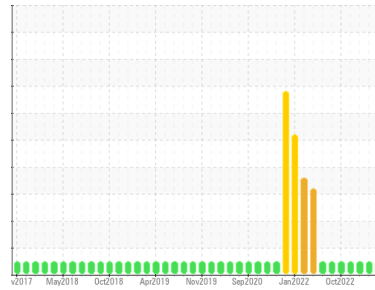




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
RECUPERATION - BROYAGE
 Machine Id
CONVOYEUR D'ALIMENTATION DES BROYEURS (206) (S/N 460-B2-206)
 Component
Reduction Gear
 Fluid
MOBIL MOBILGEAR SHC 220 (20 LTR)

DIAGNOSIS

Recommendation

Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition.

Wear

Les taux d'usure de tous les composants sont normaux.

Contamination

Il n'y a aucun indice de contamination dans l'huile.

Fluid Condition

L'état de l'huile est acceptable pour la durée de service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0894288	WC0888596	WC0868671
Sample Date	Client Info			17 Jan 2024	29 Dec 2023	29 Nov 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>150	36	39	38
Chromium	ppm	ASTM D5185(m)	>10	0	<1	0
Nickel	ppm	ASTM D5185(m)	>10	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	4	5	4
Lead	ppm	ASTM D5185(m)	>100	0	0	<1
Copper	ppm	ASTM D5185(m)	>50	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>10	0	0	0
Antimony	ppm	ASTM D5185(m)	>5	0	0	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)		1	1	2
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		1	1	1
Calcium	ppm	ASTM D5185(m)		9	8	8
Phosphorus	ppm	ASTM D5185(m)		427	428	427
Zinc	ppm	ASTM D5185(m)		29	28	28
Sulfur	ppm	ASTM D5185(m)		2092	1942	1890
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

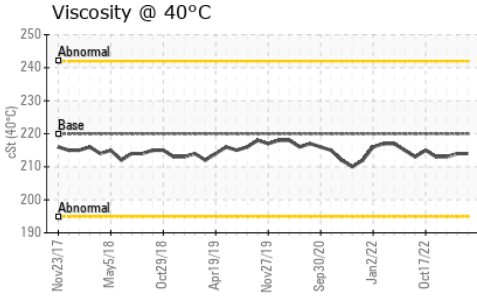
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	8	8	7
Sodium	ppm	ASTM D5185(m)		0	0	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	2	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0	---	---
Nitration	Abs/cm	ASTM D7624*		3.0	---	---
Sulfation	Abs/.1mm	ASTM D7415*		46.5	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*		55.4	---	---



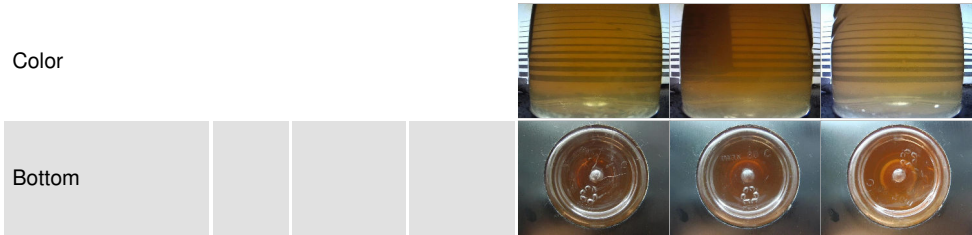
OIL ANALYSIS REPORT



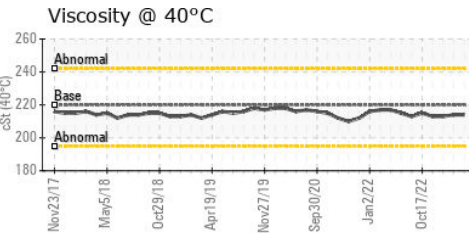
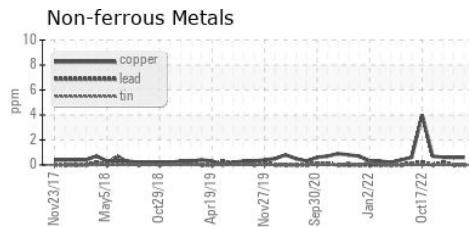
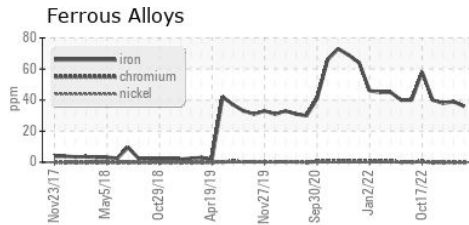
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	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)	220	214	214	213

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0894288
Lab Number : **02610426**
Unique Number : 5711512
Test Package : IND 1 (Additional Tests: FT-IR)

Received : 22 Jan 2024
Tested : 23 Jan 2024
Diagnosed : 23 Jan 2024 - Kevin Marson
Rio Tinto - USINE VAUDREUIL BHB (Mill - Aluminum)
 1955 BD. MELLON, EDIFICE 401
 JONQUIERE, QC
 CA G7S 4L2
 Contact: Dany Bonneau
 dany.bonneau@riotinto.com
 T: (418)718-7771
 F: (418)699-2421

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.