

Machine Id
14
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP 5W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0045329	PC0061324	PC0053989
Sample Date		Client Info		12 Feb 2024	05 Dec 2022	11 Jan 2022
Machine Age	hrs	Client Info		4970	4727	4461
Oil Age	hrs	Client Info		500	250	280
Filter Age	hrs	Client Info		500	250	280
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	50	34	55
Chromium	ppm	ASTM D5185(m)	>20	1	<1	1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	5	4	4
Lead	ppm	ASTM D5185(m)	>40	20	6	18
Copper	ppm	ASTM D5185(m)	>330	2	2	4
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

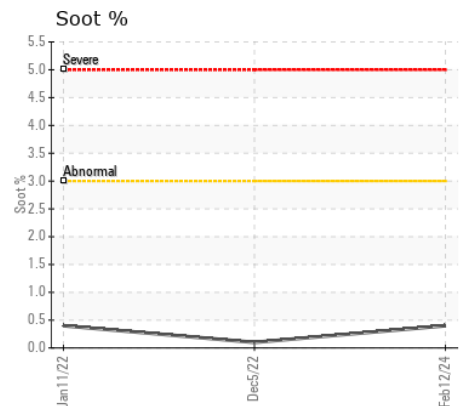
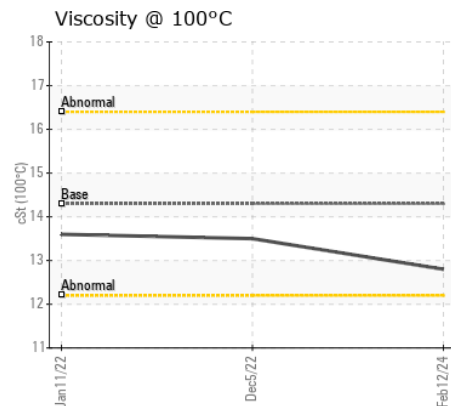
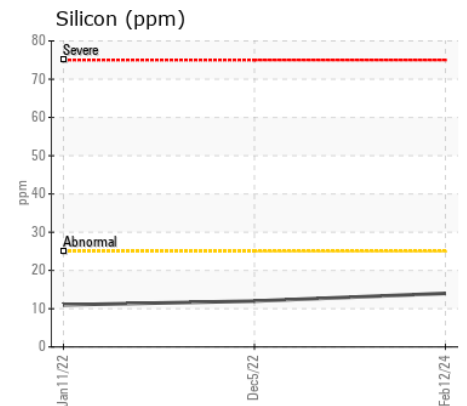
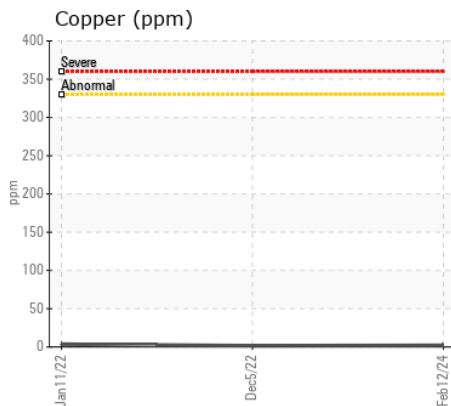
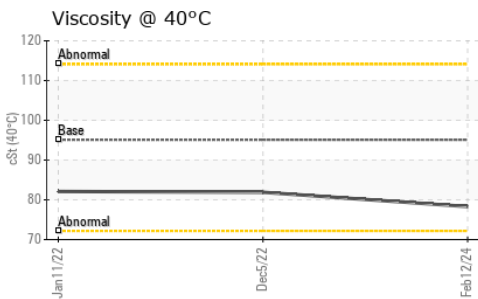
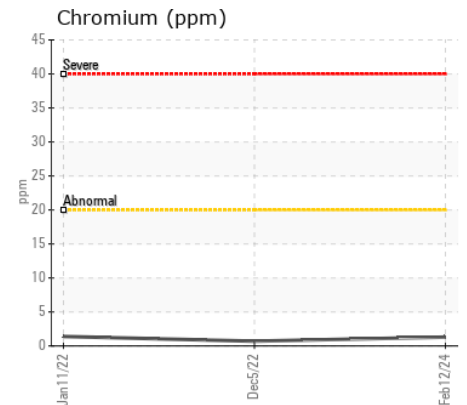
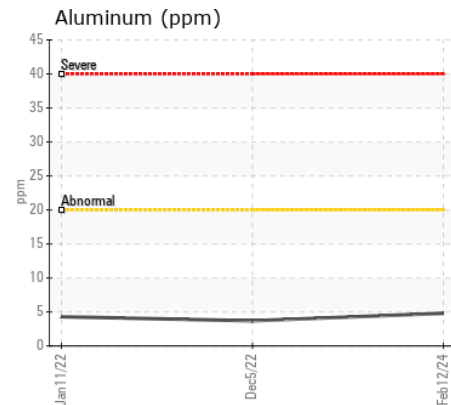
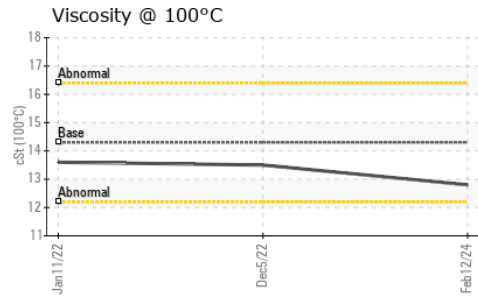
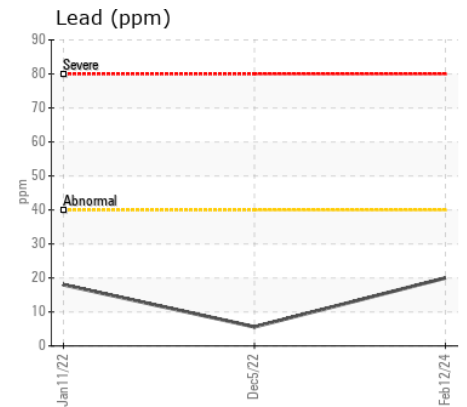
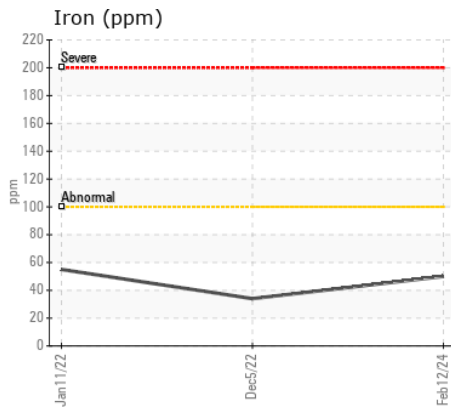
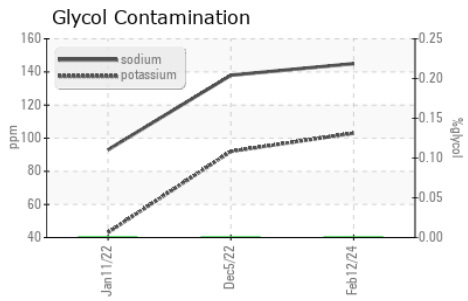
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	14	12	11
Potassium	ppm	ASTM D5185(m)	>20	103	92	43
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	0.0	0.0
Soot %	%	ASTM D7844*	>3	0.4	0.1	0.4
Nitration	Abs/cm	ASTM D7624*	>20	11.5	10.3	10.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.4	22.7	23.4
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)		145	138	93
Boron	ppm	ASTM D5185(m)	65	20	24	12
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	65	56	54	22
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1160	946	946	343
Calcium	ppm	ASTM D5185(m)	820	994	1078	1803
Phosphorus	ppm	ASTM D5185(m)	1160	954	1042	935
Zinc	ppm	ASTM D5185(m)	1260	1116	1183	1088
Sulfur	ppm	ASTM D5185(m)	3000	2705	2786	2828
Oxidation	Abs/.1mm	ASTM D7414*	>25	23.2	20.3	18.3
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	78.3	81.9	82.1
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	12.8	13.5	13.6
Viscosity Index (VI)	Scale	ASTM D2270*	169	163	168	169



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0045329 **Received** : 21 Feb 2024
Lab Number : 02616991 **Tested** : 22 Feb 2024
Unique Number : 5734101 **Diagnosed** : 22 Feb 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol, KV40, VI)

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.

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