IND II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[GH-9161B]
Machine Id
170832 DA
Component
Unknown Component
Fluid
AW HYDRAULIC OIL ISO 32 (--- GAL)

RECOMMENDATION

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. Please provide more complete information on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

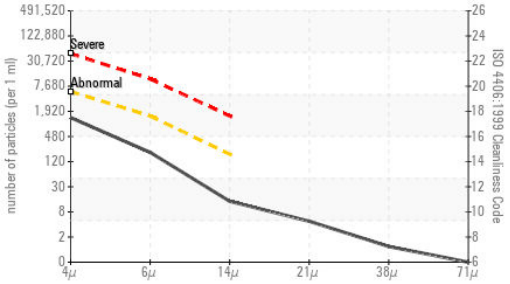
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

FLUID CONDITION

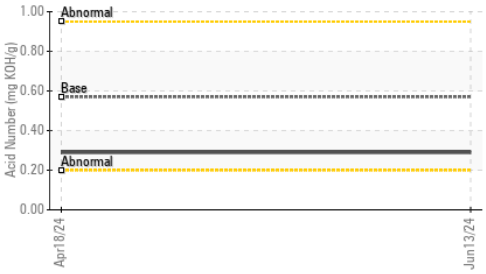
The AN level is acceptable for this fluid. The condition of the sample is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**PP**	PP	---
Sample Date		Client Info		**13 Jun 2024**	18 Apr 2024	---
Machine Age	hrs	Client Info		**0**	0	---
Oil Age	hrs	Client Info		**0**	0	---
Filter Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	N/A	---
Filter Changed		Client Info		**N/A**	N/A	---
Sample Status				**NORMAL**	NORMAL	---
PQ		ASTM D8184*		**0**	0	---
Iron	ppm	ASTM D5185(m)		**3**	2	---
Chromium	ppm	ASTM D5185(m)		**0**	0	---
Nickel	ppm	ASTM D5185(m)		**0**	0	---
Titanium	ppm	ASTM D5185(m)		**0**	0	---
Silver	ppm	ASTM D5185(m)		**0**	0	---
Aluminum	ppm	ASTM D5185(m)		**0**	0	---
Lead	ppm	ASTM D5185(m)		**0**	<1	---
Copper	ppm	ASTM D5185(m)		**7**	7	---
Tin	ppm	ASTM D5185(m)		**0**	0	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
White Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Silicon	ppm	ASTM D5185(m)		**1**	1	---
Potassium	ppm	ASTM D5185(m)	>20	**<1**	<1	---
Water		WC Method		**NEG**	NEG	---
Particles >4µm		ASTM D7647	>5000	**1193**	620	---
Particles >6µm		ASTM D7647	>1300	**176**	149	---
Particles >14µm		ASTM D7647	>160	**12**	4	---
Particles >21µm		ASTM D7647	>40	**4**	1	---
Particles >38µm		ASTM D7647	>10	**1**	1	---
Particles >71µm		ASTM D7647	>3	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**17/15/11**	16/14/9	---
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*		**NEG**	NEG	---
Sodium	ppm	ASTM D5185(m)		**<1**	0	---
Boron	ppm	ASTM D5185(m)	5	**<1**	<1	---
Barium	ppm	ASTM D5185(m)	5	**0**	0	---
Molybdenum	ppm	ASTM D5185(m)	5	**0**	0	---
Manganese	ppm	ASTM D5185(m)		**0**	0	---
Magnesium	ppm	ASTM D5185(m)	25	**6**	5	---
Calcium	ppm	ASTM D5185(m)	200	**65**	64	---
Phosphorus	ppm	ASTM D5185(m)	300	**233**	231	---
Zinc	ppm	ASTM D5185(m)	370	**276**	274	---
Sulfur	ppm	ASTM D5185(m)	2500	**2298**	2253	---
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	**0.29**	0.29	---
Visc @ 40°C	cSt	ASTM D7279(m)	32	**34.1**	34.3	---

