

# **OIL ANALYSIS REPORT**



ISO



# **622 BANBURY MOTOR**

**Inboard Journal Bearing** 

ESSO NUTO H ISO 68 (1 QTS)

# **DIAGNOSIS**

### Recommendation

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

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

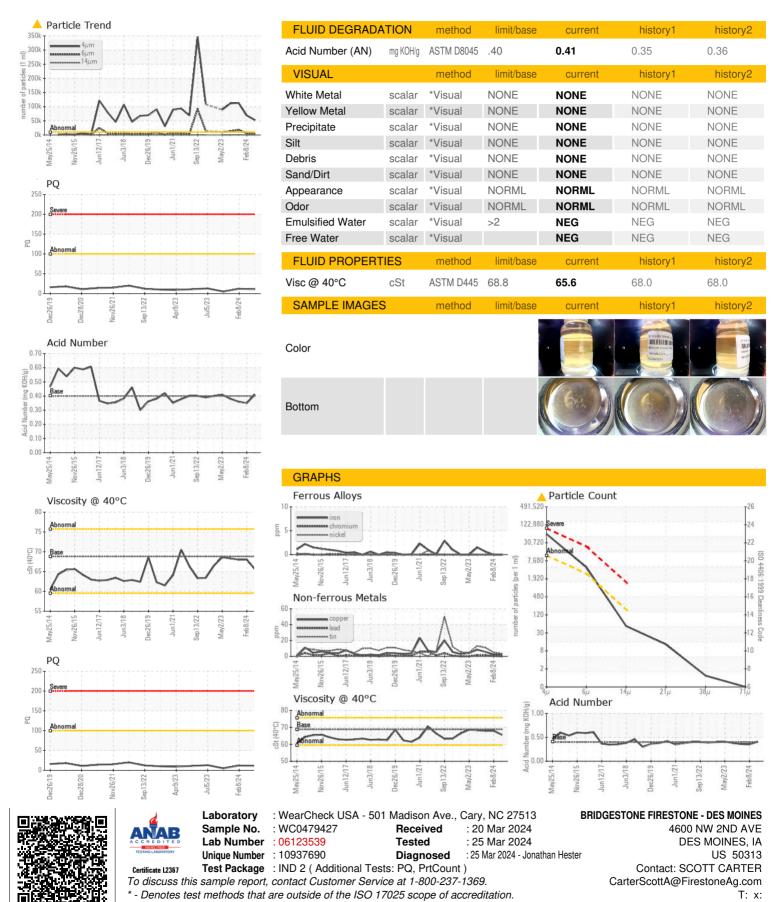
#### **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

