



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
20-58
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP 5W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

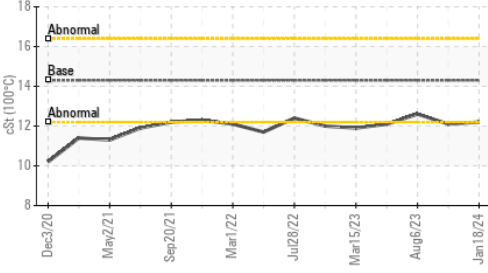
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

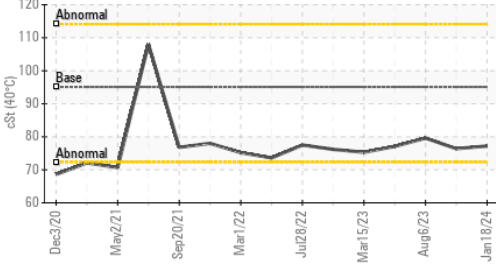
Viscosity of sample indicates oil is within SAE 10W30 range, advise investigate. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0081768	PC0081734	PC0066975
Sample Date		Client Info		18 Jan 2024	25 Oct 2023	06 Aug 2023
Machine Age	kms	Client Info		640717	598928	560000
Oil Age	kms	Client Info		41539	41928	40000
Filter Age	kms	Client Info		41539	41928	40000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
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Iron	ppm	ASTM D5185(m)	>200	17	12	14
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>30	2	2	2
Lead	ppm	ASTM D5185(m)	>30	0	<1	0
Copper	ppm	ASTM D5185(m)	>30	6	5	6
Tin	ppm	ASTM D5185(m)	>15	<1	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
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Silicon	ppm	ASTM D5185(m)	>30	3	4	3
Potassium	ppm	ASTM D5185(m)	>20	1	<1	9
Fuel	%	ASTM D7593*	>3.0	0.4	0.5	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	0.0
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	10.5	10.2	10.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.2	23.4	24.3
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
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Sodium	ppm	ASTM D5185(m)		4	5	8
Boron	ppm	ASTM D5185(m)	65	20	19	19
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	65	60	60	61
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1160	1188	1173	1202
Calcium	ppm	ASTM D5185(m)	820	902	892	930
Phosphorus	ppm	ASTM D5185(m)	1160	1035	1009	1125
Zinc	ppm	ASTM D5185(m)	1260	1253	1264	1282
Sulfur	ppm	ASTM D5185(m)	3000	2695	2535	2671
Oxidation	Abs/.1mm	ASTM D7414*	>25	25.6	24.0	23.3
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	▲ 77.2	76.4	79.6
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	▲ 12.2	12.1	12.6
Viscosity Index (VI)	Scale	ASTM D2270*	169	154	154	157

