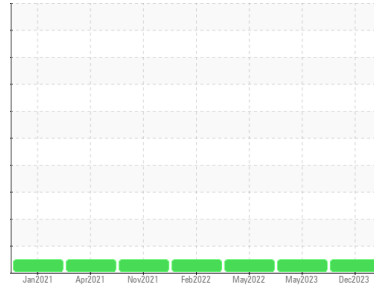


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
1833

Component
Rear Diesel Engine

Fluid
PETRO CANADA DURON HP 15W40 (18 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PC0080280	PC0031590	PC0018583
Sample Date	Client Info		18 Dec 2023	15 May 2023	20 May 2022
Machine Age	kms	Client Info	199909	179144	139272
Oil Age	kms	Client Info	9850	13188	10223
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	0.0	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >130	47	38	43
Chromium	ppm	ASTM D5185(m) >10	1	1	1
Nickel	ppm	ASTM D5185(m) >4	<1	<1	<1
Titanium	ppm	ASTM D5185(m) >2	0	<1	0
Silver	ppm	ASTM D5185(m) >2	<1	0	0
Aluminum	ppm	ASTM D5185(m) >20	15	20	20
Lead	ppm	ASTM D5185(m) >20	<1	0	<1
Copper	ppm	ASTM D5185(m) >125	2	1	3
Tin	ppm	ASTM D5185(m) >4	0	0	<1
Antimony	ppm	ASTM D5185(m)	0	<1	0
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	14	75	1
Barium	ppm	ASTM D5185(m) 0	<1	0	0
Molybdenum	ppm	ASTM D5185(m) 60	54	3	61
Manganese	ppm	ASTM D5185(m) 0	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	839	31	1042
Calcium	ppm	ASTM D5185(m) 1070	1485	2301	1089
Phosphorus	ppm	ASTM D5185(m) 1150	1062	1016	1114
Zinc	ppm	ASTM D5185(m) 1270	1320	1151	1286
Sulfur	ppm	ASTM D5185(m) 2060	2542	2804	2556
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

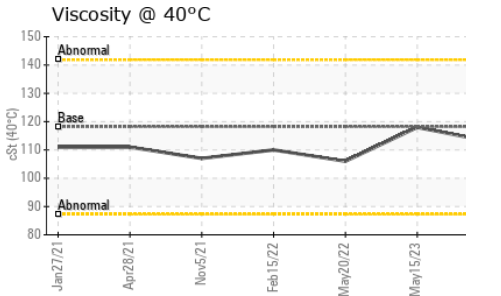
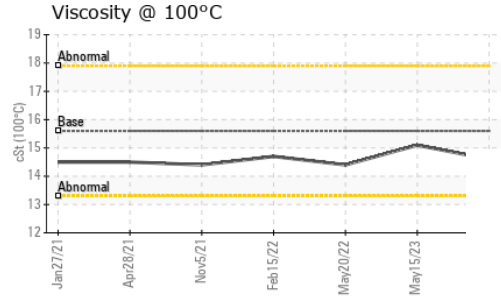
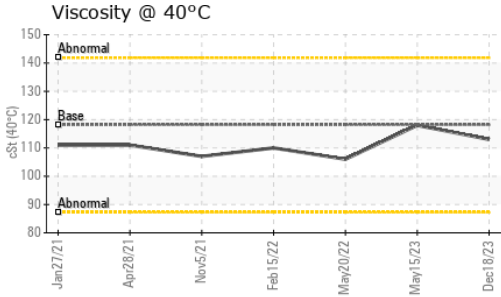
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	8	9	6
Sodium	ppm	ASTM D5185(m)	4	7	2
Potassium	ppm	ASTM D5185(m) >20	3	8	0

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >6	1	1	0.3
Nitration	Abs/cm	ASTM D7624* >20	12.9	11.9	9.7
Sulfation	Abs./1mm	ASTM D7415* >30	28.4	29.0	22.5

OIL ANALYSIS REPORT

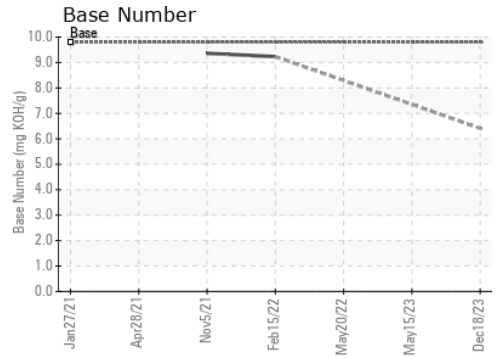
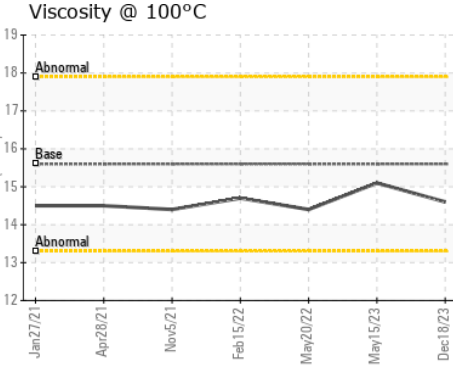
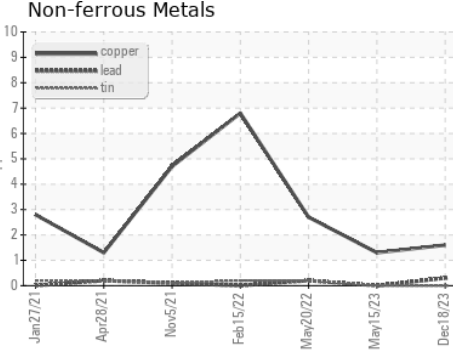
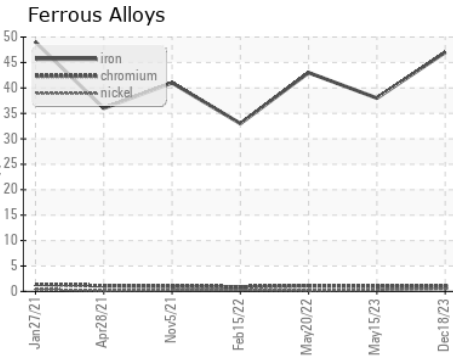


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	25.7	26.1	17.6
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	6.41	---	---

VISUAL		method	limit/base	current	history1	history2
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	113	118	106
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	14.6	15.1	14.4
Viscosity Index (VI)	Scale	ASTM D2270*	139	132	132	139

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0080280 **Received** : 19 Dec 2023
Lab Number : **02604032** **Diagnosed** : 21 Dec 2023
Unique Number : 5697117 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: KV40, VI, Visual)

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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