



WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Machine Id
DEBORAH MILES
Component
Port Reduction Gear
Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (35 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0062038	MW0061824	MW0058016
Sample Date		Client Info		10 Apr 2024	30 Jan 2024	19 Oct 2023
Machine Age	hrs	Client Info		48605	47150	45179
Oil Age	hrs	Client Info		1432	1502	988
Filter Age	hrs	Client Info		733	849	255
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Filter Changed		Client Info		N/A	Not Changd	Not Changd
Sample Status				MARGINAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	6	6	4
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>10	1	0	0
Titanium	ppm	ASTM D5185m		9	8	8
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>25	2	2	1
Lead	ppm	ASTM D5185m	>100	1	0	0
Copper	ppm	ASTM D5185m	>50	3	6	7
Tin	ppm	ASTM D5185m	>10	1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

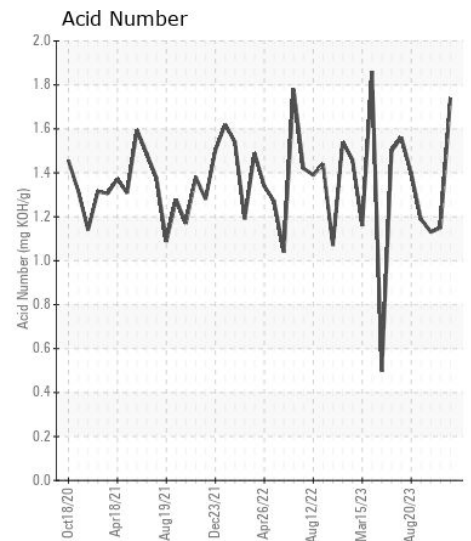
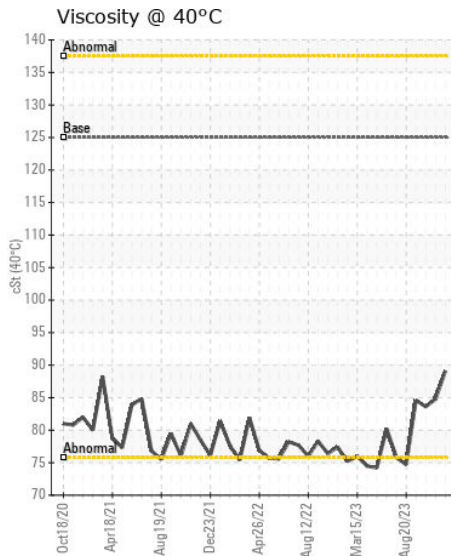
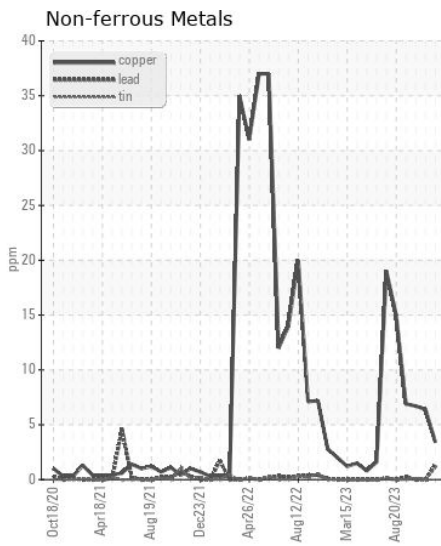
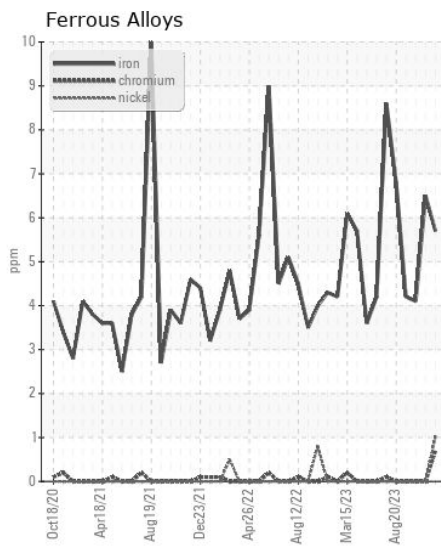
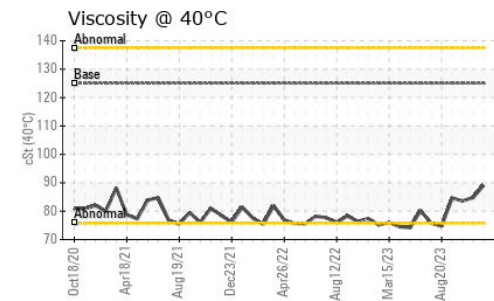
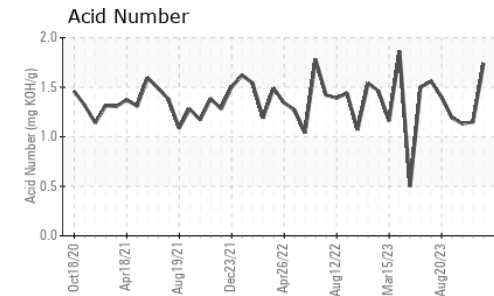
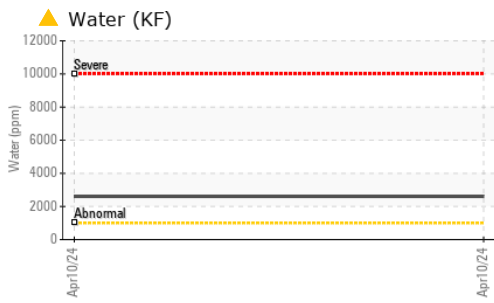
There is a light concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>50	6	4	4
Potassium	ppm	ASTM D5185m	>20	3	<1	1
Water	%	ASTM D6304	>0.1	▲ 0.261	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ 2610	---	---
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
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	>0.1	0.2%	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		2	3	4
Boron	ppm	ASTM D5185m		287	271	294
Barium	ppm	ASTM D5185m		5	0	0
Molybdenum	ppm	ASTM D5185m		53	61	59
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		438	552	482
Calcium	ppm	ASTM D5185m		2168	1997	1809
Phosphorus	ppm	ASTM D5185m	1360	781	835	726
Zinc	ppm	ASTM D5185m	1480	880	923	817
Sulfur	ppm	ASTM D5185m		3396	3304	2922
Acid Number (AN)	mg KOH/g	ASTM D8045		1.74	1.15	1.13
Visc @ 40°C	cSt	ASTM D445	125	89.1	84.8	83.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0062038
Lab Number : 06159832
Unique Number : 10995255
Test Package : MAR 2 (Additional Tests: KF)

Received : 24 Apr 2024
Tested : 25 Apr 2024
Diagnosed : 26 Apr 2024 - Don Baldrige

MAGNOLIA MARINE TRANSPORT
 697 HAINING ROAD
 VICKSBURG, MS
 US 39183
 Contact: MMT MAINTENANCE PLANNERS
 mmtmaintenanceplanners@ergon.com

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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