9/2014 Nov2015 Jun2017 Jun2016 Des2019 Jun2021 Sep2022 May2023 Feb2024						
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0479427	WC06087145	WC0838933
Sample Date		Client Info		14 Mar 2024	08 Feb 2024	10 Nov 2023
Machine Age	hrs	Client Info		0	0	6
Oil Age	hrs	Client Info		600	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		11	12	5
Iron	ppm	ASTM D5185m	>60	0	0	<1
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>4	0	0	<1
Lead	ppm		>250	0	<1	1
Copper	ppm	ASTM D5185m	>125	2	2	6
Tin Vanadium	ppm	ASTM D5185m	>80	4	5	11
Cadmium	ppm	ASTM D5185m		0	0	0
Gaumum	ppm	ASTIVI DOTOSITI		U	U	U
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1	history2
	ppm ppm				,	
Boron Barium Molybdenum	• •	ASTM D5185m	0	0	0	0 6 0
Boron Barium Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	0 0 0 <1	0 0 0 0 <1	0 6 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	0 0 0 <1 <1	0 0 0 <1 0	0 6 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 5 50	0 0 0 <1 <1 49	0 0 0 <1 0 40	0 6 0 0 1 48
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 5 50 330	0 0 0 <1 <1 49 342	0 0 0 <1 0 40 331	0 6 0 0 1 48 322
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 5 50 330 420	0 0 0 <1 <1 49 342 414	0 0 0 <1 0 40 331 433	0 6 0 0 1 48 322 399
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 5 50 330 420 3100	0 0 0 <1 <1 49 342 414 3493	0 0 0 <1 0 40 331 433 3009	0 6 0 0 1 48 322 399 3132
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 5 50 330 420 3100 limit/base	0 0 0 <1 <1 49 342 414 3493	0 0 0 <1 0 40 331 433 3009 history1	0 6 0 0 1 48 322 399 3132 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 5 50 330 420 3100	0 0 0 <1 <1 49 342 414 3493 current	0 0 0 0 <1 0 40 331 433 3009 history1	0 6 0 0 1 48 322 399 3132 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 5 50 330 420 3100 limit/base >50	0 0 0 <1 <1 49 342 414 3493 current 5 <1	0 0 0 0 <1 0 40 331 433 3009 history1 4	0 6 0 0 1 48 322 399 3132 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 5 50 330 420 3100 limit/base >50 >20	0 0 0 <1 <1 49 342 414 3493 current 5 <1	0 0 0 <1 0 40 331 433 3009 history1 4 <1	0 6 0 0 1 48 322 399 3132 history2 3 0 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 5 50 330 420 3100 limit/base >50 >20	0 0 0 <1 <1 49 342 414 3493 current 5 <1 0	0 0 0 0 <1 0 40 331 433 3009 history1 4 <1 0	0 6 0 0 1 48 322 399 3132 history2 3 0 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m	0 0 0 5 50 330 420 3100 limit/base >50 >20 limit/base	0 0 0 <1 <1 49 342 414 3493  current  5 <1 0  current  5 5 <1 0  current	0 0 0 <1 0 40 331 433 3009 history1 4 <1 0 history1	0 6 0 0 1 48 322 399 3132 history2 3 0 <1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m	0 0 0 5 50 330 420 3100 limit/base >50 >20 limit/base >10000 >2500	0 0 0 <1 <1 49 342 414 3493 current 5 <1 0 current ▲ 52332 4090	0 0 0 <1 0 40 331 433 3009 history1 4 <1 0 history1 △ 69046 △ 5841	0 6 0 0 1 48 322 399 3132 history2 3 0 <1 history2 113134 18279
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647	0 0 0 5 50 330 420 3100 limit/base >50 >20 limit/base >10000 >2500 >160	0 0 0 <1 <1 49 342 414 3493 current 5 <1 0 current ▲ 52332 ● 4090 45	0 0 0 <1 0 40 331 433 3009 history1 4 <1 0 history1 △ 69046 △ 5841 55	0 6 0 0 1 48 322 399 3132 history2 3 0 <1 history2 113134 18279 126
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 5 50 330 420 3100 limit/base >50 >20 limit/base >10000 >2500 >160 >40	0 0 0 <1 <1 <1 49 342 414 3493  current  5 <1 0  current  452332  4090 45 11	0 0 0 0 41 0 40 331 433 3009 history1 4 <1 0 history1 △ 69046 △ 5841 55 8	0 6 0 0 1 48 322 399 3132 history2 3 0 <1 history2 △ 113134 △ 18279 126 29
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 5 50 330 420 3100 limit/base >50 >20 limit/base >10000 >2500 >160 >40 >10	0 0 0 <1 <1 <1 49 342 414 3493      current  5 <1 0     current  1 52332 4090 45 11 1	0 0 0 0 40 331 433 3009 history1 4 <1 0 history1 △ 69046 △ 5841 55 8 0	0 6 0 0 1 48 322 399 3132 history2 3 0 <1 history2 △ 113134 △ 18279 126 29 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 5 50 330 420 3100 limit/base >50 >20 limit/base >10000 >2500 >160 >40 >10	0 0 0 <1 <1 <1 49 342 414 3493  current  5 <1 0  current  452332  4090 45 11	0 0 0 0 41 0 40 331 433 3009 history1 4 <1 0 history1 △ 69046 △ 5841 55 8	0 6 0 0 1 48 322 399 3132 history2 3 0 <1 history2 ▲ 113134 ▲ 18279 126 29



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Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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