



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
SEAWARD EXPLORER
Machine Id
Explorer - Voith
Component
Port Fluid Coupling
Fluid
SHELL TELLUS T46 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

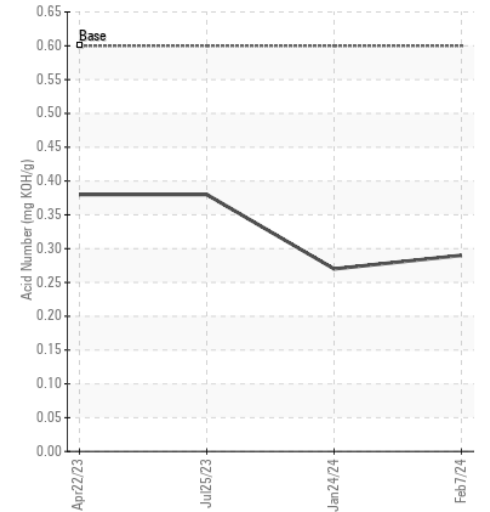
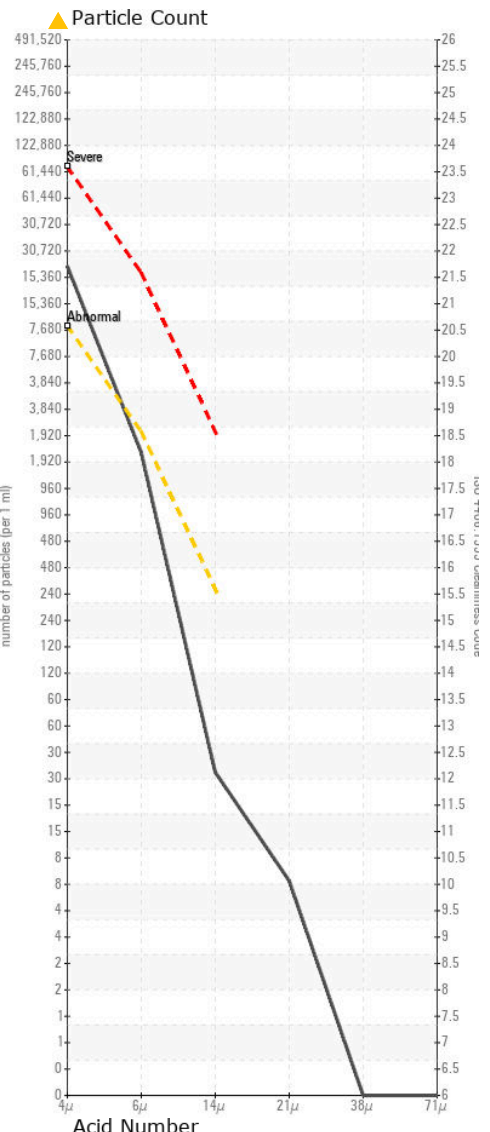
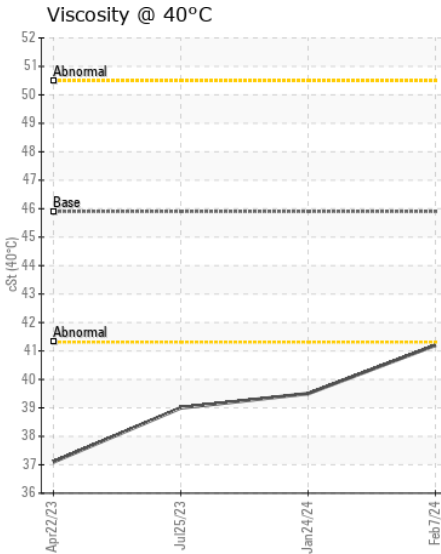
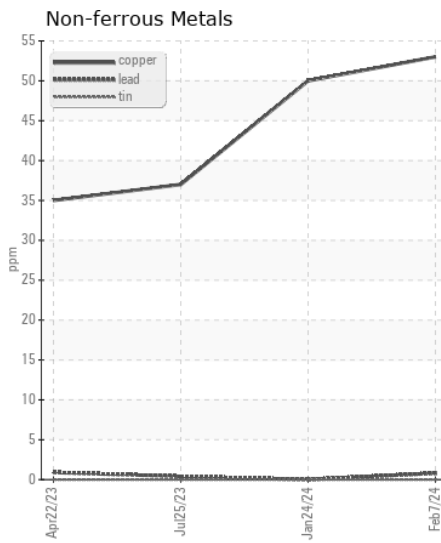
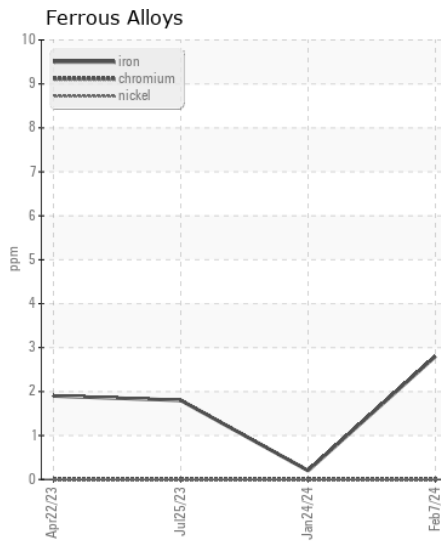
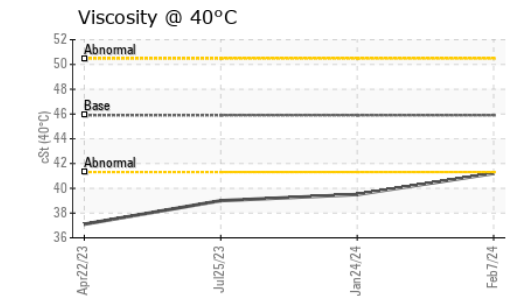
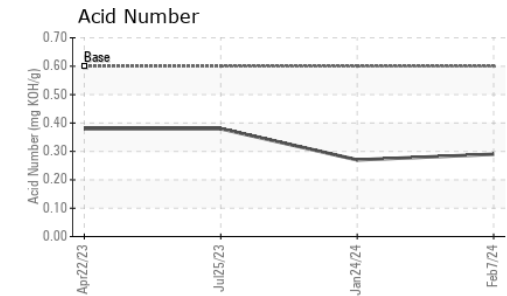
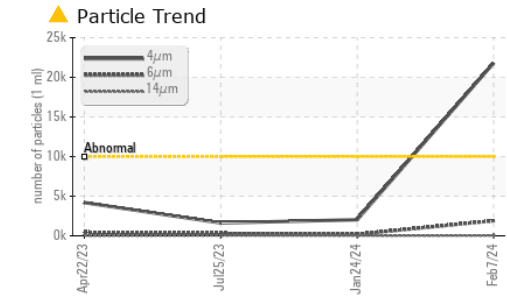
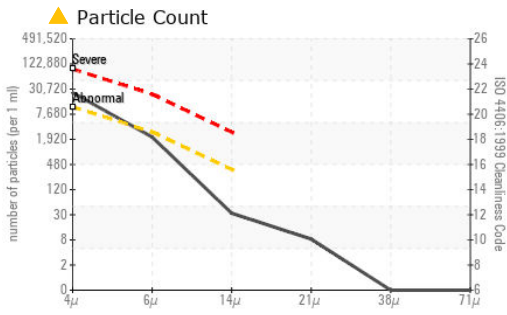
CONTAMINATION

