



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
T.M.B.
Machine Id
5502-CWC-700 (S/N 21)
Component
7 Gearbox
Fluid
CHEVRON CYLINDER OIL W ISO 680 (20 LTR)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0902400	WC0884537	WC0840714
Sample Date		Client Info		14 Mar 2024	06 Dec 2023	23 Aug 2023
Machine Age	days	Client Info		0	0	0
Oil Age	days	Client Info		0	0	0
Filter Age	days	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

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

PQ		ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m)	>200	32	26	8
Chromium	ppm	ASTM D5185(m)	>15	0	0	0
Nickel	ppm	ASTM D5185(m)	>15	<1	1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	1	1	<1
Lead	ppm	ASTM D5185(m)	>100	0	<1	0
Copper	ppm	ASTM D5185(m)	>200	16	12	4
Tin	ppm	ASTM D5185(m)	>25	3	2	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

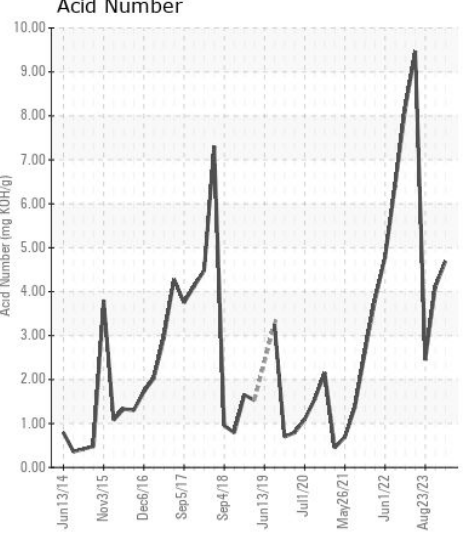
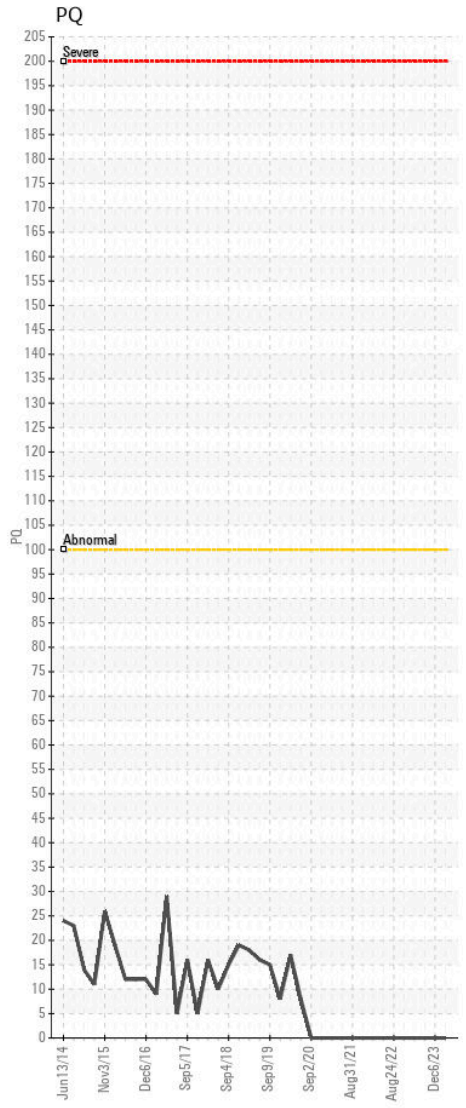
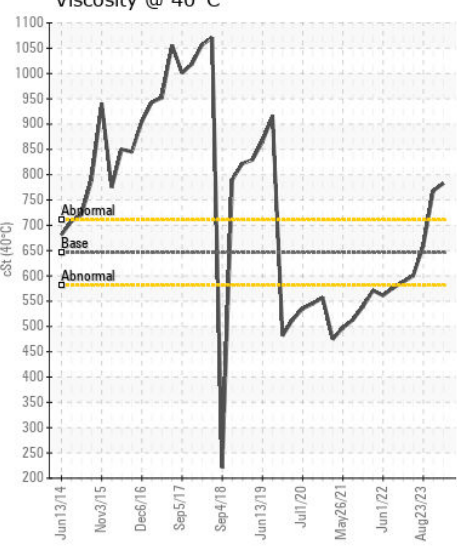
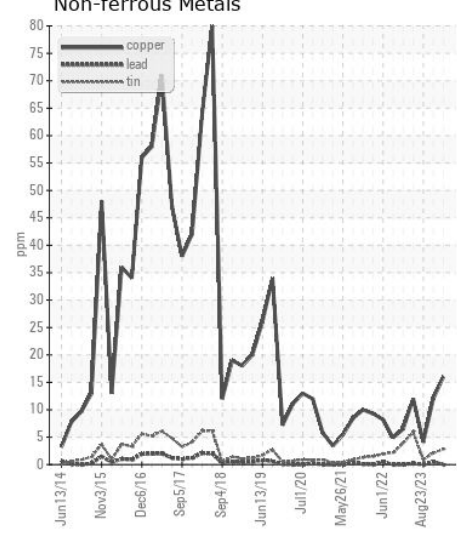
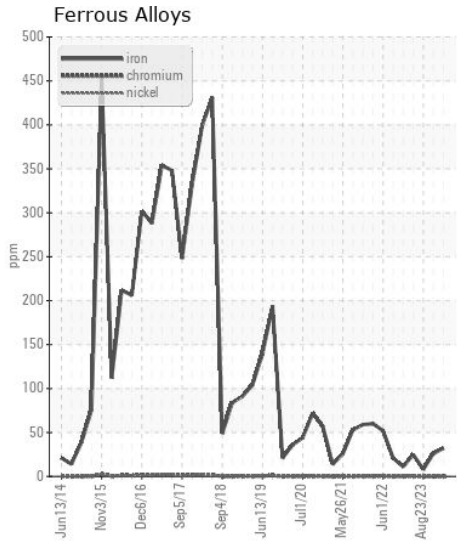
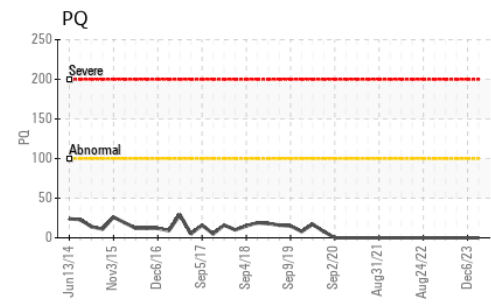
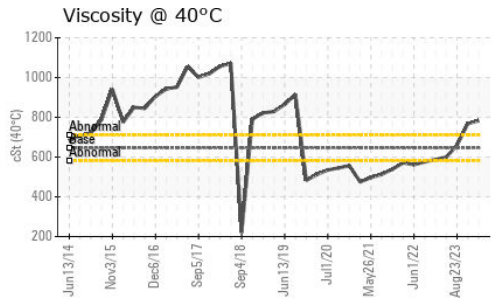
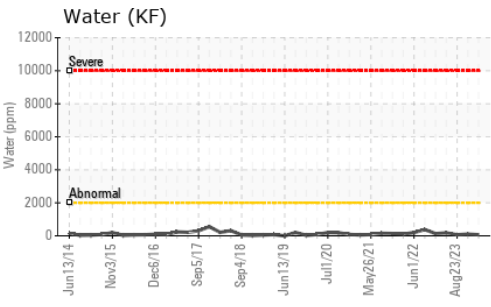
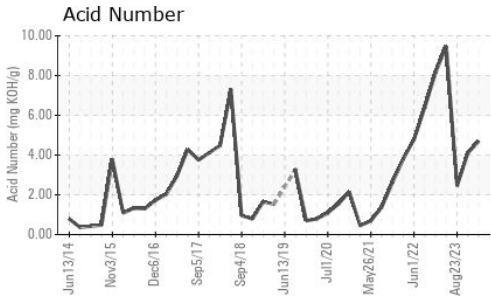
La teneur en eau est négligeable. Il n'y a aucun indice de contamination dans l'huile.

