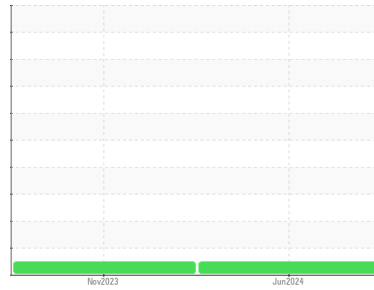




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
GHEO 4

Component
Gearbox

Fluid
GEAR OIL (PAG) ISO 320 (--- GAL)

DIAGNOSIS

Recommendation

Vu la faible quantité d'informations pour cet équipement et son lubrifiant, les recommandations sont d'ordre général et peuvent ne pas s'appliquer à cette application. Veuillez nous transmettre les informations sur l'équipement, la contenance du réservoir, le type de lubrifiant et toute autre information pertinente pour une évaluation plus précise. Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition. À NOTER: S.V.P. inclure, avec le prochain échantillon, des détails de la capacité du réservoir et le type et le degré de filtration. Veuillez préciser la marque, le type et la viscosité de l'huile lors de votre prochain échantillon.

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			WC	WC0715176	---
Sample Date	Client Info			13 Jun 2024	01 Nov 2023	---
Machine Age	hrs	Client Info		0	0	---
Oil Age	hrs	Client Info		0	0	---
Oil Changed	Client Info			Not Changed	Not Changed	---
Sample Status				NORMAL	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	NEG	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>200	<1	1	---
Chromium	ppm	ASTM D5185(m)	>15	0	0	---
Nickel	ppm	ASTM D5185(m)	>15	<1	0	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		0	<1	---
Aluminum	ppm	ASTM D5185(m)	>25	<1	0	---
Lead	ppm	ASTM D5185(m)	>100	0	<1	---
Copper	ppm	ASTM D5185(m)	>200	<1	<1	---
Tin	ppm	ASTM D5185(m)	>25	0	0	---
Antimony	ppm	ASTM D5185(m)	>5	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	2	4	---
Barium	ppm	ASTM D5185(m)	5	0	<1	---
Molybdenum	ppm	ASTM D5185(m)	5	0	0	---
Manganese	ppm	ASTM D5185(m)		0	0	---
Magnesium	ppm	ASTM D5185(m)	5	<1	0	---
Calcium	ppm	ASTM D5185(m)	5	<1	<1	---
Phosphorus	ppm	ASTM D5185(m)	775	402	412	---
Zinc	ppm	ASTM D5185(m)	5	1	<1	---
Sulfur	ppm	ASTM D5185(m)	2000	1717	2384	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

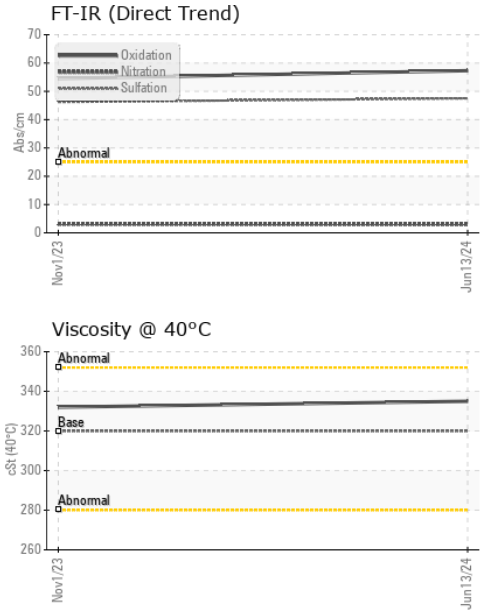
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	20	17	---
Sodium	ppm	ASTM D5185(m)		<1	<1	---
Potassium	ppm	ASTM D5185(m)	>20	0	0	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0	0	---
Nitration	Abs/cm	ASTM D7624*		3.0	3.1	---
Sulfation	Abs./1mm	ASTM D7415*		47.5	46.2	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*		57.3	54.5	---



OIL ANALYSIS REPORT



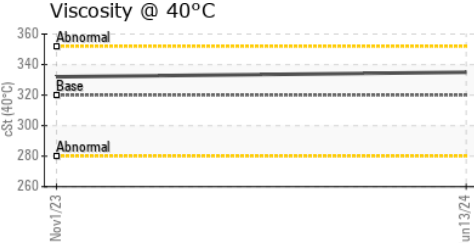
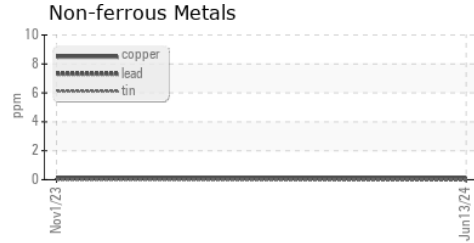
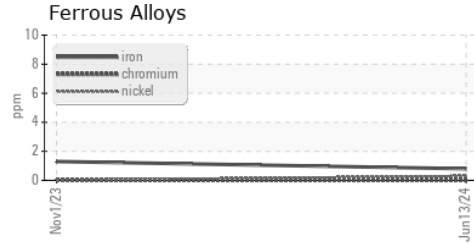
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	VLITE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	320	335	332

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **Rio Tinto - USINE VAUDREUIL Hydrate 1**
Sample No. : WC **Received** : 02 Jul 2024 1955 BD. MELLON, EDIFICE 401
Lab Number : **02645050** **Tested** : 02 Jul 2024 JONQUIERE, QC
Unique Number : 5802589 **Diagnosed** : 02 Jul 2024 - Wes Davis CA G7S 4L2
Test Package : IND 1 (Additional Tests: FT-IR) Contact: Yannick Bilodeau
 yannickbilodeau@riotinto.com

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.

T: (418)699-2421