppm	ASTM D5185(m)	1260	1193	1124	1070
Sulfur	ppm	ASTM D5185(m)	3000	2782	2680	2465
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.9	19.2	20.0
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	85.3	82.5	▲ 71.8
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	13.7	13.3	▲ 11.0
Viscosity Index (VI)	Scale	ASTM D2270*	169	164	163	143



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations
Sample No. : PC0078017 **Received** : 10 Jan 2024 151 Ram Forest Rd,
Lab Number : 02607736 **Diagnosed** : 11 Jan 2024 Stouffville, ON
Unique Number : 5708822 **Diagnostician** : Wes Davis CA L4A 2G8
Test Package : MOB 1 (Additional Tests: KV40, VI)
 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.