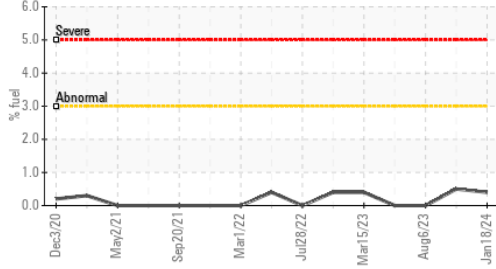
▲ Viscosity @ 100°C



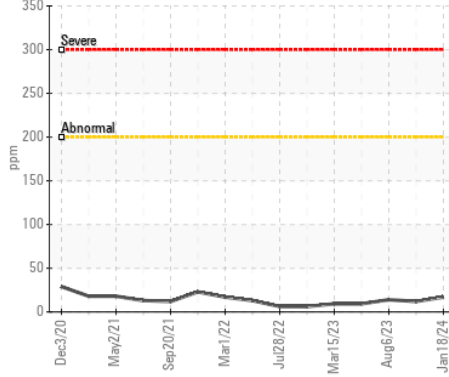
▲ Viscosity @ 40°C



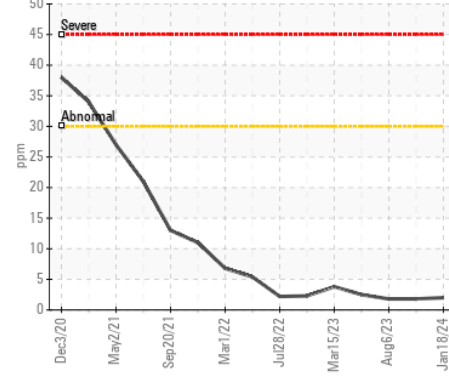
Fuel Dilution



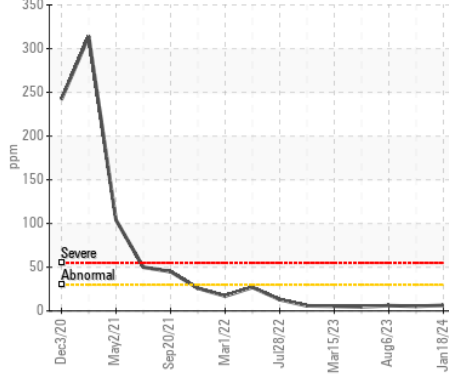
Iron (ppm)



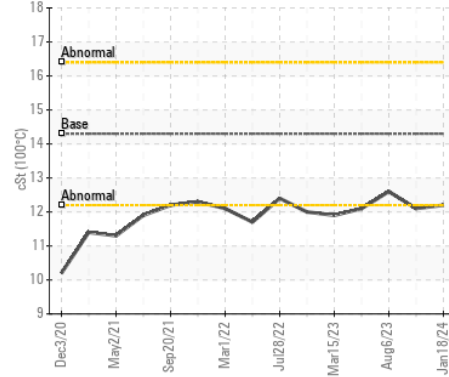
Aluminum (ppm)



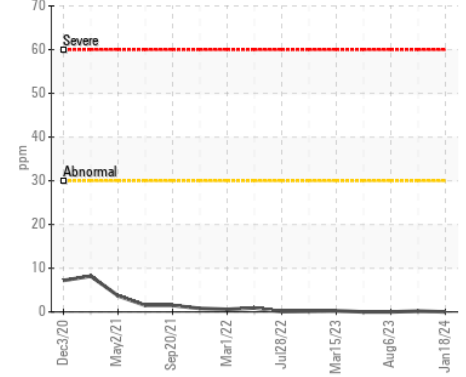
Copper (ppm)



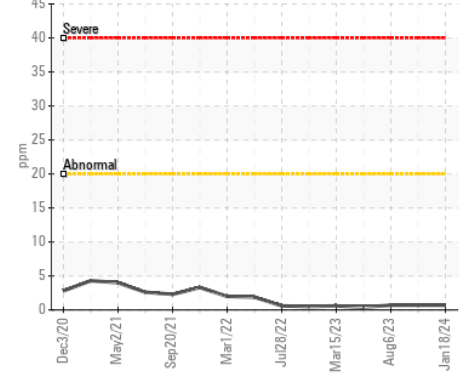
▲ Viscosity @ 100°C



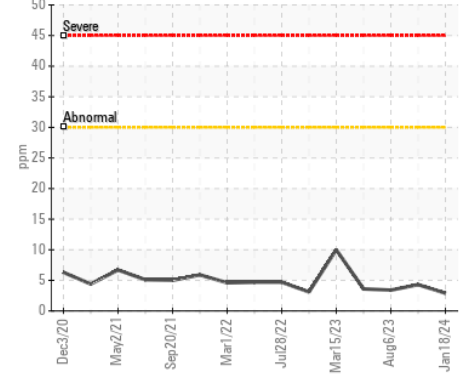
Lead (ppm)



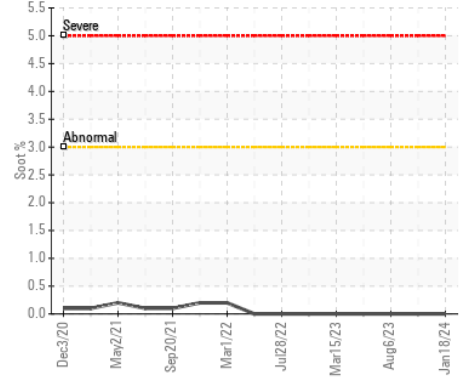
Chromium (ppm)



Silicon (ppm)



Soot %



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0081768
Lab Number : 02610136
Unique Number : 5711222
Test Package : MOB 1 (Additional Tests: FUELDILUTION, KV40, PercentFuel, VI)

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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.