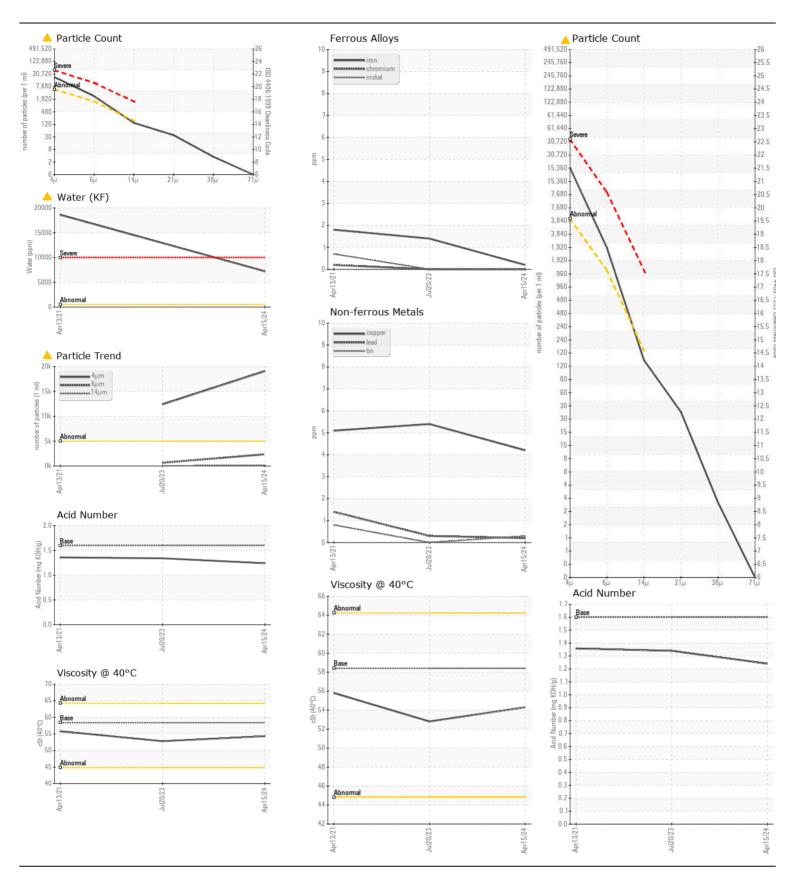
**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL ABNORMAL NORMAL** 

Machine Id

## TRAVELIFT (S/N 3331-0907) Component Hydraulic System

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check for the source of water entry. The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.	Sample Number		Client Info		MW0059793	MW0059736	MW0021214
	Sample Date		Client Info		15 Apr 2024	20 Jul 2023	13 Apr 202
	Machine Age	yrs	Client Info		1	1	1
	Oil Age	yrs	Client Info		1	1	1
	Filter Age	yrs	Client Info		1	1	1
	Oil Changed		Client Info		Not Changd	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				ABNORMAL	ABNORMAL	SEVERE
WEAR	Iron	ppm	ASTM D5185m	>20	<1	1	2
WEAR	Chromium	ppm	ASTM D5185m		0	0	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	0	<1
	Titanium	ppm	ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m		0	0	1
	Aluminum	ppm	ASTM D5185m	>10	<1	<1	<1
	Lead	ppm	ASTM D5185m	>20	<1	<1	1
	Copper	ppm	ASTM D5185m	>20	4	5	5
	Tin	ppm	ASTM D5185m	>10	<1	0	<1
	Vanadium	ppm	ASTM D5185m		0	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	nnm	ASTM D5185m	×15	9	6	<u>4</u> 2
CONTAININATION	Potassium	ppm	ASTM D5185m		ء <1	<1	1
There is a high amount of silt (particulates < 14 microns in size) present in the oil. There is a moderate concentration of water present in the oil.	Water	ppm %	ASTM D316301		▲ 0.719		<b>▲</b> 1.86
	ppm Water	ppm	ASTM D6304		▲ 7190		▲ 18600
	Particles >4µm	ppiii	ASTM D7647		<u>▲</u> 19073	<u> </u>	
	Particles >6µm		ASTM D7647		2335	635	
	Particles >14µm		ASTM D7647		124	31	
	Particles >21µm		ASTM D7647	>40	32	6	
	Particles >38µm		ASTM D7647	>10	3	0	
	Particles >71μm		ASTM D7647	>3	0	0	
	Oil Cleanliness		ISO 4406 (c)	>19/17/14	<u> </u>	<u> </u>	
	Silt	scalar	*Visual	NONE	NONE	NONE	▲ MODE
	Debris	scalar	*Visual	NONE	NONE	NONE	▲ MODE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	MILKY
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.05	<b>0.2%</b>	NEG	▲ 0.2%
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3	0	0
The AN level is acceptable for this fluid.	Boron	ppm	ASTM D5185m	10	22	7	18
	Barium	ppm	ASTM D5185m		0	2	0
	Molybdenum	ppm	ASTM D5185m		6	3	2
	Manganese	ppm	ASTM D5185m		<1	0	<1
	Magnesium	ppm	ASTM D5185m		40	16	17
	Calcium	ppm	ASTM D5185m	3200	2747	2717	2431
	Phosphorus	ppm	ASTM D5185m		1030	996	928
	Zinc	ppm	ASTM D5185m		1214	1199	1180
	Sulfur	ppm	ASTM D5185m		4203	4086	3863
	Acid Number (AN)	mg KOH/g	ASTM D8045		1.24	1.34	1.358
	Visc @ 40°C	cSt	ASTM D445	58.4	54.3	52.8	55.8





Certificate L2367

Laboratory

Sample No. Lab Number : 06153017

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : MW0059793

Received **Tested** Unique Number: 10983095 Diagnosed Test Package : MAR 2 ( Additional Tests: KF )

: 22 Apr 2024 : 22 Apr 2024 - Don Baldridge

: 18 Apr 2024

**MARITIME COMPANY** 3802 PORT RIVER RD PASCAGOULA, MS US 39567

Contact: MARK KOPSZYWA mark.kopszywa@signetmaritime.com T:

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) F: (228)769-0629