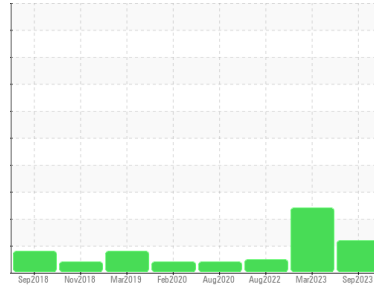




PROBLEM SUMMARY

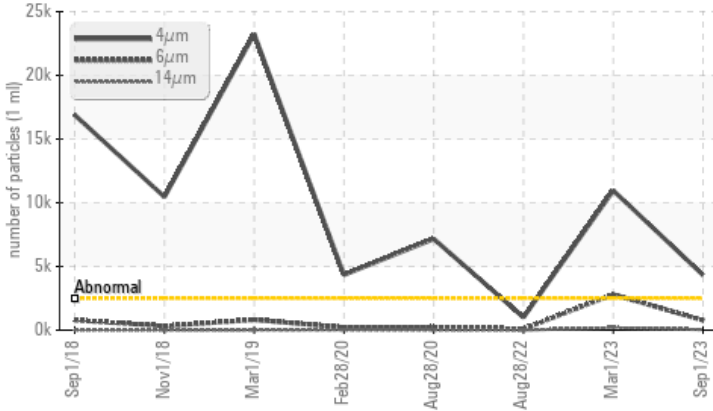
Sample Rating Trend



Area
MARTHA LYNN
 Machine Id
[MARTHA LYNN] 012 504678-12
 Component
Auxiliary Steering
 Fluid
CHEVRON RANDO HDZ 68 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

No corrective action is recommended at this time.
 Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	ABNORMAL	NORMAL
Particles >4µm	ASTM D7647	>2500	▲ 4328	▲ 10953	1002
Particles >6µm	ASTM D7647	>640	▲ 768	▲ 2804	87
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 19/17/12	▲ 21/19/15	17/14/10

Customer Id: INGPAD
 Sample No.: MW0058746
 Lab Number: 05964156
 Test Package: MAR 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

01 Mar 2023 Diag: Don Baldrige

ISO



No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the fluid. The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.

view report



28 Aug 2022 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



28 Aug 2020 Diag: Don Baldrige

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

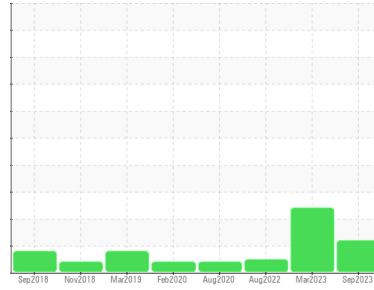
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
MARTHA LYNN
 Machine Id
[MARTHA LYNN] 012 504678-12
 Component
Auxiliary Steering
 Fluid
CHEVRON RANDO HDZ 68 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the fluid.

Fluid Condition

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	MW0058746	MW0051325	MW0043458
Sample Date	Client Info	01 Sep 2023	01 Mar 2023	28 Aug 2022
Machine Age	hrs	Client Info	11820	8000
Oil Age	hrs	Client Info	11820	8000
Oil Changed	Client Info	N/A	Not Changd	Not Changd
Sample Status		ATTENTION	ABNORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<1	0	0
Chromium	ppm	ASTM D5185m >15	<1	0	<1
Nickel	ppm	ASTM D5185m >5	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	<1	0
Aluminum	ppm	ASTM D5185m >5	0	0	<1
Lead	ppm	ASTM D5185m >10	0	0	<1
Copper	ppm	ASTM D5185m >50	11	11	34
Tin	ppm	ASTM D5185m >5	0	0	0
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	0	0	<1
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	<1
Manganese	ppm	ASTM D5185m	<1	<1	0
Magnesium	ppm	ASTM D5185m 0	0	<1	0
Calcium	ppm	ASTM D5185m 75	53	52	55
Phosphorus	ppm	ASTM D5185m 275	357	368	348
Zinc	ppm	ASTM D5185m 350	428	438	426
Sulfur	ppm	ASTM D5185m 550	969	790	915

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<1	2	<1
Sodium	ppm	ASTM D5185m	0	0	<1
Potassium	ppm	ASTM D5185m >20	1	0	0

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >2500	▲ 4328	▲ 10953	1002
Particles >6µm	ASTM D7647 >640	▲ 768	▲ 2804	87
Particles >14µm	ASTM D7647 >80	37	▲ 192	5
Particles >21µm	ASTM D7647 >20	9	▲ 41	1
Particles >38µm	ASTM D7647 >4	0	▲ 5	0
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >18/16/13	▲ 19/17/12	▲ 21/19/15	17/14/10

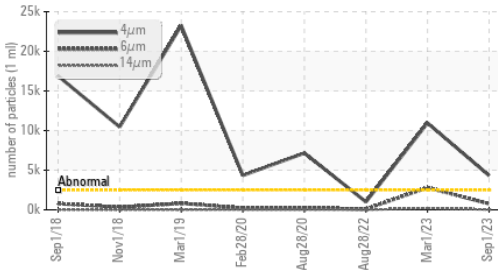
FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.26	0.30	0.32