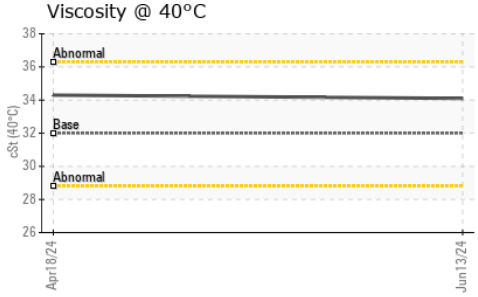
Particle Count



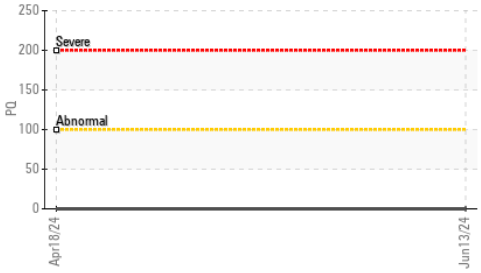
Acid Number



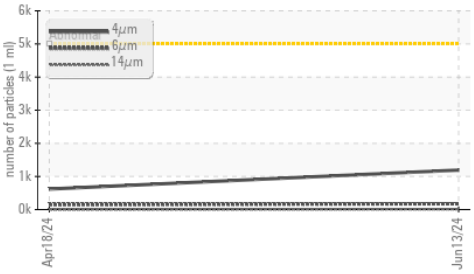
Viscosity @ 40°C



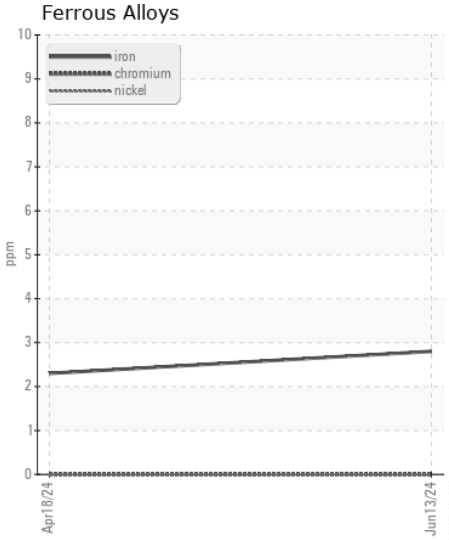
PQ



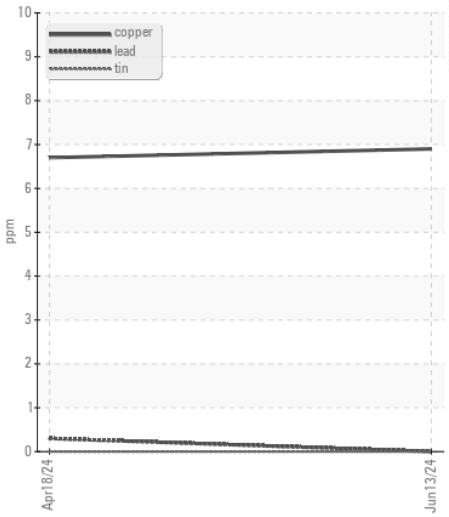
Particle Trend



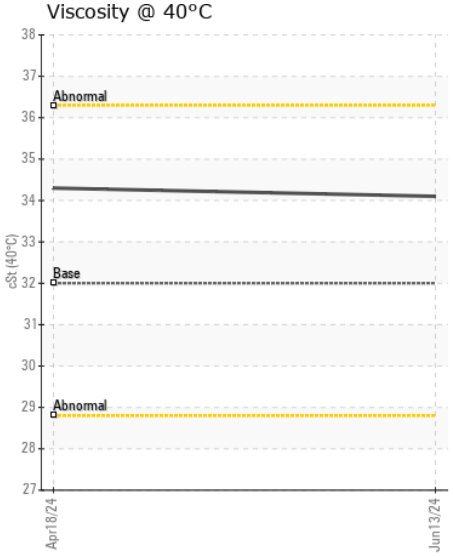
Ferrous Alloys



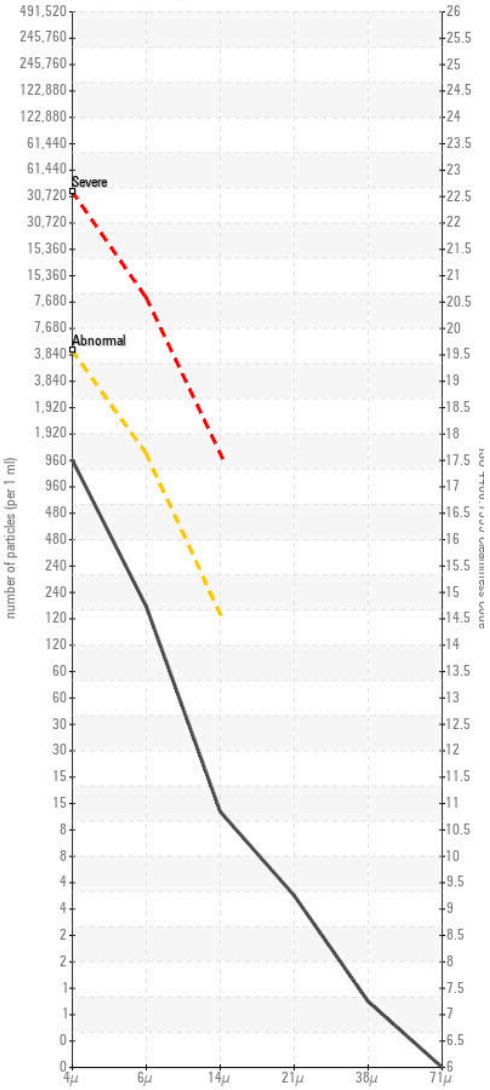
Non-ferrous Metals



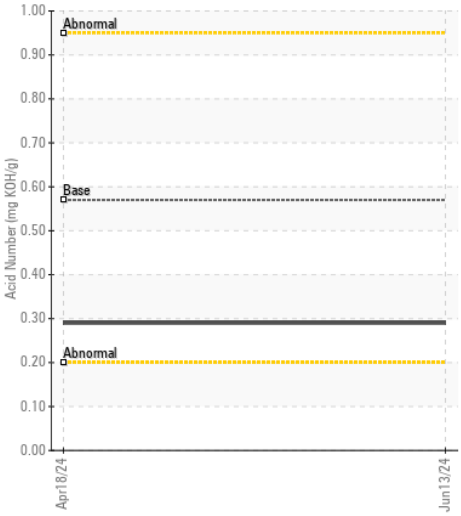
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PP
Lab Number : 02641973
Unique Number : 5799512
Test Package : IND 2 (Additional Tests: PQ, PrtCount)

Received : 14 Jun 2024
Tested : 18 Jun 2024
Diagnosed : 18 Jun 2024 - Kevin Marson

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.

HIBERNIA MGMT & DEVELOPMENT CO. LTD
SUITE 1000,, 100 NEW GOWER STREET
ST.JOHNS, NL
CA A1C 6K3
Contact: Sam Nash
samantha.m.nash@exxonmobil.com
T:
F: (709)722-3766