



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Machine Id  
**HL8136 Fore Deck Machinery - Fwd Tank**  
 Component  
**Tank Hydraulic System**  
 Fluid  
**ESSO UNIVIS N 22 (850 LTR)**

## RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0929750</b>	WC0709113	WC0676981
Sample Date		Client Info		<b>30 May 2024</b>	20 Mar 2023	29 May 2022
Machine Age	yrs	Client Info		<b>0</b>	0	0
Oil Age	yrs	Client Info		<b>0</b>	0	0
Filter Age	yrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	N/A	Not Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>ATTENTION</b>	SEVERE	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Lead	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	2
Copper	ppm	ASTM D5185(m)	>20	<b>8</b>	7	7
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

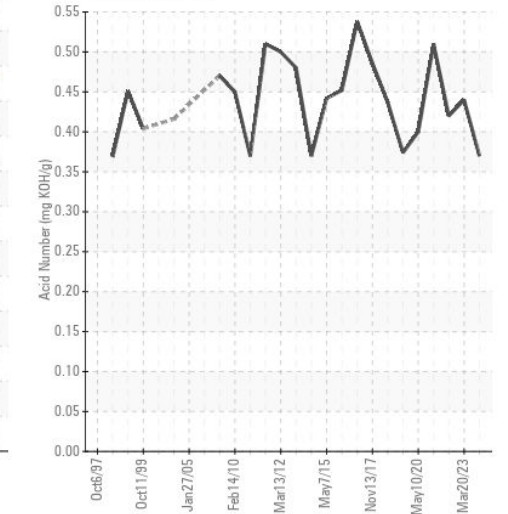
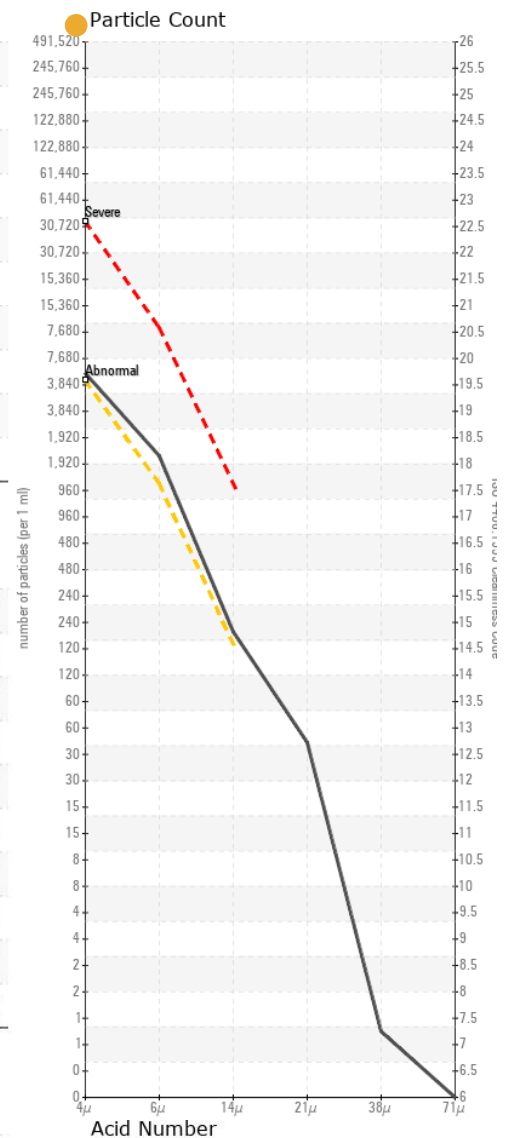
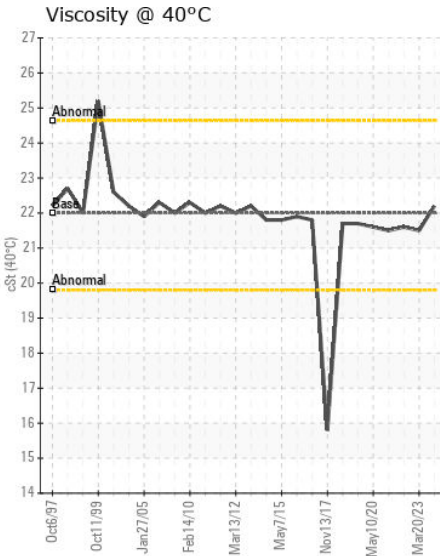
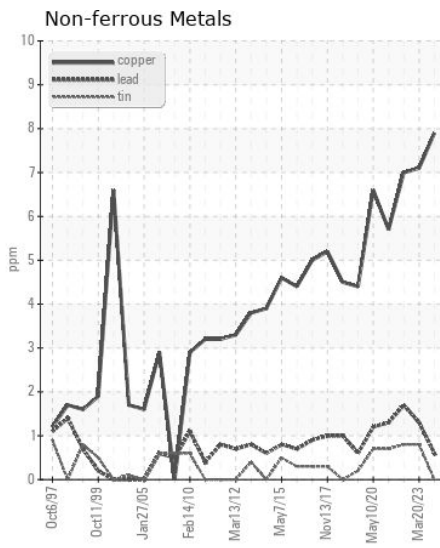
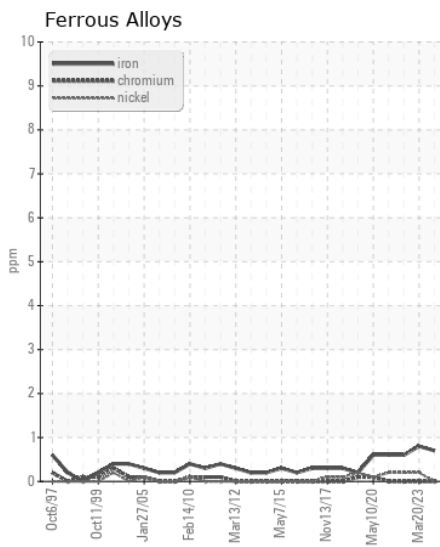
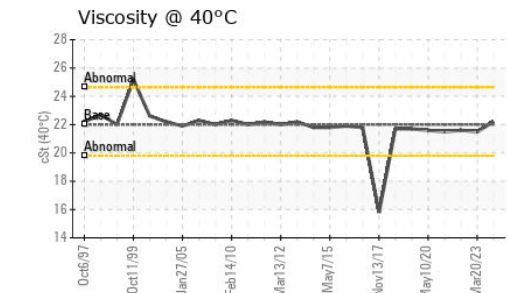
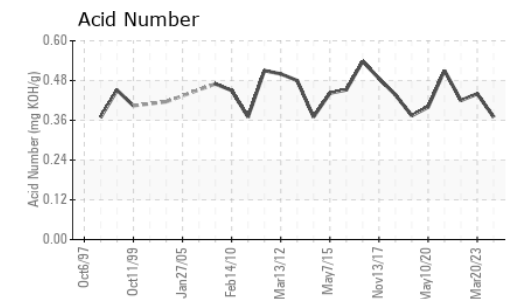
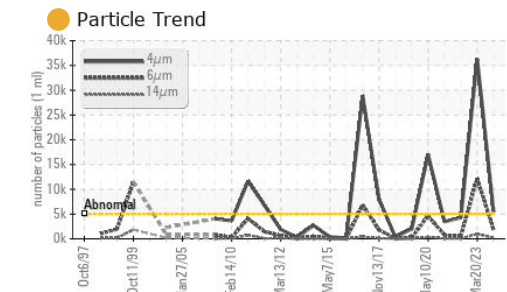
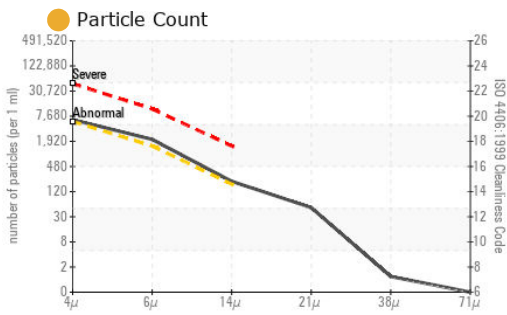
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<b>0</b>	1	1
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	1
Water		WC Method	>0.05	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>5516</b>	36282	4253
