

OIL ANALYSIS REPORT

NORMAL



FINISHING BAY CRANES **EST 10.1 NORTHWEST BRIDGE**

Component

Gearbox

GEAR OIL ISO 220 (--- GAL)

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

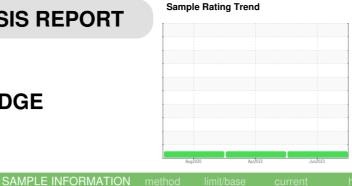
All component wear rates are normal.

Contamination

The water content is negligible. There is no indication of any contamination in the oil.

Fluid Condition

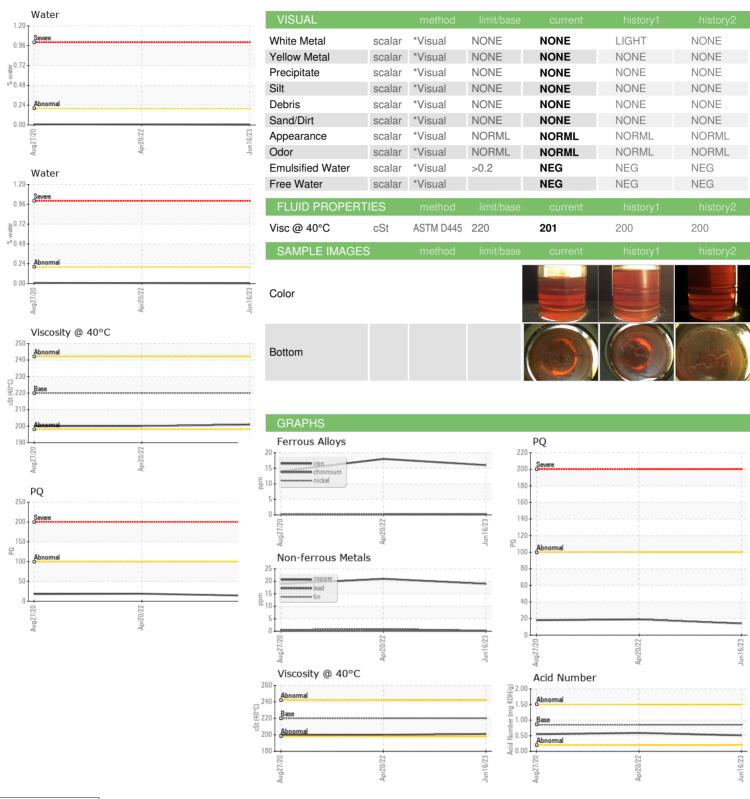
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



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Sample Number		Client Info		RP0034480	RP0024989	RP0009848
Sample Date		Client Info		16 Jun 2023	20 Apr 2022	27 Aug 2020
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		14	19	18
Iron	ppm	ASTM D5185m	>200	16	18	14
Chromium	ppm	ASTM D5185m	>15	<1	<1	<1
Nickel	ppm	ASTM D5185m	>15	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	0	<1	0
Lead	ppm	ASTM D5185m	>100	<1	<1	<1
Copper	ppm	ASTM D5185m	>200	19	21	19
Tin	ppm	ASTM D5185m	>25	0	<1	0
Antimony	ppm	ASTM D5185m	>5			0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES			11 1. 1		biotom/1	l-1-1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	o current	3	nistory2 5
	ppm				•	•
Boron		ASTM D5185m	50	0	3	5
Boron Barium	ppm	ASTM D5185m ASTM D5185m	50 15	0 0	3	5 2
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	50 15	0 0 0	3 0 0	5 2 0
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 15 15	0 0 0 <1	3 0 0 <1	5 2 0 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 15 15 50	0 0 0 <1 0	3 0 0 <1 0	5 2 0 <1 <1
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 15 15 50	0 0 0 <1 0 8	3 0 0 <1 0	5 2 0 <1 <1 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 15 15 50 50 350	0 0 0 <1 0 8 214	3 0 0 <1 0 8 250	5 2 0 <1 <1 1 8 210
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	50 15 15 50 50 350 100	0 0 0 <1 0 8 214	3 0 0 <1 0 8 250	5 2 0 <1 <1 8 210 7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 15 15 50 50 350 100 limit/base	0 0 0 <1 0 8 214 0	3 0 0 <1 0 8 250 16	5 2 0 <1 <1 8 210 7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 15 15 50 50 350 100 limit/base	0 0 0 <1 0 8 214 0 current	3 0 0 <1 0 8 250 16 history1	5 2 0 <1 <1 8 210 7 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 15 15 50 50 350 100 limit/base >50	0 0 0 <1 0 8 214 0 current	3 0 0 0 <1 0 8 250 16 history1 13	5 2 0 <1 <1 8 210 7 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 15 15 50 50 350 100 limit/base >50	0 0 0 <1 0 8 214 0 current 12 <1	3 0 0 0 <1 0 8 250 16 history1 13 <1	5 2 0 <1 <1 8 210 7 history2 11 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 15 15 50 50 350 100 limit/base >50 >20 >0.2	0 0 0 0 <1 0 8 214 0 current 12 <1 <1 0.003	3 0 0 0 <1 0 8 250 16 history1 13 <1 1 0.006	5 2 0 <1 <1 8 210 7 history2 11 0 1 0.008



OIL ANALYSIS REPORT







Laboratory Sample No. Lab Number **Unique Number**

: RP0034480 : 05876880 : 10521983

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 19 Jun 2023 Diagnosed

: 20 Jun 2023 Diagnostician : Wes Davis

Test Package : IND 2 (Additional Tests: PQ) Certificate L2367 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)

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