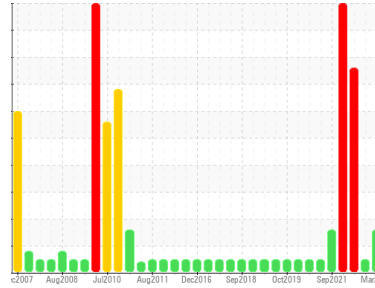




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
RECUPERATION - BROYAGE
 Machine Id
CONCASSEUR Bauxite 411 (Roulement 2) (S/N 411-C8-216)
 Component
Bearing
 Fluid
ESSO SPARTAN EP 320 (160 LTR)

DIAGNOSIS

Recommendation

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

Wear

Le bas indice ferreux (PQ) indique que l'usure ferreuse est due à de la corrosion. Les niveaux de fer et d'aluminium sont élevés. Les taux d'usure de tous les autres 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		WC0835084	WC0782327	WC0677859
Sample Date	Client Info		13 Mar 2024	25 Jan 2023	05 May 2022
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			ATTENTION	NORMAL	SEVERE

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	4	2
Iron	ppm	ASTM D5185(m) >20	28	23	18
Chromium	ppm	ASTM D5185(m) >20	<1	0	<1
Nickel	ppm	ASTM D5185(m) >20	<1	<1	0
Titanium	ppm	ASTM D5185(m)	1	1	<1
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >20	33	18	11
Lead	ppm	ASTM D5185(m) >20	0	0	0
Copper	ppm	ASTM D5185(m) >20	<1	0	<1
Tin	ppm	ASTM D5185(m) >20	0	0	0
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) .4	12	19	21
Barium	ppm	ASTM D5185(m)	0	0	0
Molybdenum	ppm	ASTM D5185(m) 0	0	0	<1
Manganese	ppm	ASTM D5185(m)	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 0	<1	0	0
Calcium	ppm	ASTM D5185(m) 0	3	2	5
Phosphorus	ppm	ASTM D5185(m) 250	329	355	351
Zinc	ppm	ASTM D5185(m) 0	3	2	4
Sulfur	ppm	ASTM D5185(m)	16162	15937	15938
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	11	8	5
Sodium	ppm	ASTM D5185(m)	<1	<1	<1
Potassium	ppm	ASTM D5185(m) >20	<1	0	0

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0	0	---
Nitration	Abs/cm	ASTM D7624*	3.4	5.4	---
Sulfation	Abs/.1mm	ASTM D7415*	13.8	20.8	---

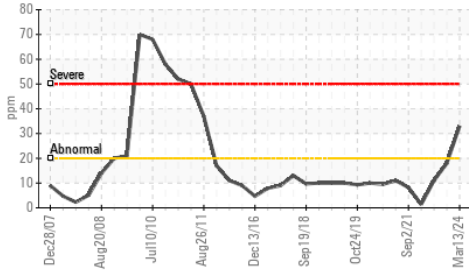
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	5.2	9.5	---

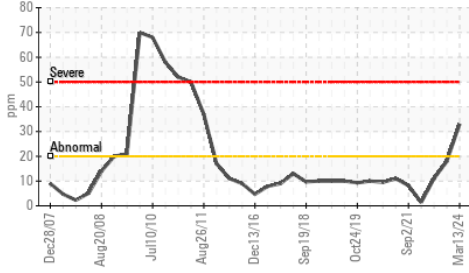


OIL ANALYSIS REPORT

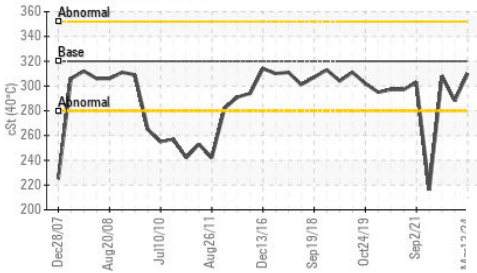
● Aluminum (ppm)



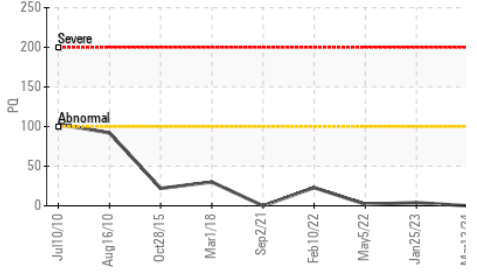
● Aluminum (ppm)



Viscosity @ 40°C



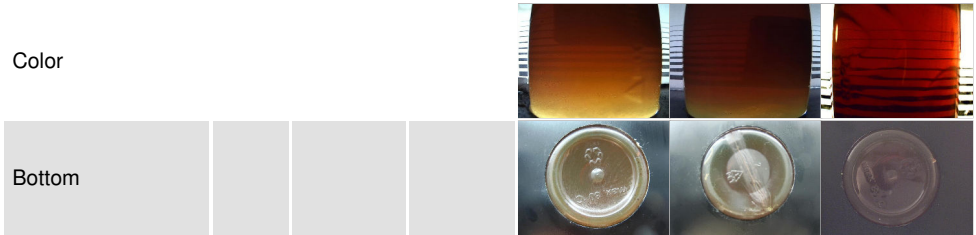
PQ



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

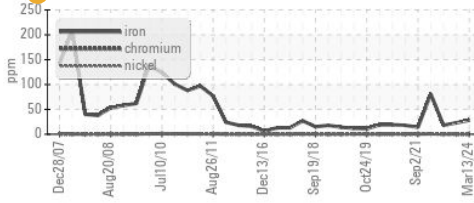
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	320	310	288 308

SAMPLE IMAGES	method	limit/base	current	history1	history2
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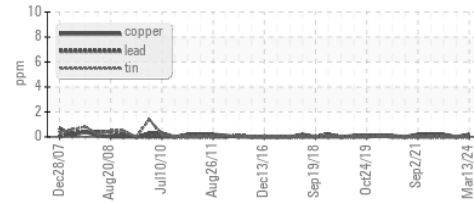


GRAPHS

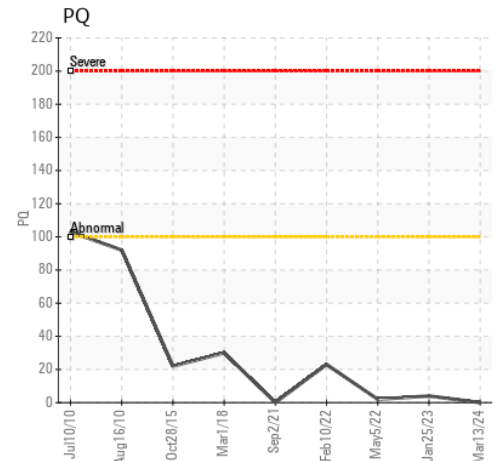
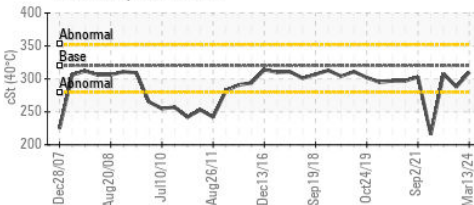
● Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **Rio Tinto - USINE VAUDREUIL BHB (Mill - Aluminum)**
Sample No. : WC0835084 **Received** : 14 Mar 2024 1955 BD. MELLON, EDIFICE 401
Lab Number : 02622135 **Tested** : 14 Mar 2024 JONQUIERE, QC
Unique Number : 5747254 **Diagnosed** : 15 Mar 2024 - Kevin Marson CA G7S 4L2
Test Package : IND 1 (Additional Tests: FT-IR, PQ)

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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