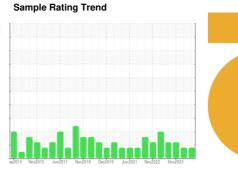


OIL ANALYSIS REPORT

412
Machine Id
273 BANBURY MOTOR

Inboard Journal Bearing

ESSO NUTO H ISO 68 (1 QTS)





DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

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

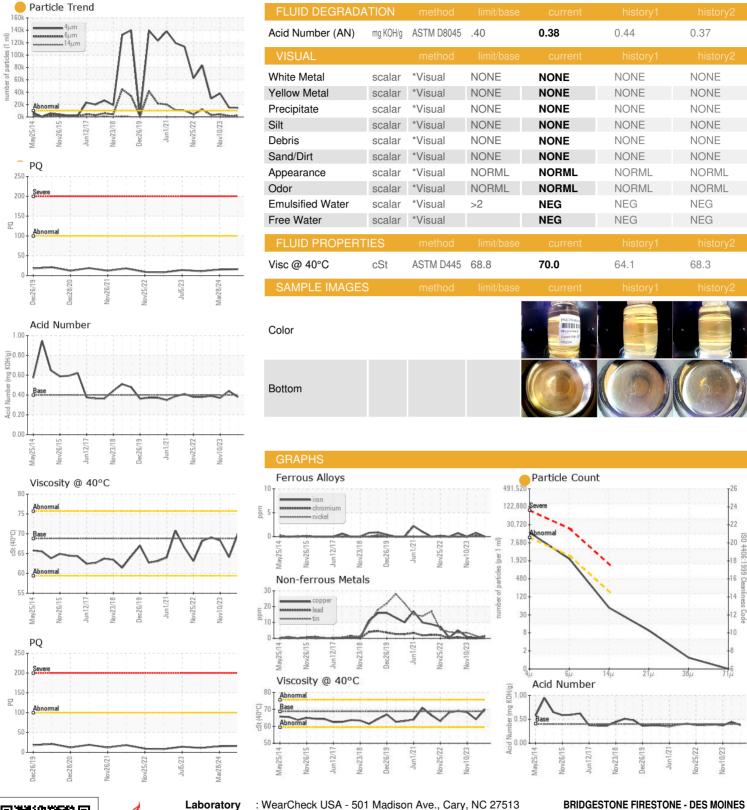
Fluid Condition

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

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0912084	WC0838925	WC0838935
Sample Date		Client Info		23 May 2024	28 Mar 2024	10 Nov 2023
Machine Age	hrs	Client Info		0	0	6
Oil Age	hrs	Client Info		0	720	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ATTENTION	ABNORMAL
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		16	15	11
Iron	ppm	ASTM D5185m	>60	0	<1	0
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>4	0	2	<1
Lead	ppm	ASTM D5185m	>250	<1	0	0
Copper	ppm	ASTM D5185m	>125	1	<1	<1
Tin	ppm	ASTM D5185m	>80	<1	2	4
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1 0	history2 0
	ppm	ASTM D5185m			· · · · · · · · · · · · · · · · · · ·	, and the second second
Boron	• • • • • • • • • • • • • • • • • • • •	ASTM D5185m	0	0	0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	0 0	0	0 7
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	0 0 0	0 0 <1	0 7 0
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	0 0 0	0 0 <1 0	0 7 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 0 <1	0 0 <1 0 5	0 7 0 0 <1
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 0 <1 52	0 0 <1 0 5 57	0 7 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 0 <1 52 339	0 0 <1 0 5 57 321	0 7 0 0 <1 48 321
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm 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 0 <1 52 339 430	0 0 <1 0 5 57 321 419	0 7 0 0 <1 48 321 402
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 limit/base	0 0 0 0 <1 52 339 430 3873	0 0 <1 0 5 57 321 419 6130	0 7 0 0 <1 48 321 402 3246
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 5 50 330 420 3100 limit/base	0 0 0 0 <1 52 339 430 3873	0 0 <1 0 5 57 321 419 6130 history1	0 7 0 0 <1 48 321 402 3246 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 5 50 330 420 3100 limit/base	0 0 0 0 <1 52 339 430 3873 current	0 0 <1 0 5 57 321 419 6130 history1	0 7 0 0 0 <1 48 321 402 3246 history2 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 5 50 330 420 3100 limit/base	0 0 0 0 <1 52 339 430 3873 current	0 0 <1 0 5 57 321 419 6130 history1	0 7 0 0 0 <1 48 321 402 3246 history2 4 0
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 0 <1 52 339 430 3873 current 2 1	0 0 <1 0 5 57 321 419 6130 history1 5 0 <1	0 7 0 0 0 <1 48 321 402 3246 history2 4 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	0 0 0 5 50 330 420 3100 limit/base >50	0 0 0 0 <1 52 339 430 3873 current 2 1 0	0 0 <1 0 5 57 321 419 6130 history1 5 0 <1	0 7 0 0 0 <1 48 321 402 3246 history2 4 0 <1 history2
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	0 0 0 5 50 330 420 3100 limit/base >50 	0 0 0 0 <1 52 339 430 3873 current 2 1 0 current	0 0 <1 0 5 57 321 419 6130 history1 5 0 <1 history1 15112	0 7 0 0 0 <1 48 321 402 3246 history2 4 0 <1 history2 △38069
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 >160	0 0 0 0 <1 52 339 430 3873 current 2 1 0 current 14677 1962	0 0 <1 0 5 5 57 321 419 6130 history1 5 0 <1 history1 15112 1769	0 7 0 0 0 <1 48 321 402 3246 history2 4 0 <1 history2 ▲ 38069 ● 4127
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 0 <1 52 339 430 3873 current 2 1 0 current 14677 1962 46	0 0 <1 0 5 57 321 419 6130 history1 5 0 <1 history1 15112 1769 40	0 7 0 0 0 <1 48 321 402 3246 history2 4 0 <1 history2 ▲ 38069 ▲ 4127 80
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 0 0 5 5 50 330 420 3100 limit/base >50 >20 limit/base >10000 >2500 >160 >40 >10	0 0 0 0 <1 52 339 430 3873 current 2 1 0 current 14677 1962 46 8	0 0 <1 0 5 57 321 419 6130 history1 5 0 <1 history1 15112 1769 40 10	0 7 0 0 0 <1 48 321 402 3246 history2 4 0 <1 history2 △ 38069 △ 4127 80 15



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

: WC0912084 Lab Number : 06196546 Unique Number: 11058669

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 31 May 2024 **Tested**

: 03 Jun 2024 Diagnosed

: 03 Jun 2024 - Don Baldridge Test Package : IND 2 (Additional Tests: PQ, PrtCount)

Contact: SCOTT CARTER CarterScottA@FirestoneAg.com T: x:

4600 NW 2ND AVE

DES MOINES, IA

US 50313

F: x:

To discuss this sample report, contact Customer Service at 1-800-237-1369. st - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: BRIDES [WUSCAR] 06196546 (Generated: 06/03/2024 14:30:35) Rev: 1

Contact/Location: SCOTT CARTER - BRIDES