



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
MARC 33
 Component
Air Compressor
 Fluid
BRAD PENN DDS PLUS SAE 40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0028851	DC0025701	DC0024692
Sample Date		Client Info		10 Jan 2024	06 Oct 2023	07 Jun 2023
Machine Age	mls	Client Info		0	0	0
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	0	0	3
Chromium	ppm	ASTM D5185m	>4	0	0	0
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	0	<1
Lead	ppm	ASTM D5185m	>20	2	0	2
Copper	ppm	ASTM D5185m	>40	15	11	28
Tin	ppm	ASTM D5185m	>5	<1	<1	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

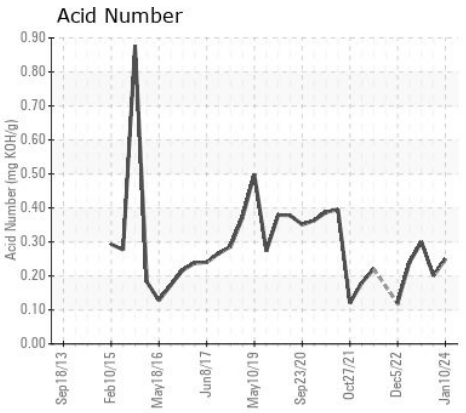
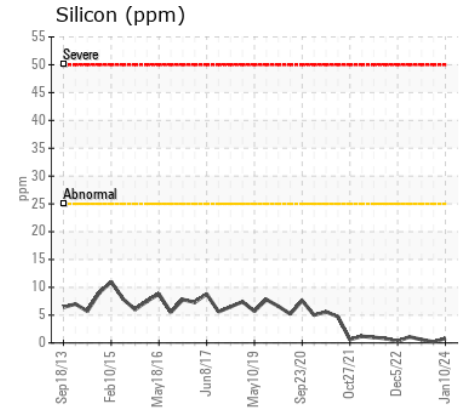
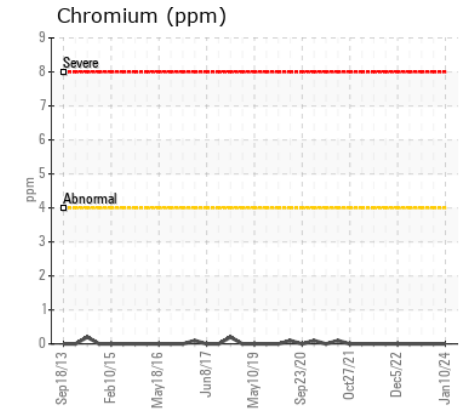
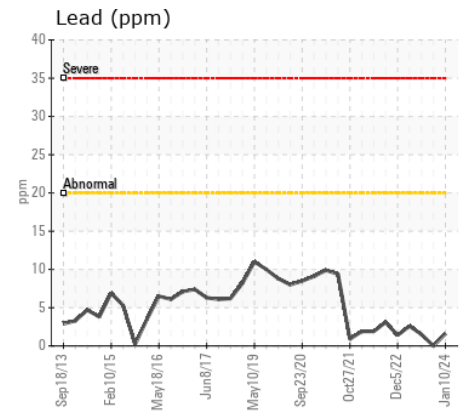
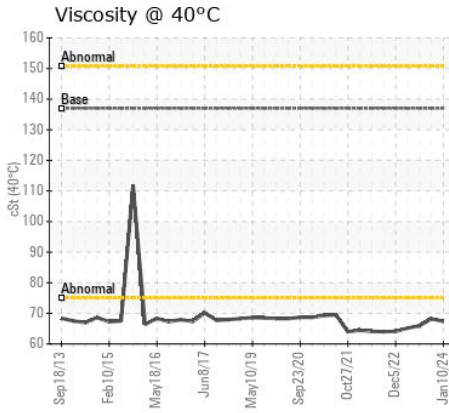
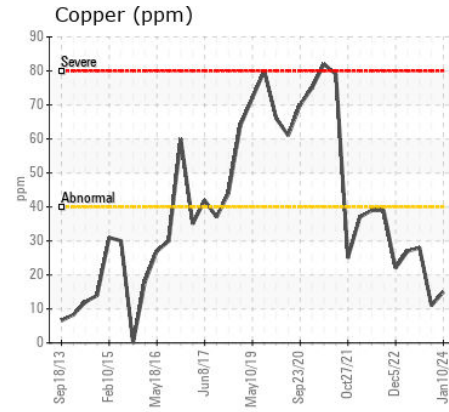
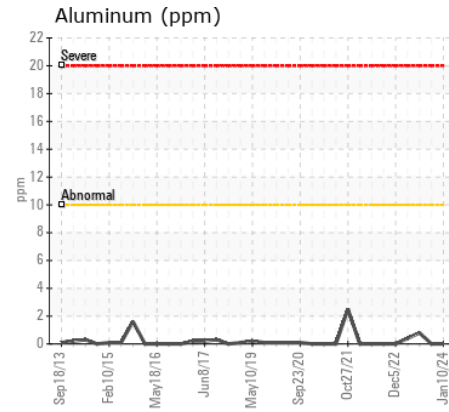
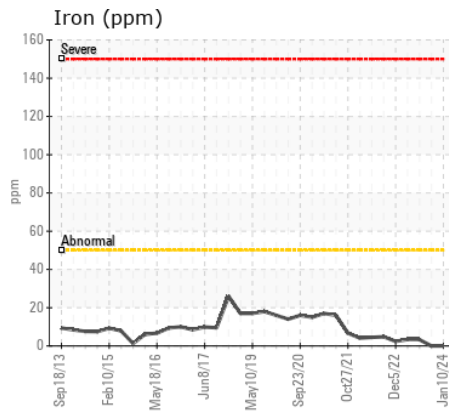
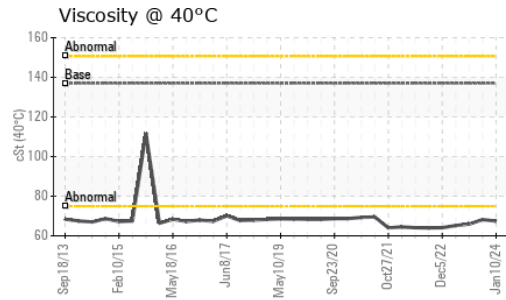
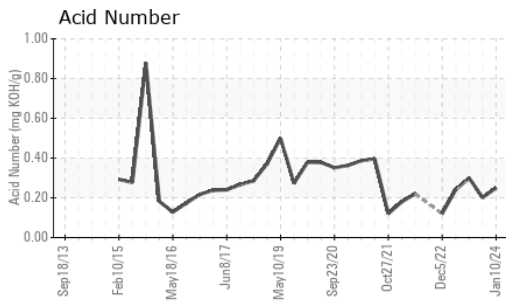
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<1	<1	<1
Potassium	ppm	ASTM D5185m	>20	<1	0	0
Water		WC Method	>0.6	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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	>0.6	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	<1	2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		0	<1	1
Calcium	ppm	ASTM D5185m		20	12	33
Phosphorus	ppm	ASTM D5185m		165	149	153
Zinc	ppm	ASTM D5185m	10	20	10	13
Sulfur	ppm	ASTM D5185m		7571	7200	8844
Acid Number (AN)	mg KOH/g	ASTM D8045		0.25	0.20	0.30
Visc @ 40°C	cSt	ASTM D445	137	67.4	68.2	65.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0028851 **Received** : 12 Jan 2024
Lab Number : 06060355 **Diagnosed** : 16 Jan 2024
Unique Number : 10831737 **Diagnostician** : Don Baldrige
Test Package : MOB 2

ALSTOM - BALTIMORE
 1600 LUDLOW ST
 BALTIMORE, MD
 US 21230
 Contact: SEAN MCCARTY
 sean.mccarty@rail.bombardier.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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