

OIL ANALYSIS REPORT

Area

Propulsion

12H - Propulseur d'étrave rés d'éxpansion (S/N 50057032)

Hydraulic System

ESSO SPARTAN EP 100 (--- GAL)

Sample Rating Trend ISO And 2024

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

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

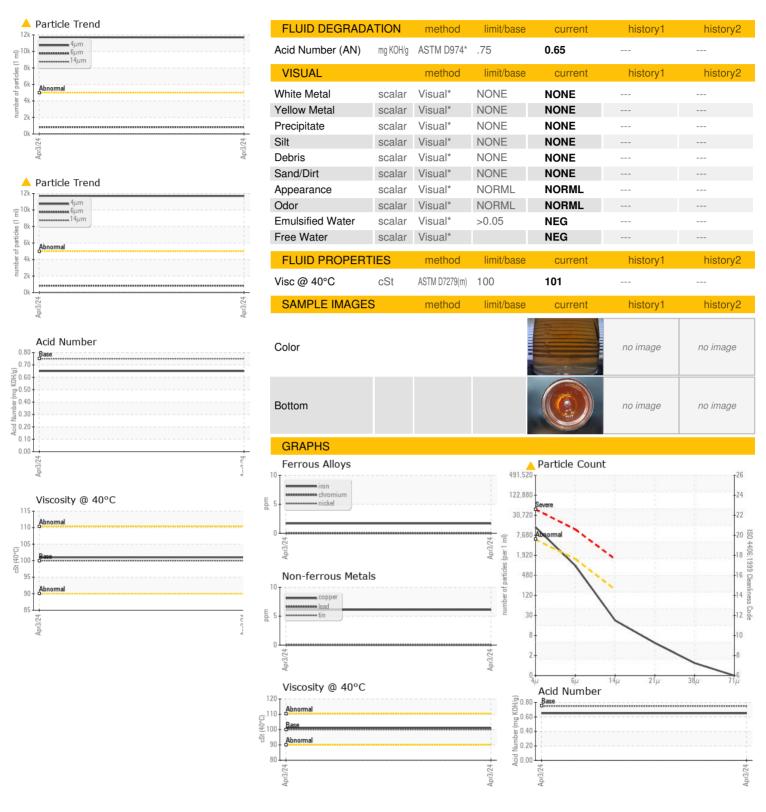
Fluid Condition

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 INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0866064		
Sample Date		Client Info		03 Apr 2024		
Machine Age	hrs	Client Info		2272		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	2		
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)	>10	<1		
Lead	ppm	ASTM D5185(m)	>20	0		
Copper	ppm	ASTM D5185(m)	>20	6		
Tin	ppm	ASTM D5185(m)	>10	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
		, ,				
ADDITIVES		method	limit/base	current	historv1	historv2
ADDITIVES	222	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2.6	11		
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	2.6 0.2	11 0		
Boron Barium Molybdenum	ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	2.6	11 0 0		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	2.6 0.2 0.0	11 0 0 -<1		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	2.6 0.2 0.0	11 0 0 0 <1 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m)	2.6 0.2 0.0 0.2 2.1	11 0 0 <1 <1 2		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185(m)	2.6 0.2 0.0 0.2 2.1 250	11 0 0 0 <1 <1 2 325		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	2.6 0.2 0.0 0.2 2.1 250 0.4	11 0 0 0 <1 <1 2 325		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	2.6 0.2 0.0 0.2 2.1 250	11 0 0 <1 <1 2 325 11 8265		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	2.6 0.2 0.0 0.2 2.1 250 0.4	11 0 0 0 <1 <1 2 325		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	2.6 0.2 0.0 0.2 2.1 250 0.4 4048	11 0 0 <1 <1 2 325 11 8265 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	2.6 0.2 0.0 0.2 2.1 250 0.4 4048	11 0 0 <1 <1 2 325 11 8265 <1 current		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	2.6 0.2 0.0 0.2 2.1 250 0.4 4048	11 0 0 <1 <1 2 325 11 8265 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	2.6 0.2 0.0 0.2 2.1 250 0.4 4048	11 0 0 <1 <1 2 325 11 8265 <1 current	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm	ASTM D5185(m)	2.6 0.2 0.0 0.2 2.1 250 0.4 4048 limit/base >15	11 0 0 <1 <1 2 325 11 8265 <1 current 0 3	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm	ASTM D5185(m)	2.6 0.2 0.0 0.2 2.1 250 0.4 4048 limit/base >15 >20	11 0 0 <1 <1 2 325 11 8265 <1 current 0 3 <1	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLII	ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	2.6 0.2 0.0 0.2 2.1 250 0.4 4048 limit/base >15 >20 limit/base	11 0 0 <1 <1 2 325 11 8265 <1 current 0 3 <1		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLII	ppm	ASTM D5185(m) MASTM D5185(m) ASTM D5185(m)	2.6 0.2 0.0 0.2 2.1 250 0.4 4048 limit/base >15 >20 limit/base >5000	11 0 0 0 <1 <1 2 325 11 8265 <1 current 0 3 <1 current 11697	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIF Particles >4µm Particles >6µm	ppm	ASTM D5185(m) method ASTM D5185(m)	2.6 0.2 0.0 0.2 2.1 250 0.4 4048 limit/base >15 >20 limit/base >5000 >1300	11 0 0 0 <1 <1 2 325 11 8265 <1 current 0 3 <1 current 11697 833	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIT Particles >4µm Particles >6µm Particles >14µm	ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D7647 ASTM D7647	2.6 0.2 0.0 0.2 2.1 250 0.4 4048 limit/base >15 >20 limit/base >5000 >1300 >160	11 0 0 0 <1 <1 2 325 11 8265 <1 current 0 3 <1 current ▲ 11697 833 19	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLII Particles >4µm Particles >14µm Particles >21µm	ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	2.6 0.2 0.0 0.2 2.1 250 0.4 4048 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	11 0 0 0 <1 <1 2 325 11 8265 <1 current 0 3 <1 current 11697 833 19 4	history1 history1	history2 history2



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Test Package : MAR 2

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Lab Number : 02630591 Unique Number : 5763723

: WC0866064 Received **Tested**

: 22 Apr 2024 : 23 Apr 2024 Diagnosed

: 23 Apr 2024 - Kevin Marson

CA G1K 7Y7 Contact: Pierre Radisson PierreRadissonCE@ccgs-ngcc.gc.ca

CCGS Pierre Radisson, 101 Boul. Champlain

T: (418)563-1737

Canadian Coast Guard

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.

Quebec, QC