



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id  
**Tenford Forward Steering Gear Hydraulics (S/N 11494.1991)**

Component  
**Forward Steering**

Fluid  
**TOTAL EQUIVIS ZS 68 (100 LTR)**

## RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. We suspect that the abnormal contaminant(s) is the result of incorrect sampling technique. **DISCLAIMER:** Interpretation of results is based on the sample as received from the customer. The condition of the sample and the method of sampling cannot be verified.

## WEAR

All component wear rates are normal.

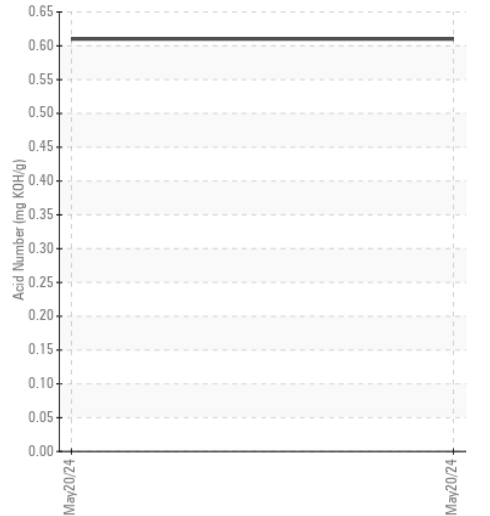
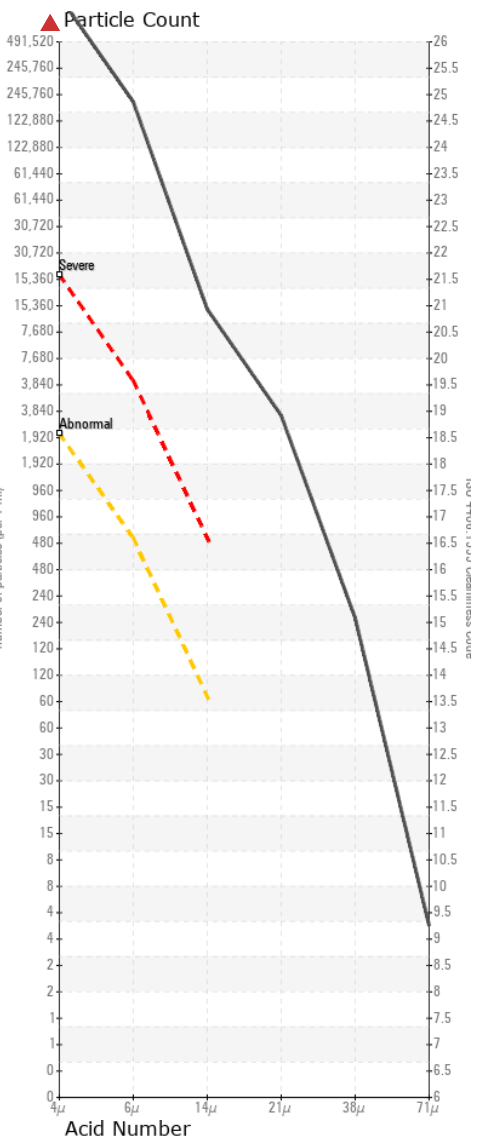
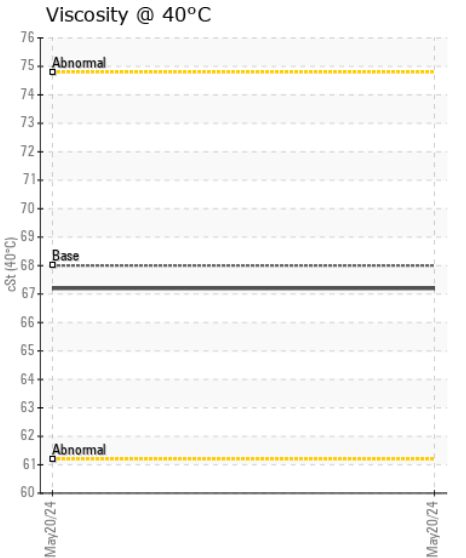
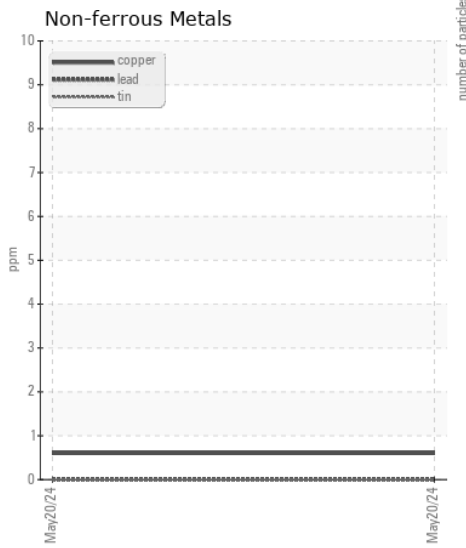
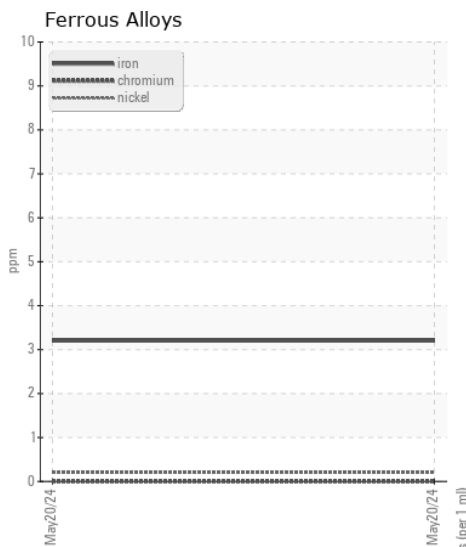
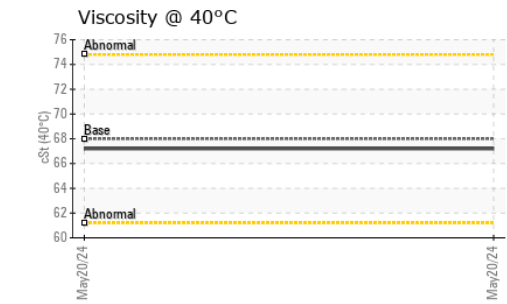
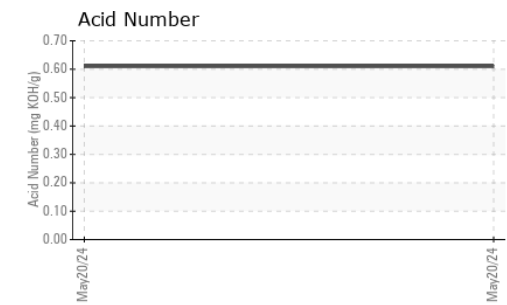
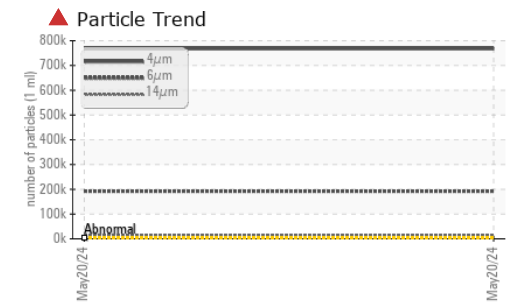
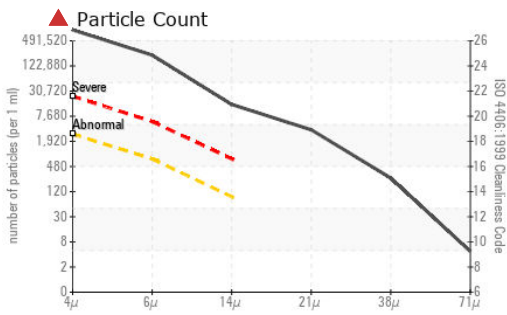
## CONTAMINATION

