



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
CR 3111 No. 1 Port S/S Gen. Engine
Component
Port Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (68 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0844541	WC0844556	WC0844574
Sample Date		Client Info		15 Feb 2024	08 Nov 2023	15 Oct 2023
Machine Age	hrs	Client Info		87181	86756	86253
Oil Age	hrs	Client Info		500	503	464
Filter Age	hrs	Client Info		500	503	464
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>86	16	12	12
Chromium	ppm	ASTM D5185(m)	>3	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>3	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>15	2	1	<1
Lead	ppm	ASTM D5185(m)	>16	3	2	2
Copper	ppm	ASTM D5185(m)	>250	3	3	3
Tin	ppm	ASTM D5185(m)	>2	<1	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

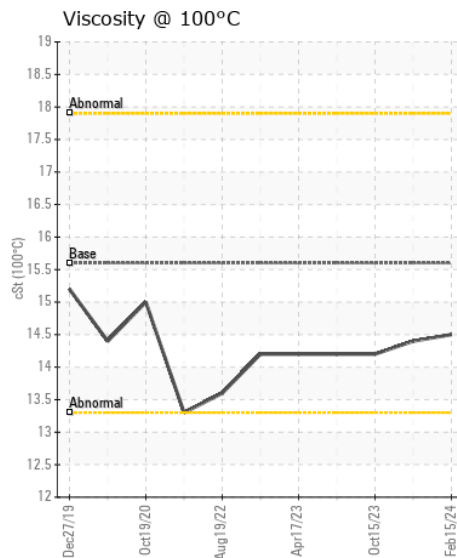
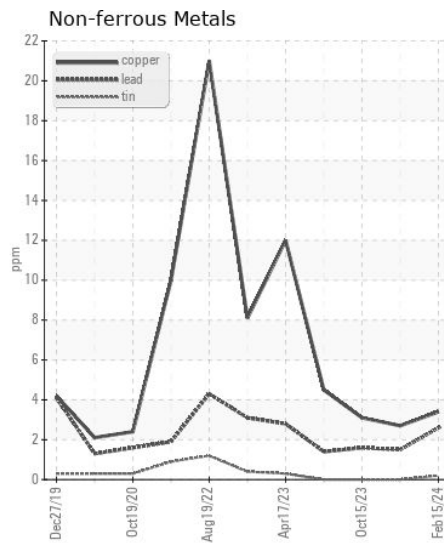
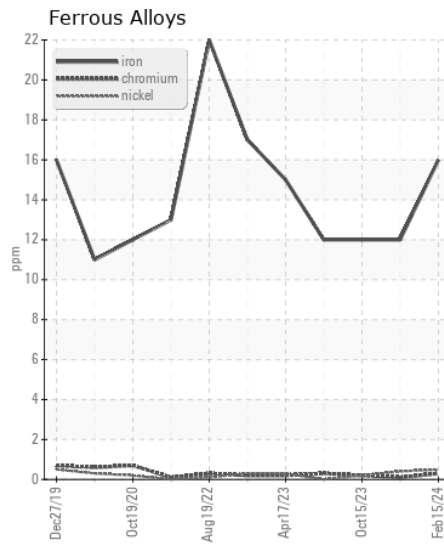
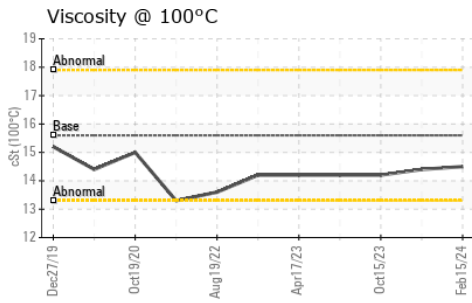
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	3	2	2
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.1	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	7.8	7.2	6.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.5	20.5	19.9
Silt	scalar	Visual*	NONE	NONE	NONE	VLITE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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)		3	3	3
Boron	ppm	ASTM D5185(m)	0	<1	2	2
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	61	61	62
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	1010	1011	995	1008
Calcium	ppm	ASTM D5185(m)	1070	1089	1064	1072
Phosphorus	ppm	ASTM D5185(m)	1150	1011	1004	1012
Zinc	ppm	ASTM D5185(m)	1270	1200	1207	1217
Sulfur	ppm	ASTM D5185(m)	2060	2632	2499	2555
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.6	16.5	15.6
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	14.5	14.4	14.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0844541
Lab Number : 02618885
Unique Number : 5735995
Test Package : MAR 1
Received : 29 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 29 Feb 2024 - Wes Davis

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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.