

OIL ANALYSIS REPORT

Machine Id **901111**

Component **Hydraulic System**

AW HYDRAULIC OIL ISO 32 (--- GAL)

Sample Rating Trend ISO

DIAGNOSIS

Recommendation

The filter 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 light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

			Sep2021	JunŽ023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0057423	GFL0035671	
Sample Date		Client Info		14 Jun 2023	13 Sep 2021	
Machine Age	hrs	Client Info		4407	0	
Oil Age	hrs	Client Info		1200	0	
Oil Changed		Client Info		Changed	Not Changd	
Sample Status				ATTENTION	ABNORMAL	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	6	9	
Chromium	ppm	ASTM D5185(m)	>10	4	0	
Nickel	ppm	ASTM D5185(m)	>10	0	0	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)		0	0	
Aluminum	ppm	ASTM D5185(m)	>10	<1	<1	
Lead	ppm	ASTM D5185(m)	>10	1	1	
Copper	ppm	ASTM D5185(m)		5	7	
Tin	ppm	ASTM D5185(m)	>10	0	<1	
Antimony	ppm	ASTM D5185(m)		0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	<1	1	
Barium	ppm	ASTM D5185(m)	5	0	0	
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Molybdenum	ppm	ASTM D5185(m)	5	<1	<1	
Manganese	ppm	ASTM D5185(m) ASTM D5185(m)		0	0	
Manganese Magnesium	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	25	0 3	0 5	
Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	25 200	0 3 56	0 5 51	
Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	25 200 300	0 3 56 348	0 5 51 360	
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	25 200 300 370	0 3 56 348 412	0 5 51 360 414	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	25 200 300	0 3 56 348 412 773	0 5 51 360 414 893	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	25 200 300 370 2500	0 3 56 348 412	0 5 51 360 414 893 <1	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	25 200 300 370	0 3 56 348 412 773	0 5 51 360 414 893	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	25 200 300 370 2500	0 3 56 348 412 773	0 5 51 360 414 893 <1	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD	25 200 300 370 2500	0 3 56 348 412 773 <1	0 5 51 360 414 893 <1 history1	 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m)	25 200 300 370 2500	0 3 56 348 412 773 <1 current	0 5 51 360 414 893 <1 history1	 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	25 200 300 370 2500 limit/base >20	0 3 56 348 412 773 <1 current <1 2	0 5 51 360 414 893 <1 history1 1	 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	25 200 300 370 2500 limit/base >20	0 3 56 348 412 773 <1 current <1 2 <1	0 5 51 360 414 893 <1 history1 1 2 <1	 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANL	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) Method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	25 200 300 370 2500 limit/base >20 >20 limit/base	0 3 56 348 412 773 <1 current <1 2 <1 current	0 5 51 360 414 893 <1 history1 1 2 <1 history1	history2 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	25 200 300 370 2500 limit/base >20 >20 limit/base >5000	0 3 56 348 412 773 <1	0 5 51 360 414 893 <1 history1 1 2 <1 history1 1 10985	history2 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) Method ASTM D5185(m)	25 200 300 370 2500 limit/base >20 >20 limit/base >5000 >1300 >160 >40	0 3 56 348 412 773 <1 current <1 2 <1 current 4 9392 457	0 5 51 360 414 893 <1 history1 1 2 <1 history1 ^ 10985 ^ 4338	history2 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) MEthod ASTM D5185(m) ASTM D7647 ASTM D7647	25 200 300 370 2500 limit/base >20 >20 limit/base >5000 >1300 >160	0 3 56 348 412 773 <1 current <1 2 <1 current △ 9392 457 46	0 5 51 360 414 893 <1 history1 1 2 <1 history1 1 0985 4338 390	history2 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium FLUID CLEANL Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD METHOD ASTM D5185(m) METHOD ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	25 200 300 370 2500 limit/base >20 >20 limit/base >5000 >1300 >160 >40 >10	0 3 56 348 412 773 <1 current <1 2 <1 current ▲ 9392 457 46 14	0 5 51 360 414 893 <1 history1 1 2 <1 history1 1 10985 4338 390 101	history2 history2



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

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

: GFL0057423 : 02570134

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 574 - Vancouver Fleet Received

: 5607180 Diagnostician

: 14 Jul 2023 Diagnosed : 17 Jul 2023

: Wes Davis

Test Package : MOB 1 (Additional Tests: PrtCount) 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.

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