There is a high amount of particulates (2 to 100 microns in size) present in the fluid. Light concentration of visible dirt/debris present in the fluid.

## FLUID CONDITION

The AN level is acceptable for this fluid. The fluid is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0861275</b>	---	---
Sample Date		Client Info		<b>20 May 2024</b>	---	---
Machine Age		Client Info		<b>0</b>	---	---
Oil Age		Client Info		<b>0</b>	---	---
Filter Age		Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>N/A</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>SEVERE</b>	---	---
Iron	ppm	ASTM D5185(m)	>50	<b>3</b>	---	---
Chromium	ppm	ASTM D5185(m)	>15	<b>0</b>	---	---
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185(m)	>10	<b>0</b>	---	---
Copper	ppm	ASTM D5185(m)	>50	<b>&lt;1</b>	---	---
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silicon	ppm	ASTM D5185(m)	>15	<b>1</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Particles >4µm		ASTM D7647	>2500	<b>▲ 767956</b>	---	---
Particles >6µm		ASTM D7647	>640	<b>▲ 192323</b>	---	---
Particles >14µm		ASTM D7647	>80	<b>▲ 12772</b>	---	---
Particles >21µm		ASTM D7647	>20	<b>▲ 3173</b>	---	---
Particles >38µm		ASTM D7647	>4	<b>▲ 224</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>4</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	<b>▲ 27/25/21</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>▲ VLITE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---
Sodium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Boron	ppm	ASTM D5185(m)		<b>2</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)		<b>3</b>	---	---
Calcium	ppm	ASTM D5185(m)		<b>62</b>	---	---
Phosphorus	ppm	ASTM D5185(m)		<b>315</b>	---	---
Zinc	ppm	ASTM D5185(m)		<b>410</b>	---	---
Sulfur	ppm	ASTM D5185(m)		<b>6990</b>	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.61</b>	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	68	<b>67.2</b>	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0861275 **Received** : 21 Jun 2024  
**Lab Number** : 02643458 **Tested** : 24 Jun 2024  
**Unique Number** : 5800997 **Diagnosed** : 24 Jun 2024 - Kevin Marson  
**Test Package** : MAR 2 ( Additional Tests: PrtCount, TAN Man )

**CANSHIP UGLAND - SVANOY**  
 1315 TOPSAIL ROAD, PO BOX 8040 STN A  
 ST JOHNS, NL  
 CA AIB 3M7  
 Contact: Guillaume Bernier  
 gbernier@canship.com

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.