Silicon	ppm	ASTM D5185(m)	>50	1	3	3
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
Water	%	ASTM D6304*	>0.2	0.006	0.010	0.006
ppm Water	ppm	ASTM D6304*	>2000	66	104	64.9
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	VLITE
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

La viscosité de l'huile est plus élevée que la normale. Le AN est acceptable pour ce fluide. L'état de l'huile permet d'en prolonger l'utilisation.

Sodium	ppm	ASTM D5185(m)		<1	1	<1
Boron	ppm	ASTM D5185(m)		2	2	<1
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		0	0	<1
Calcium	ppm	ASTM D5185(m)		0	<1	<1
Phosphorus	ppm	ASTM D5185(m)		6	4	4
Zinc	ppm	ASTM D5185(m)		3	5	3
Sulfur	ppm	ASTM D5185(m)		4149	4380	4295
Acid Number (AN)	mg KOH/g	ASTM D974*		4.69	4.10	2.45
Visc @ 40°C	cSt	ASTM D7279(m)	646	783	768	659



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0902400
Lab Number : 02627521
Unique Number : 5760653
Test Package : IND 2 (Additional Tests: KF, TAN Man)

Received : 08 Apr 2024
Tested : 12 Apr 2024
Diagnosed : 12 Apr 2024 - Kevin Marson
RTA - ALMA
 3000 RUE DES PINS OUEST, BATISSE 7103 MEZZALINE
 ALMA, QC
 CA G8B 6T3
 Contact: Guy Dufour
 guy.dufour-almacou@riotinto.com
 T:
 F: (418)480-6004

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.