There is a high amount of silt (particulates < 6 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0886563	WC0891231	WC0818091
Sample Date		Client Info		07 Feb 2024	24 Jan 2024	25 Jul 2023
Machine Age	hrs	Client Info		16717	14987	14912
Oil Age	hrs	Client Info		4	0	0
Filter Age	hrs	Client Info		4	0	0
Oil Changed		Client Info		Changed	Not Changd	N/A
Filter Changed		Client Info		Changed	Not Changd	N/A
Sample Status				ABNORMAL	NORMAL	MARGINAL
Iron	ppm	ASTM D5185m	>100	3	<1	2
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	0	0
Lead	ppm	ASTM D5185m	>50	<1	0	<1
Copper	ppm	ASTM D5185m	>75	53	50	▲ 37
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>50	<1	0	<1
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>10000	▲ 21808	2031	1623
Particles >6µm		ASTM D7647	>2500	1903	183	301
Particles >14µm		ASTM D7647	>320	29	9	36
Particles >21µm		ASTM D7647	>80	7	2	11
Particles >38µm		ASTM D7647	>20	0	0	2
Particles >71µm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ 22/18/12	18/15/10	18/15/12
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	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		7	1	4
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	<1
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	0	0	0	5
Calcium	ppm	ASTM D5185m	48	23	66	108
Phosphorus	ppm	ASTM D5185m	337	296	291	414
Zinc	ppm	ASTM D5185m	426	312	333	507
Sulfur	ppm	ASTM D5185m	2280	1078	1302	1728
Acid Number (AN)	mg KOH/g	ASTM D8045	.6	0.29	0.27	0.38
Visc @ 40°C	cSt	ASTM D445	45.9	41.2	39.5	39.0



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0886563 **Received** : 29 Feb 2024
Lab Number : 06104501 **Tested** : 06 Mar 2024
Unique Number : 10902731 **Diagnosed** : 06 Mar 2024 - Jonathan Hester
Test Package : MAR 2 (Additional Tests: PRTCOUNT)

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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)