

**OIL ANALYSIS REPORT** 

# **KRAUSS MAFFEI 7 MOLDING MACHINE** Component

**Hydraulic System** AW HYDRAULIC OIL ISO 46 (--- 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 component make and model with your 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 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 Rating Trend NORMAL

		Mar2019	Feb2021	Feb 2022 May 2022	Nov2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC0069620	PC0058290	PC408415
Sample Date		Client Info		02 Nov 2023	30 May 2022	17 Feb 2022
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1	<1	<1
Chromium	ppm	ASTM D5185(m)	>10	0	0	0
Nickel	ppm	ASTM D5185(m)	>10	<1	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		<1	<1	0
Aluminum	ppm	ASTM D5185(m)	>10	<1	0	0
Lead	ppm	ASTM D5185(m)	>10	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>75	1	1	1
Tin	ppm	ASTM D5185(m)	>10	0	0	<1
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	3	2	2
Barium	ppm	ASTM D5185(m)	5	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	5	<1	<1	<1
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	25	8	5	5
Calcium	ppm	ASTM D5185(m)	200	80	79	84
Phosphorus	ppm	ASTM D5185(m)	300	331	344	346
Zinc	ppm	ASTM D5185(m)	370	418	406	418
Sulfur	ppm	ASTM D5185(m)	2500	893	910	925
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	<1	<1	<1
Sodium	ppm	ASTM D5185(m)		<1	0	<1
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	2927	2670	1909
Particles >6µm	ASTM D7647	>1300	923	686	440
Particles >14µm	ASTM D7647	>160	77	39	19
Particles >21µm	ASTM D7647	>40	15	6	3
Particles >38µm	ASTM D7647	>10	2	0	0
Particles >71µm	ASTM D7647	>3	1	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	19/17/13	19/17/12	18/16/11

FLUID DEGRADATION method

Acid Number (AN) mg KOH/g ASTM D974\* 0.57

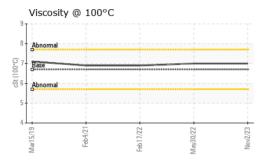
0.23 0.33 0.23

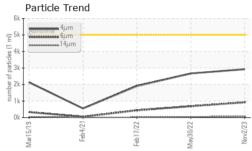
Report Id: VERLEA [WCAMIS] 02594629 (Generated: 11/08/2023 17:38:25) Rev: 1

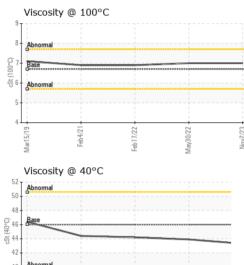
Contact/Location: Dave Fawdry - VERLEA

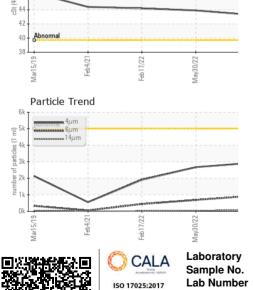


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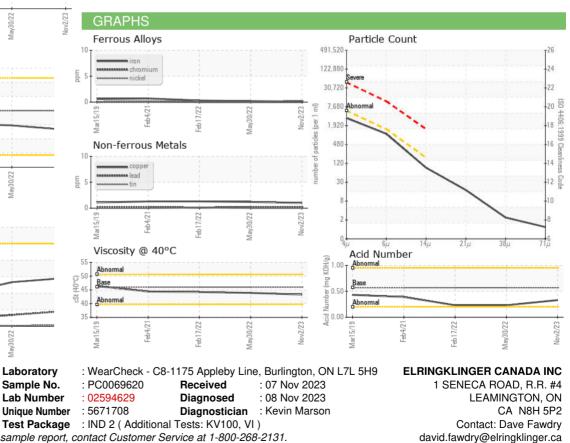


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	🔺 LIGHT
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	.5%
Free Water	scalar	Visual*		NEG	NEG	▲ 1%
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	43.3	43.9	44.2
Visc @ 100°C	cSt	ASTM D7279(m)	6.7	7	7	6.9
Viscosity Index (VI)	Scale	ASTM D2270*	97	120	117	112
SAMPLE IMAGES		method	limit/base	current	history1	history2
				8		





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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.

Contact/Location: Dave Fawdry - VERLEA

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Accredited Laboratory

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T: (519)326-6113