Particles >6µm		ASTM D7647	>1300	<b>1869</b>	12191	510
Particles >14µm		ASTM D7647	>160	<b>187</b>	946	34
Particles >21µm		ASTM D7647	>40	<b>44</b>	238	8
Particles >38µm		ASTM D7647	>10	<b>1</b>	11	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>20/18/15</b>	22/21/17	19/16/12
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>VLITE</b>	VLITE	VLITE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	<b>NEG</b>	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 D5185(m)		<b>&lt;1</b>	2	2
Boron	ppm	ASTM D5185(m)	.3	<b>0</b>	0	<1
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	0	<b>2</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	49	<b>33</b>	35	34
Phosphorus	ppm	ASTM D5185(m)	192	<b>367</b>	392	372
Zinc	ppm	ASTM D5185(m)	237	<b>386</b>	412	397
Sulfur	ppm	ASTM D5185(m)		<b>1430</b>	1439	1415
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.37</b>	0.44	0.42
Visc @ 40°C	cSt	ASTM D7279(m)	22	<b>22.2</b>	21.5	21.6



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0929750  
**Lab Number** : 02639886  
**Unique Number** : 5789048  
**Test Package** : MAR 2

**Received** : 05 Jun 2024  
**Tested** : 07 Jun 2024  
**Diagnosed** : 07 Jun 2024 - Wes Davis

**CANADIAN COAST GUARD**  
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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.