MAR II

WEAR CHECK Inland Marine Oil Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CDA
Component
Hydraulic System
Fluid
CHEVRON RANDO HD 68 (300 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

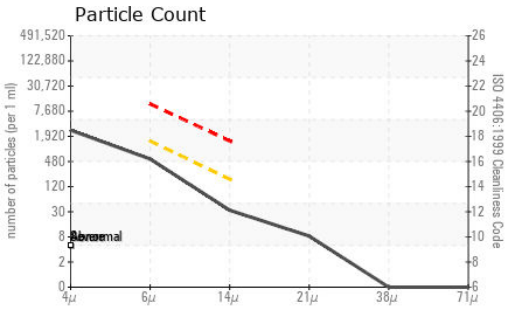
CONTAMINATION

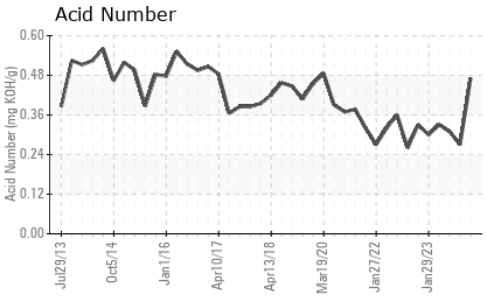
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

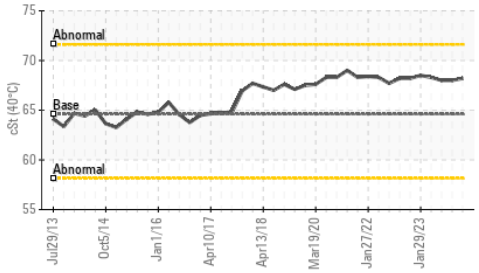
FLUID CONDITION

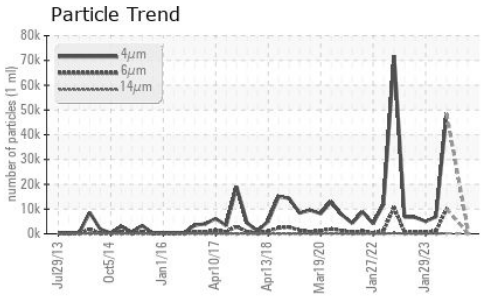
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

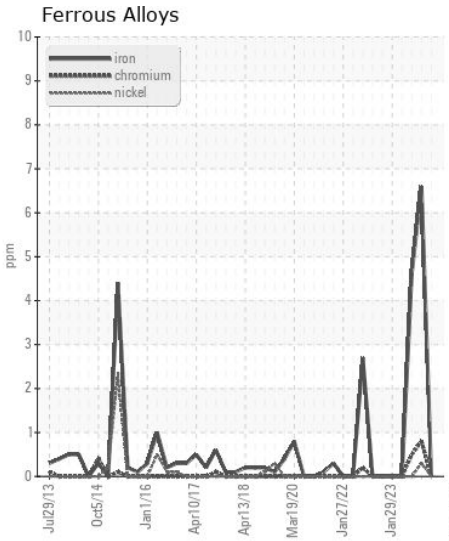
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0050801	MW0050782	MW0054970
Sample Date		Client Info		28 Jan 2024	27 Oct 2023	14 Aug 2023
Machine Age	hrs	Client Info		0	24385	23336
Oil Age	hrs	Client Info		26617	24385	23336
Filter Age	hrs	Client Info		0	24385	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	N/A
Sample Status				NORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>20	0	7	5
Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	2	0
Lead	ppm	ASTM D5185m	>20	0	<1	<1
Copper	ppm	ASTM D5185m	>20	<1	4	2
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>15	0	2	1
Potassium	ppm	ASTM D5185m	>20	0	2	<1
Water		WC Method	>0.05	NEG	NEG	NEG
Particles >4µm		ASTM D7647		2351	---	48462
Particles >6µm		ASTM D7647	>1300	484	---	▲ 9992
Particles >14µm		ASTM D7647	>160	29	---	● 213
Particles >21µm		ASTM D7647	>40	7	---	26
Particles >38µm		ASTM D7647	>10	0	---	1
Particles >71µm		ASTM D7647	>3	0	---	0
Oil Cleanliness		ISO 4406 (c)	>--/17/14	18/16/12	---	▲ 23/20/15
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER	LIGHT
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	>0.05	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		0	0	0
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		0	<1	<1
Calcium	ppm	ASTM D5185m		39	52	37
Phosphorus	ppm	ASTM D5185m		330	353	322
Zinc	ppm	ASTM D5185m		403	464	388
Sulfur	ppm	ASTM D5185m		774	998	735
Acid Number (AN)	mg KOH/g	ASTM D8045		0.47	0.27	0.31
Visc @ 40°C	cSt	ASTM D445	64.6	68.2	68.0	68.0

