



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
SERVO PUMP

Component
Winch

Fluid
CASTROL ALPHA SP 68 (500 LTR)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MAR 2 test kits, this testkit includes AN to determine the suitability of the oil for continued use.

WEAR

All component wear rates are normal.

CONTAMINATION

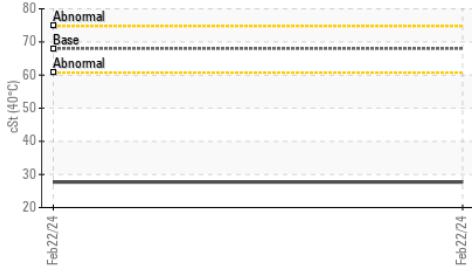
There is no indication of any contamination in the oil.

FLUID CONDITION

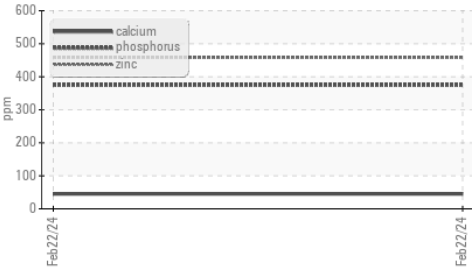
Viscosity of sample indicates oil is within ISO 32 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service (unconfirmed).

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0787204	---	---
Sample Date		Client Info		22 Feb 2024	---	---
Machine Age	hrs	Client Info		13829	---	---
Oil Age	hrs	Client Info		659	---	---
Filter Age	hrs	Client Info		659	---	---
Oil Changed		Client Info		Not Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185(m)	>150	<1	---	---
Chromium	ppm	ASTM D5185(m)	>10	0	---	---
Nickel	ppm	ASTM D5185(m)	>10	0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)	>5	<1	---	---
Lead	ppm	ASTM D5185(m)	>15	<1	---	---
Copper	ppm	ASTM D5185(m)	>80	3	---	---
Tin	ppm	ASTM D5185(m)		0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>25	<1	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Water		WC Method	>0.2	NEG	---	---
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*	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185(m)		<1	---	---
Boron	ppm	ASTM D5185(m)		0	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		0	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)		<1	---	---
Calcium	ppm	ASTM D5185(m)		45	---	---
Phosphorus	ppm	ASTM D5185(m)		375	---	---
Zinc	ppm	ASTM D5185(m)		458	---	---
Sulfur	ppm	ASTM D5185(m)		3400	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	68	▲ 27.7	---	---

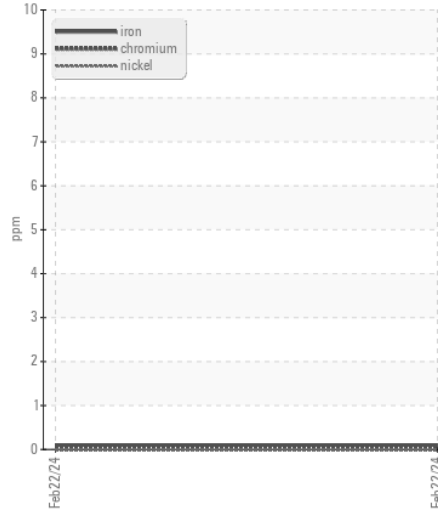
▲ Viscosity @ 40°C



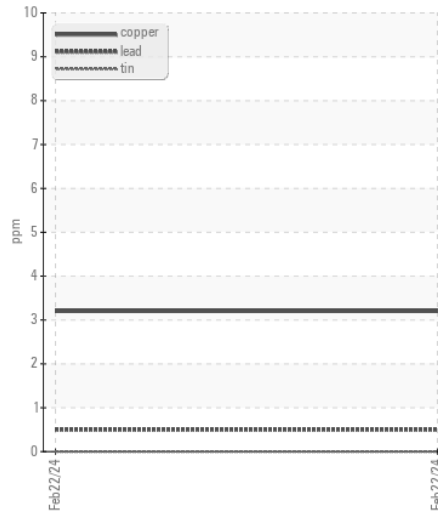
Additives



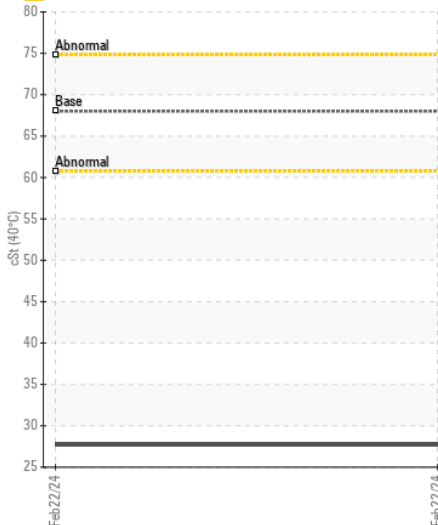
Ferrous Alloys



Non-ferrous Metals



▲ Viscosity @ 40°C



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0787204
Lab Number : 02619935
Unique Number : 5737045
Test Package : MAR 1

Horizon Maritime Services Ltd. - K.J. Gardner
 101 Research Drive, Main Floor
 Dartmouth, NS
 CA B2Y 4T6
 Contact: Engine Room
 chiefeng.kjgardner@horizonmaritime.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.

T:
F: