

OIL ANALYSIS REPORT

Area **PROPULSION EQUIPMENT** Machine Id **REINTJES REDUCTION GEARBOX (CAL012) (S/N K84269)** Component

Component Gearbox

Fluid MOBIL MOBILGEAR 600 XP ISO 150 (500 LTR)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

Wear

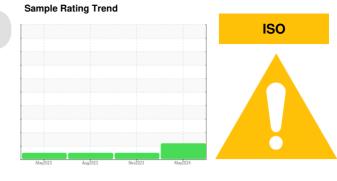
All component wear rates are normal.

Contamination

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

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



Sample Date Client Info 17 May 2024 07 Nov 2023 09 Aug 2023 Machine Age hrs Client Info 24554 21847 20530 Oil Age hrs Client Info 24554 21847 20530 Oil Changed Client Info N/A N/A N/A Sample Status Imit/base current history1 history2 Water WC Method >0.2 NEG NEG NEG Chromium ppm ASTM 05/85(m) >150 3 3 2 Chromium ppm ASTM 05/85(m) >10 0 0 0 Nickel ppm ASTM 05/85(m) >10 0 0 0 Nickel ppm ASTM 05/85(m) >10 0 0 0 Nickel ppm ASTM 05/85(m) >6 0 1 1 Autorn ppm ASTM 05/85(m) >6 0 0 0 Numanum ppm	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
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Oil Cleanliness ISO 4406 (c) >21/19/16 🔺 23/20/14 16/14/11	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >20 >20 limit/base >20000 >5000 >5000 >640 >160	25 0 <1 0 30 35 339 42 8354 <1 current 0 3 <1 current 0 3 <1 € 4 0 3 <1 0 3 <1 0 3 <1 0 1 7 0 1 7	26 0 <1 0 31 38 359 45 8750 <1 history1 <1 1 <1 1 <1 474 98 11 5	31 <1 1 0 33 39 355 47 8471 <1 <1 *1 2 0 history2 <1 2 0 history2
0:26:10) Rev: 1 Submitted By: Alf Hartery	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >20 >20 >20 limit/base >20000 >20000 >5000 >5000 >640 >160 >40	25 0 <1 0 30 35 339 42 8354 <1 current 0 3 <1 current 0 54470 ● 6341 150 17 1	26 0 <1 0 31 38 359 45 8750 <1 history1 <1 1 <1 1 <1 474 98 11 5 1	31 <1 1 0 33 39 355 47 8471 <1 *1 *1 *1 *1 *1 *1 *1 *1 *1 *1 *1 *1 *1

Submitted By: Alf Hartery



🔺 Particle Count

🔺 Particle Trend

Aug9/23

491,520 122,880

(TEL, 000 (TEL, 30, 720 (TEL, 30, 680 (1, 920) (

120 30

8

60 € 50k u () 40k 30k 20 P 10F 0

Mav1

0.70 0.60 (B/HO) (B/H Ê 0.40 - 문 0.30 Acid Nu 0.20

0.10 0.00

Acid Number

OIL ANALYSIS REPORT

Acid Number (AN)	mg KOH/g	ASTM D974*		0.60	0.57	
VISUAL		method	limit/base	current	history1	history
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	VLITE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	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*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history
Visc @ 40°C	cSt	ASTM D7279(m)	150	143	143	143
Visc @ 100°C	cSt	ASTM D7279(m)	14.7	14.1	14.2	14.1
Viscosity Index (VI)	Scale	ASTM D2270*	97	95	96	95
SAMPLE IMAG	iES	method	limit/base	current	history1	history

.24

22 8

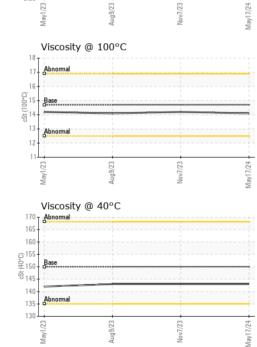
20 4406:1999 Cleanlin 16 14

12 10 8

38/

214

Bottom



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **Ocean Choice International - MV Calvert** CALA Sample No. : PC0080231 Received : 28 May 2024 1315 Topsail Rd, P.O. Box 8190 Lab Number : 02638277 Tested : 30 May 2024 St. John`s, NL ISO 17025:2017 Accredited Laboratory Unique Number : 5787439 Diagnosed : 30 May 2024 - Kevin Marson CA A1B 3N4 Test Package : IND 2 (Additional Tests: KV100, TAN Man, VI) Contact: Calvert Engine Control Room To discuss this sample report, contact Customer Service at 1-800-268-2131. calvertengine@oceanchoice.com Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: Validity of results and interpretation are based on the sample and information as supplied. F:

Report Id: MVCALVERT [WCAMIS] 02638277 (Generated: 05/30/2024 10:26:11) Rev: 1

Submitted By: Alf Hartery Page 2 of 2