



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
SEAWARD ENDEAVOR
Machine Id
Component
Endeavor - Hydraulics
Component
Steering
Fluid
CHEVRON 47 (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0891210	---	---
Sample Date		Client Info		15 Mar 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>60	8	---	---
Chromium	ppm	ASTM D5185m	>12	1	---	---
Nickel	ppm	ASTM D5185m	>6	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>4	1	---	---
Lead	ppm	ASTM D5185m	>12	2	---	---
Copper	ppm	ASTM D5185m	>30	20	---	---
Tin	ppm	ASTM D5185m		1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

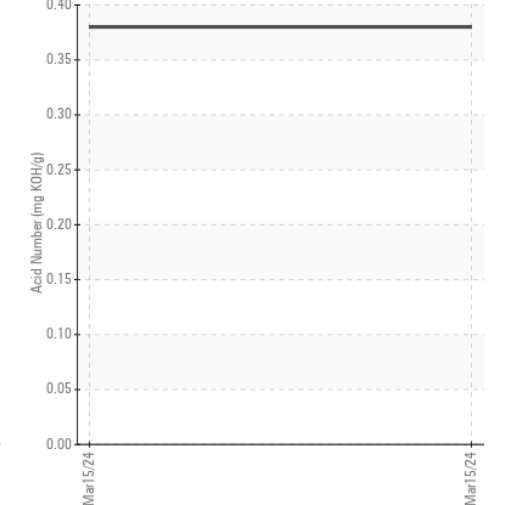
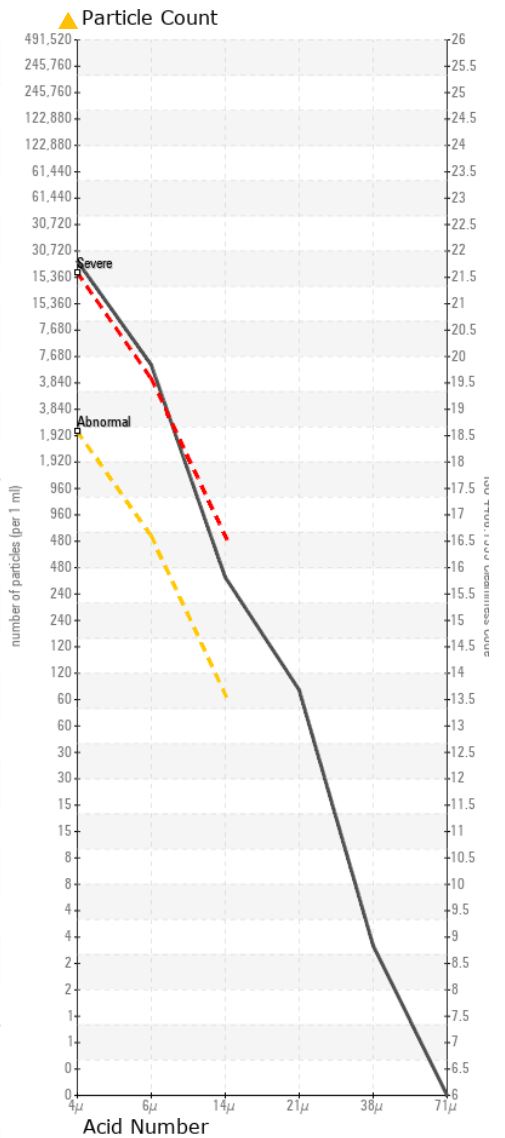
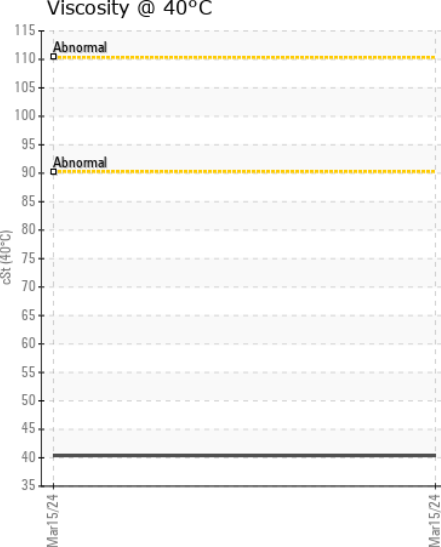
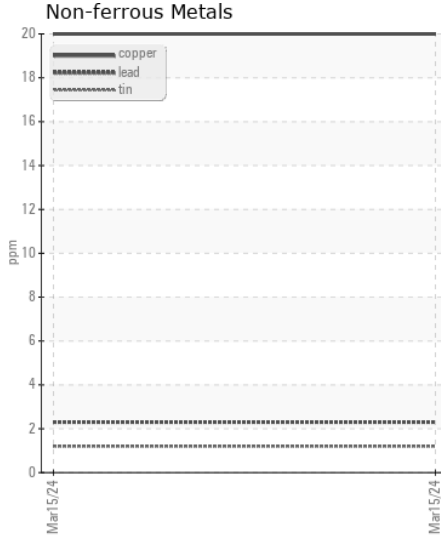
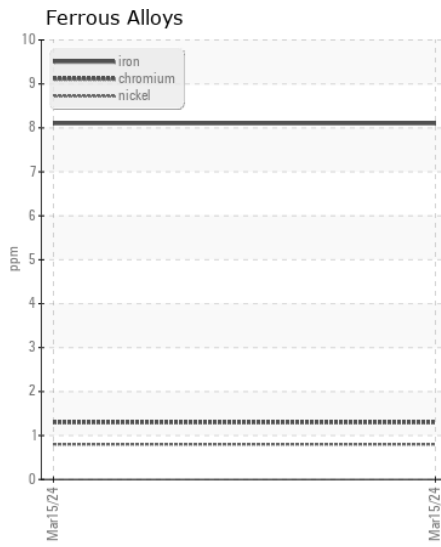
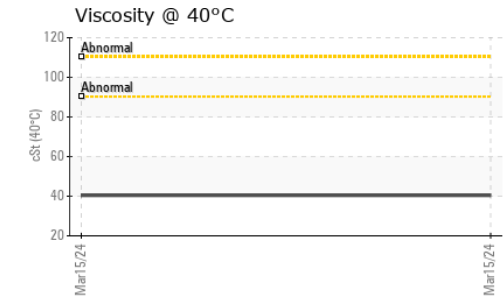
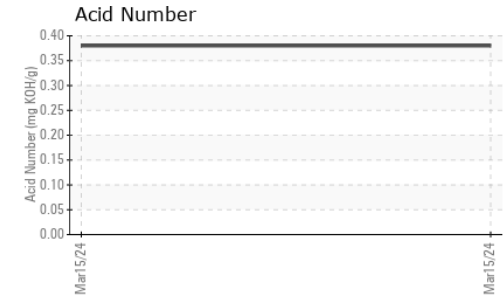
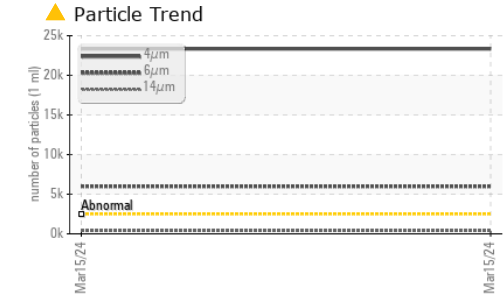
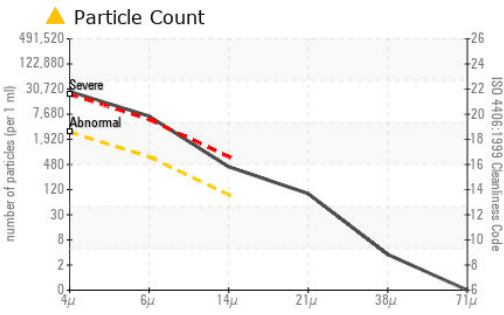
There is a high amount of particulates present in the fluid.

