

OIL ANALYSIS REPORT

Universal Alloy - U00200 M13377

Component **Hydraulic System**

AW HYDRAULIC OIL ISO 68 (--- GAL)

Sample Rating Trend NORMAL

Recommendation

We certify this oil to be clean, that the additives are at acceptable levels and the oil is suitable for use.

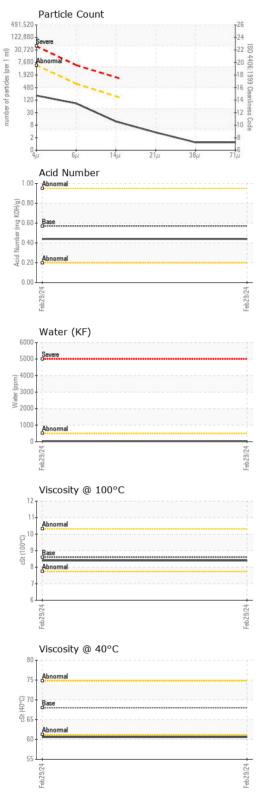
Wear

Copper ppm levels are noted.

				Feb 2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Batch #		Client Info		Mobile		
Machine ID		Client Info		Light Press		
Department		Client Info		Production		
Sample From		Client Info		Machine		
Production Stage		Client Info		Final		
Sent to WC		Client Info		03/08/2024		
Sample Number		Client Info		E30001554		
Sample Date		Client Info		29 Feb 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	9		
Chromium	ppm	ASTM D5185(m)	>20	0		
Nickel	ppm	ASTM D5185(m)	>20	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>20	1		
Lead	ppm	ASTM D5185(m)	>20	6		
Copper	ppm	ASTM D5185(m)	>20	41		
Tin	ppm	ASTM D5185(m)	>20	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	<1		
Barium	ppm	ASTM D5185(m)	5	0		
Molybdenum	ppm	ASTM D5185(m)	5	0		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)	25	18		
Calcium	ppm	ASTM D5185(m)	200	45		
Phosphorus	ppm	ASTM D5185(m)	300	418		
Zinc	ppm	ASTM D5185(m)	370	383		
Sulfur	ppm	ASTM D5185(m)	2500	1243		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	3		
Sodium	ppm	ASTM D5185(m)		6		
Potassium	ppm	ASTM D5185(m)	>20	2		
Water	%	ASTM D6304*	>0.05	0.003		
ppm Water	ppm	ASTM D6304*	>500	26		



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Particles >4µm	SS	method	limit/base	current	history1	history2
		ASTM D7647	>5000	176		
Particles >6µm		ASTM D7647	>640	73		
Particles >14μm		ASTM D7647	>160	10		
Particles >21µm		ASTM D7647	>40	3		
Particles >38µm		ASTM D7647	>10	1		
Particles >71µm		ASTM D7647	>3	1		
Oil Cleanliness		ISO 4406 (c)	>19/16/14	15/13/10		
FLUID DEGRADATI	ON	method	limit/base	current	history1	history2
Acid Number (AN)	g KOH/g	ASTM D974*	0.57	0.44		
VISUAL		method	limit/base	current	history1	history2
White Metal s	calar	Visual*	NONE	NONE		
Yellow Metal s	calar	Visual*	NONE	NONE		
Precipitate s	calar	Visual*	NONE	NONE		
Silt	calar	Visual*	NONE	NONE		
Debris s	calar	Visual*	NONE	NONE		
Sand/Dirt s	calar	Visual*	NONE	NONE		
Appearance s	calar	Visual*	NORML	NORML		
Odor	calar	Visual*	NORML	NORML		
Emulsified Water s	calar	Visual*	>0.05	NEG		
Free Water s	calar	Visual*		NEG		
FLUID PROPERTIE	S	method	limit/base	current	history1	history2
Visc @ 40°C c	St	ASTM D7279(m)	68	60.6		
Visc @ 100°C c	St	ASTM D7279(m)	8.6	8.4		
Viscosity Index (VI) S	Scale	ASTM D2270*	96	108		
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number : 02621431

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : E30001554

Unique Number : 5746550

Received : 12 Mar 2024 **Tested**

: 13 Mar 2024 Diagnosed : 14 Mar 2024 - Tatiana Sorkina

Test Package: IND 2 (Additional Tests: KF, KV100, VI) To discuss this sample report, contact Customer Service at 1-905-372-2251.

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.

Environmental 360 Solutions Ltd.

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