WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

Machine Ic

DG # (S/N HCM134C1)

Component 1 Auxiliary Engine

SHELL 15W40 (60 LTR)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		WC0722085		
	Sample Date		Client Info		22 Apr 2023		
	Machine Age	hrs	Client Info		8530		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
VEAR	PQ		ASTM D8184*		0		
All component wear rates are normal.	Iron	ppm	ASTM D5185(m)	>35	3		
	Chromium	ppm	ASTM D5185(m)	>4	0		
	Nickel	ppm	ASTM D5185(m)	>2	0		
	Titanium	ppm	ASTM D5185(m)	>2	<1		
	Silver	ppm	ASTM D5185(m)	>2	<1		
	Aluminum	ppm	ASTM D5185(m)	>25	2		
	Lead	ppm	ASTM D5185(m)	>7	1		
	Copper	ppm	ASTM D5185(m)	>65	5		
	Tin	ppm	ASTM D5185(m)	>4	0		
	Vanadium	ppm	ASTM D5185(m)		0		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>20	3		
	Potassium	ppm	ASTM D5185(m)	>20	1		
There is no indication of any contamination in the oil.	Fuel		WC Method	>4.0	<1.0		
	Water		WC Method	>0.1	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*		0		
	Nitration	Abs/cm	ASTM D7624*	>20	5.8		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	18.9		
	Emulsified Water	scalar	Visual*	>0.1	NEG		
LUID CONDITION	Sodium	ppm	ASTM D5185(m)	>150	9		
	Boron	ppm	ASTM D5185(m)		107		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		59		
	Manganese	ppm	ASTM D5185(m)		<1		
	Magnesium	ppm	ASTM D5185(m)		467		
	Calcium	ppm	ASTM D5185(m)		1700		
	Phosphorus	ppm	ASTM D5185(m)		1091		
	Zinc	ppm	ASTM D5185(m)		1153		
	Sulfur	ppm	ASTM D5185(m)		3170		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	14.8		
	Base Number (BN)	mg KOH/g	ASTM D2896*		8.48		
	Visc @ 100°C	cSt	ASTM D7279(m)		12.3		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number

: WC0722085

: 5567078

Test Package : MAR 2 (Additional Tests: PQ)

: 02554063

Recieved : 28 Apr 2023 Diagnosed

: 28 Apr 2023 Diagnostician : Wes Davis

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CANSHIP UGLAND - CRT EXPRESS 1315 TOPSAIL ROAD, PO BOX 8040 STN A ST JOHNS, NL

CA A1B 3M7 Contact: Peter Collins tecnical@canship.com

> T: (709)782-3333 F: (709)782-0225

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.