Silicon	ppm	ASTM D5185m	>10	<1	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---
Water		WC Method		NEG	---	---
Particles >4µm		ASTM D7647	>2500	▲ 23336	---	---
Particles >6µm		ASTM D7647	>640	▲ 5987	---	---
Particles >14µm		ASTM D7647	>80	▲ 372	---	---
Particles >21µm		ASTM D7647	>20	▲ 85	---	---
Particles >38µm		ASTM D7647	>4	3	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	▲ 22/20/16	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual		NEG	---	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	---	---
Boron	ppm	ASTM D5185m		0	---	---
Barium	ppm	ASTM D5185m		<1	---	---
Molybdenum	ppm	ASTM D5185m		1	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		2	---	---
Calcium	ppm	ASTM D5185m		69	---	---
Phosphorus	ppm	ASTM D5185m		361	---	---
Zinc	ppm	ASTM D5185m		423	---	---
Sulfur	ppm	ASTM D5185m		1619	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.38	---	---
Visc @ 40°C	cSt	ASTM D445		40.4	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0891210 **Received** : 11 Apr 2024
Lab Number : 06146530 **Tested** : 12 Apr 2024
Unique Number : 10976608 **Diagnosed** : 15 Apr 2024 - Don Baldrige
Test Package : MAR 2 (Additional Tests: PrtCount)

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)

SEAWARD SERVICES

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