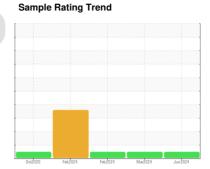


OIL ANALYSIS REPORT

412Machine Id **75 BANBURY GEARBOX** Gearbox

MOBIL MOBILGEAR SHC 460 (40 GAL)





Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

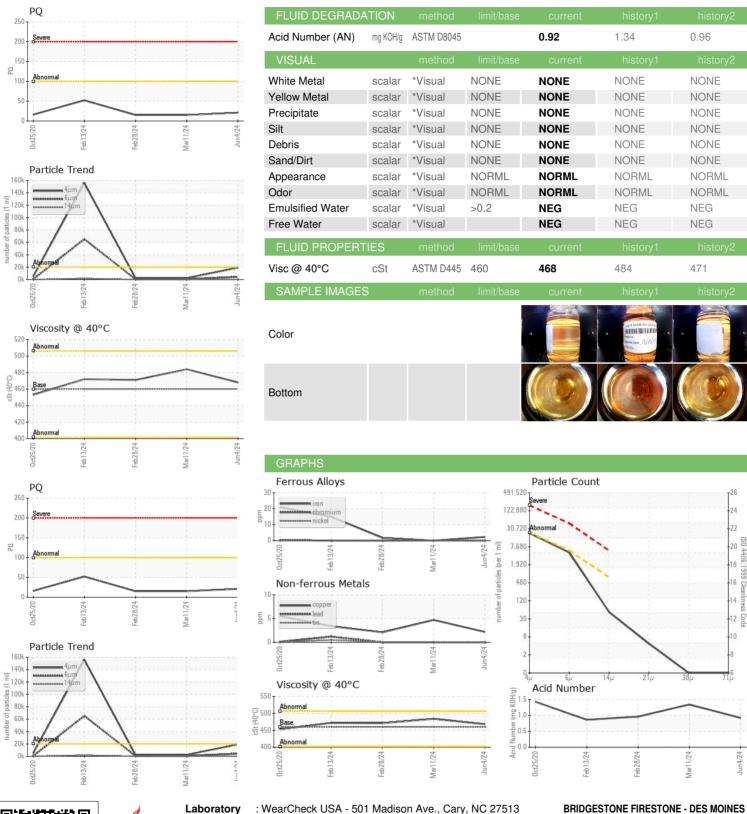
Fluid Condition

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		WC0912146	WC0912153	WC0838915
Sample Date		Client Info		04 Jun 2024	11 Mar 2024	28 Feb 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	1824	0
Oil Changed		Client Info		N/A	Not Changd	Filtered
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	٧	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		21	15	15
Iron	ppm	ASTM D5185m	>200	2	0	2
Chromium	ppm	ASTM D5185m	>15	0	<1	0
Nickel	ppm	ASTM D5185m	>15	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m		0	<1	0
Lead	ppm	ASTM D5185m		0	0	0
Copper	ppm	ASTM D5185m	>200	2	5	2
Tin	ppm	ASTM D5185m	>25	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		U	0	U
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1	history2
	ppm ppm		limit/base			
Boron	• •	ASTM D5185m	limit/base	0	0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0	0 0 0 <1	0 0 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 0 <1	0 0 0 <1 1	0 0 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 0 <1 5	0 0 0 <1 1	0 0 0 0 0 0
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	limit/base	0 0 0 0 <1 5 448	0 0 0 <1 1 6 457	0 0 0 0 0 0 5 491
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	limit/base	0 0 0 0 <1 5 448	0 0 0 <1 1 6 457	0 0 0 0 0 0 5 491 2
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 0 <1 5 448	0 0 0 <1 1 6 457 17 2625	0 0 0 0 0 5 491 2 2357
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	limit/base	0 0 0 0 <1 5 448	0 0 0 <1 1 6 457	0 0 0 0 0 0 5 491 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m		0 0 0 0 <1 5 448 21 2505 current	0 0 0 <1 1 6 457 17 2625 history1	0 0 0 0 0 5 491 2 2357 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >50	0 0 0 0 <1 5 448 21 2505 current	0 0 0 <1 1 6 457 17 2625 history1 6	0 0 0 0 0 5 491 2 2357 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	limit/base >50 >20	0 0 0 0 <1 5 448 21 2505 current 10 <1	0 0 0 <1 1 6 457 17 2625 history1 6 1	0 0 0 0 0 5 491 2 2357 history2 12 2
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	limit/base >50 >20 limit/base	0 0 0 0 <1 5 448 21 2505 current 10 <1 0	0 0 0 <1 1 6 457 17 2625 history1 6 1 <1	0 0 0 0 0 5 491 2 2357 history2 12 2 <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	limit/base >50 >20 limit/base >20000	0 0 0 0 <1 5 448 21 2505 current 10 <1 0	0 0 0 <1 1 6 457 17 2625 history1 6 1 <1	0 0 0 0 0 5 491 2 2357 history2 12 2 <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	limit/base >50 >20 limit/base >20000 >5000	0 0 0 0 0 <1 5 448 21 2505 current 10 <1 0 current 19068 4286	0 0 0 <1 1 6 457 17 2625 history1 6 1 <1 2394 544	0 0 0 0 0 5 491 2 2357 history2 12 2 <1 history2 1963 393
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647	limit/base >50 >20 limit/base >20000 >5000 >640	0 0 0 0 0 <1 5 448 21 2505 current 10 <1 0 current 19068 4286 45	0 0 0 <1 1 6 457 17 2625 history1 6 1 <1 history1 2394 544 33	0 0 0 0 0 5 491 2 2357 history2 12 2 <1 history2 1963 393 21
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 D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	limit/base >50 >20 limit/base >20000 >5000 >640 >160	0 0 0 0 41 5 448 21 2505 current 10 <1 0 current 19068 4286 45 4	0 0 0 <1 1 1 6 457 17 2625 history1 6 1 <1 +istory1 2394 544 33 10	0 0 0 0 0 5 491 2 2357 history2 12 2 <1 history2 1963 393 21
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 D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >50 >20 limit/base >20000 >5000 >640 >160 >40	0 0 0 0 0 <1 5 448 21 2505 current 10 <1 0 current 19068 4286 45 4	0 0 0 <1 1 6 457 17 2625 history1 6 1 <1 2394 544 33 10 1	0 0 0 0 0 5 491 2 2357 history2 12 2 <1 history2 1963 393 21 4
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 D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	limit/base >50 >20 limit/base >20000 >5000 >640 >160 >40	0 0 0 0 41 5 448 21 2505 current 10 <1 0 current 19068 4286 45 4	0 0 0 <1 1 1 6 457 17 2625 history1 6 1 <1 +istory1 2394 544 33 10	0 0 0 0 0 5 491 2 2357 history2 12 2 <1 history2 1963 393 21



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No. Lab Number

: 06206380 Unique Number : 11073841

: WC0912146

Received : 11 Jun 2024 **Tested** Diagnosed

: 13 Jun 2024 Test Package : IND 2 (Additional Tests: PQ, PrtCount)

: 13 Jun 2024 - Wes Davis

4600 NW 2ND AVE DES MOINES, IA

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

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - 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] 06206380 (Generated: 06/13/2024 08:09:19) Rev: 1

Contact/Location: SCOTT CARTER - BRIDES

US 50313

F: x: