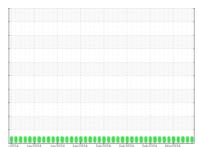


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



QC230213IND2

Component

Hydraulic System

AW HYDRAULIC OIL ISO 68 (--- 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 system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

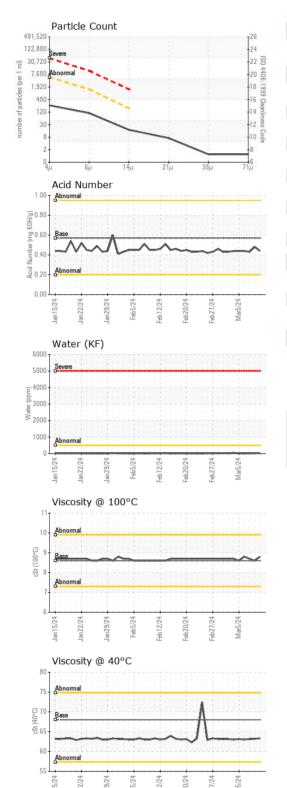
Fluid Condition

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

		12024 Jan20	24 Jan2024 Feb2024	Feb2024 Feb2024 Feb2024	Mar2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0912590	WC0912587	WC0912586
Sample Date		Client Info		11 Mar 2024	08 Mar 2024	07 Mar 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	0	0	0
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>20	0	0	1
Copper	ppm	ASTM D5185(m)	>20	0	<1	0
Tin	ppm	ASTM D5185(m)	>20	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	0	0	0
Barium	ppm	ASTM D5185(m)	5	0	0	0
Molybdenum	ppm	ASTM D5185(m)	5	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	25	<1	<1	<1
Calcium	ppm	ASTM D5185(m)	200	44	43	42
Phosphorus	ppm	ASTM D5185(m)	300	343	341	340
Zinc	ppm	ASTM D5185(m)	370	415	411	410
Sulfur	ppm	ASTM D5185(m)	2500	722	716	853
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	0	0	0
Sodium	ppm	ASTM D5185(m)		0	0	0
Potassium	ppm	ASTM D5185(m)	>20	<1	1	<1
Water	%	ASTM D6304*	>0.05	0.003	0.003	0.002
ppm Water	ppm	ASTM D6304*	>500	27	27	16
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	224	183	192
Particles >6µm		ASTM D7647	>1300	94	88	55
Particles >14μm		ASTM D7647	>160	15	16	10
Particles >21µm		ASTM D7647	>40	6	5	3
Particles >38µm		ASTM D7647	>10	1	0	1
·		ASTM D7647	>3	1	0	0
Particles >71µm		A31W D7047	/0		U	U



OIL ANALYSIS REPORT



FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	0.44	0.48	0.43
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERT	TES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68	63.3	63.2	63.1
Visc @ 100°C	cSt	ASTM D7279(m)	8.6	8.8	8.6	8.7
Viscosity Index (VI)	Scale	ASTM D2270*	96	112	107	110
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color				MC0217340		
Bottom						



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number : 02621090

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 WearCheck Quality Control Sample Results : WC0912590

Received **Tested** Unique Number : 5746209 Diagnosed

: 11 Mar 2024

: 12 Mar 2024 : 12 Mar 2024 - Wes Davis Burlington, ON CA

dorian.anderson@wearcheck.com

Test Package: IND 2 (Additional Tests: KF, KV100, VI) To discuss this sample report, contact Customer Service at 1-800-268-2131.

> T: (289)291-4652 F: (905)569-8605

Contact: Dorian Anderson

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.