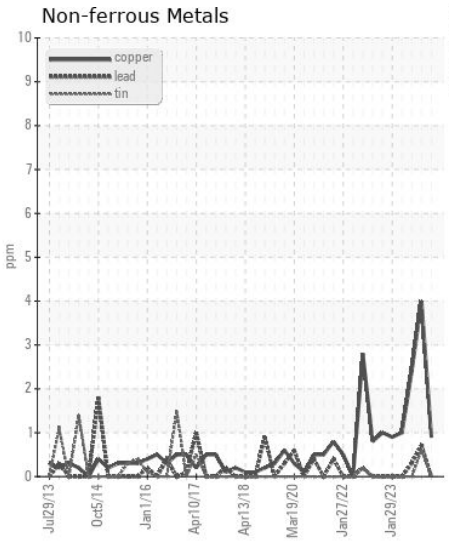


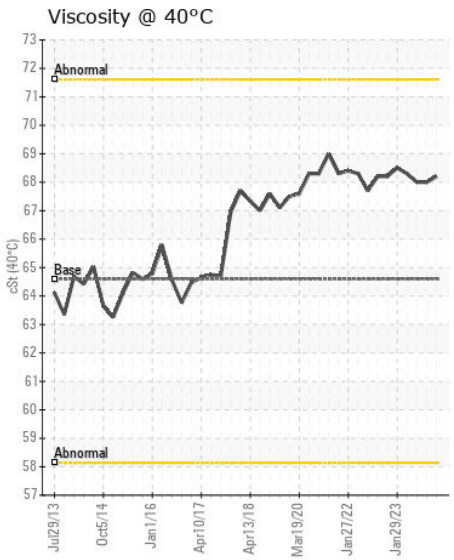


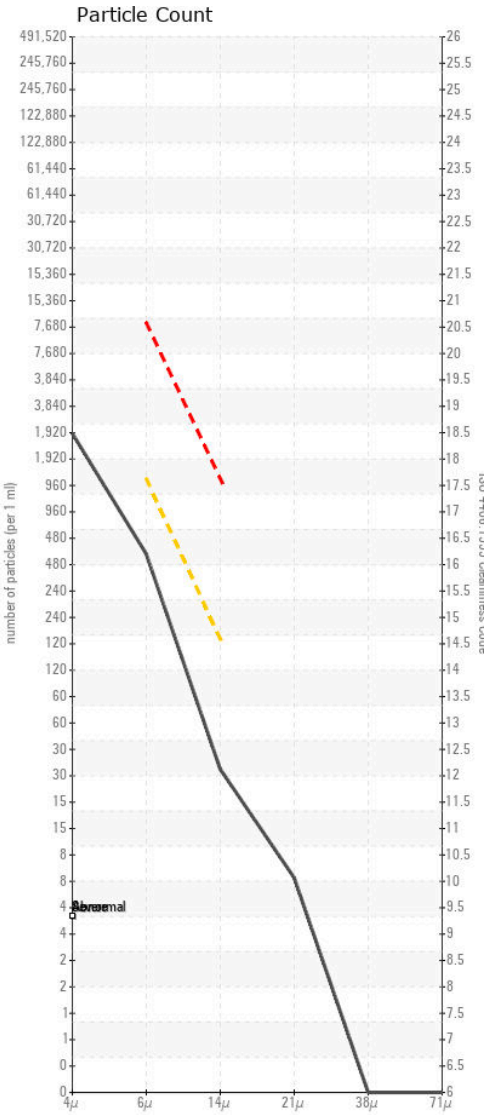


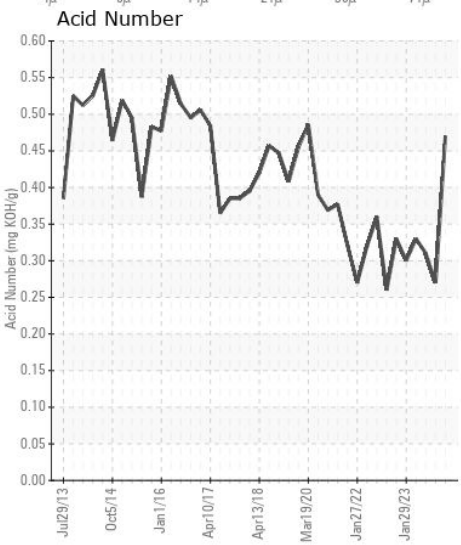












Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0050801
Lab Number : 06106008
Unique Number : 10909505
Test Package : MAR 2

Received : 01 Mar 2024
Tested : 04 Mar 2024
Diagnosed : 04 Mar 2024 - Wes Davis

Certificate L2367

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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