

Machine Id
1627
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (24 LTR)

RECOMMENDATION

Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0082766	PC0077862	PC0032182
Sample Date		Client Info		04 Apr 2024	28 Nov 2023	26 Sep 2023
Machine Age	kms	Client Info		536217	518409	506125
Oil Age	kms	Client Info		14325	12284	13394
Filter Age	kms	Client Info		14325	12284	13394
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	37	25	33
Chromium	ppm	ASTM D5185(m)	>20	2	2	2
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	3	6
Lead	ppm	ASTM D5185(m)	>40	3	4	1
Copper	ppm	ASTM D5185(m)	>330	154	113	2
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

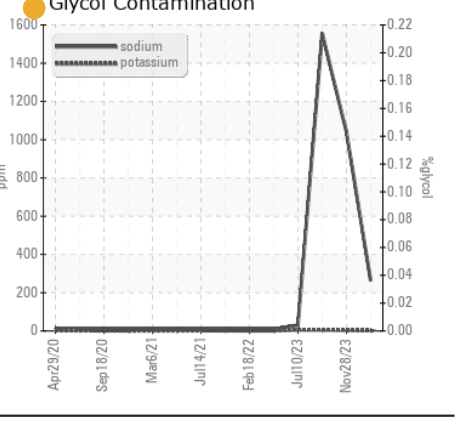
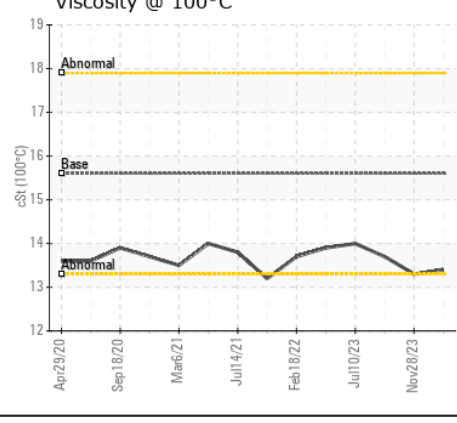
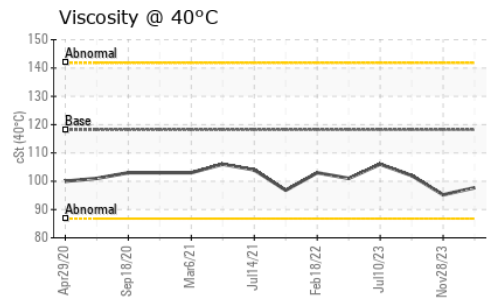
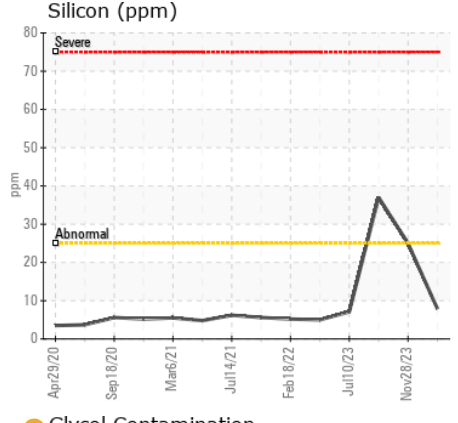
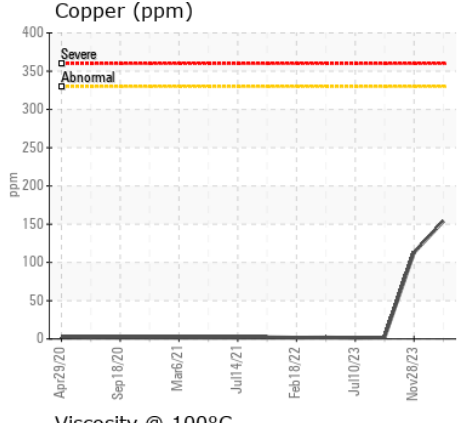
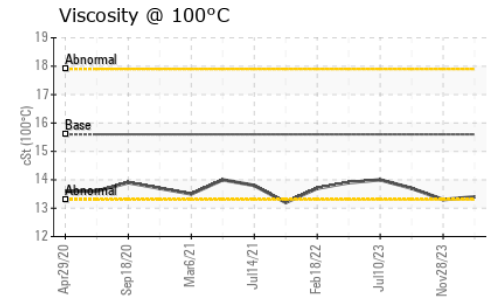
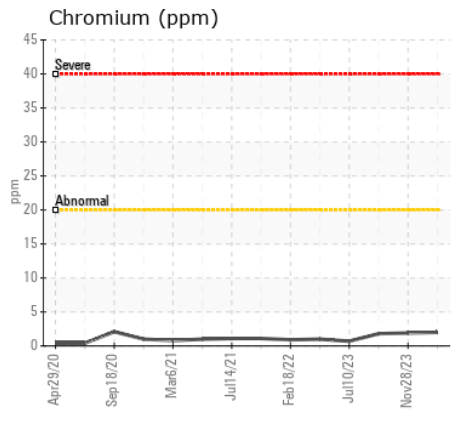
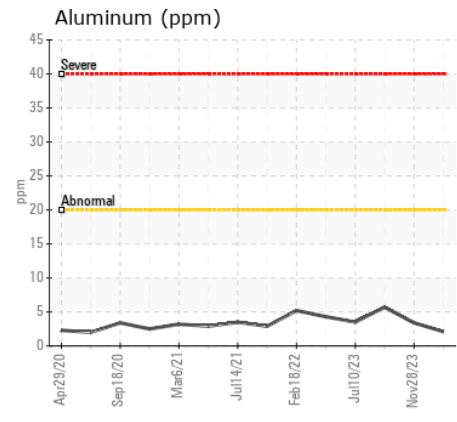
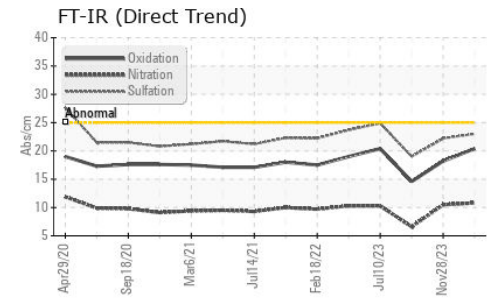
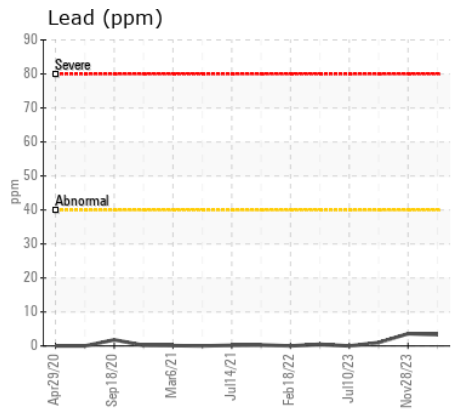
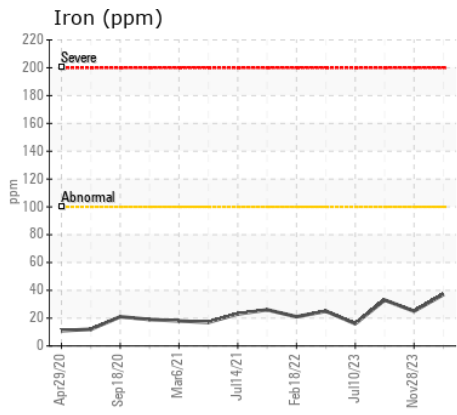
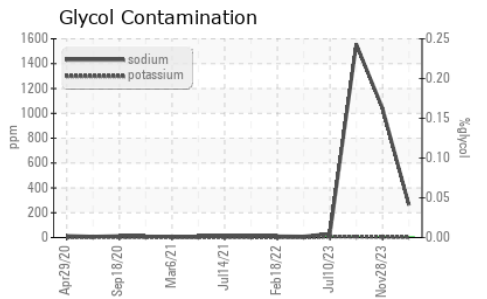
Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	8	▲ 25	▲ 37
Potassium	ppm	ASTM D5185(m)	>20	1	4	7
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	0.6	0.3	0.1
Nitration	Abs/cm	ASTM D7624*	>20	10.8	10.5	6.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.0	22.2	19.0
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service (see recommendation).

Sodium	ppm	ASTM D5185(m)		● 262	● 1040	● 1556
Boron	ppm	ASTM D5185(m)	0	4	22	25
Barium	ppm	ASTM D5185(m)	0	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)	60	68	95	107
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	1010	994	925	735
Calcium	ppm	ASTM D5185(m)	1070	1099	1061	1339
Phosphorus	ppm	ASTM D5185(m)	1150	923	938	879
Zinc	ppm	ASTM D5185(m)	1270	1193	1183	1188
Sulfur	ppm	ASTM D5185(m)	2060	2015	2382	2655
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.4	18.2	14.6
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	97.7	95.2	102
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	13.4	13.3	13.7
Viscosity Index (VI)	Scale	ASTM D2270*	139	136	139	134



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0082766 **Received** : 15 Apr 2024
Lab Number : 02628786 **Tested** : 16 Apr 2024
Unique Number : 5761918 **Diagnosed** : 17 Apr 2024 - Kevin Marson
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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