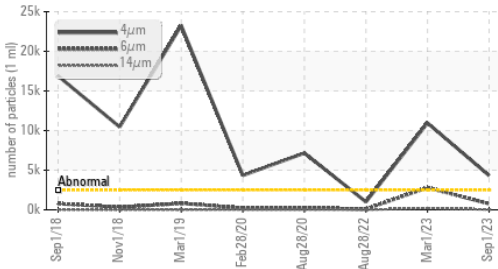


OIL ANALYSIS REPORT

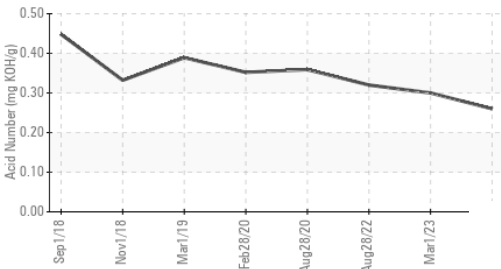
▲ Particle Trend



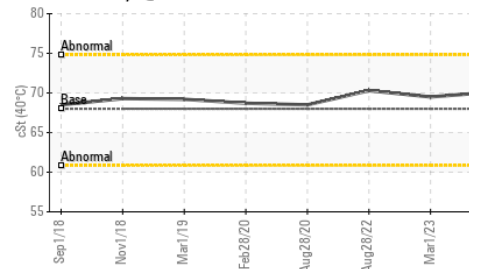
▲ Particle Trend



Acid Number



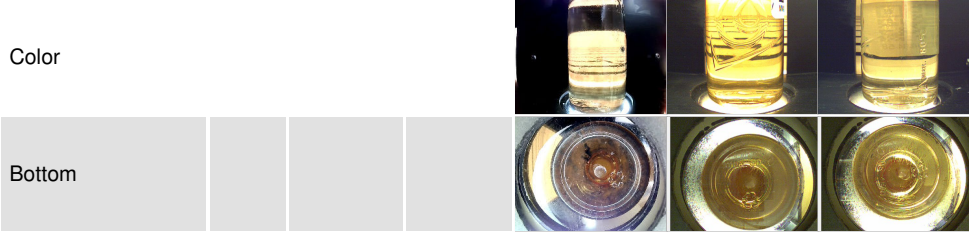
Viscosity @ 40°C



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	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

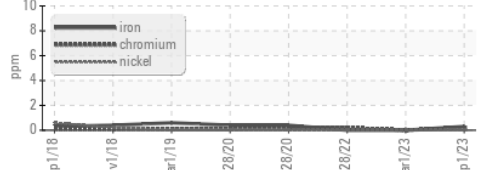
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	68.0	70.1	69.5	70.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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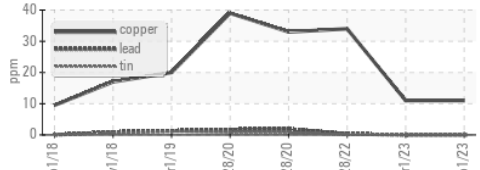


GRAPHS

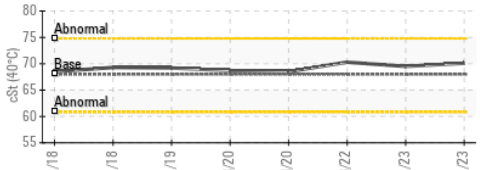
Ferrous Alloys



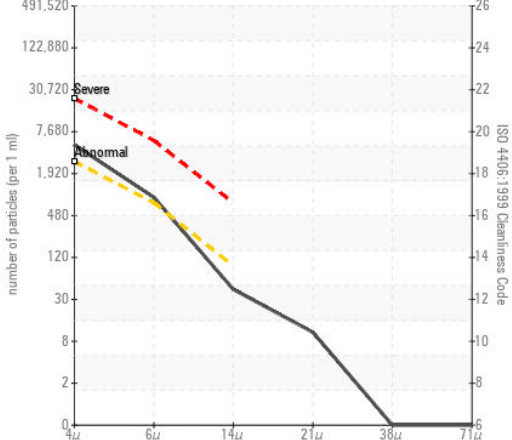
Non-ferrous Metals



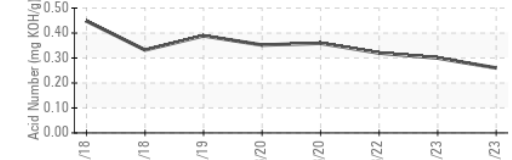
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0058746 **Received** : 28 Sep 2023
Lab Number : 05964156 **Diagnosed** : 01 Oct 2023
Unique Number : 10670707 **Diagnostician** : Don Baldrige
Test Package : MAR 2 (Additional Tests: PrtCount)

INGRAM BARGE
 900 S 3RD ST
 PADUCAH, KY
 US 42003
 Contact: GLENN ELLIS
 glen.ellis@ingrambarga.com
 T: (270)415-4467
 F: (615)695-3697

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)