

### **OIL ANALYSIS REPORT**

# KRAUSS MAFFEI KM2700MX (S/N 61034412)

Hydraulic System Fluid SHELL HYDRAULIC S1 M 46 (--- GAL)

#### DIAGNOSIS

#### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

#### Wear

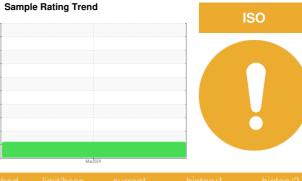
All component wear rates are normal.

#### Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

#### Fluid Condition

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



SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0916459		
Sample Date		Client Info		12 Mar 2024		
Machine Age	hrs	Client Info		1838		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ATTENTION		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1		
Chromium	ppm	ASTM D5185(m)	>20	0		
Nickel	ppm	ASTM D5185(m)	>20	0		
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	<1		
Copper	ppm	ASTM D5185(m)	>20	7		
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
ADDITIVES Boron	ppm	method ASTM D5185(m)	limit/base	current 0	history1	history2
	ppm ppm		limit/base			
Boron		ASTM D5185(m)	limit/base	0		
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	limit/base	0 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 0 0		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 0 0 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 0 0 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 0 0 <1 18		   
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	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)	limit/base	0 0 0 <1 18 386	  	   
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	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) ASTM D5185(m)	limit/base	0 0 0 <1 18 386 420		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm 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) ASTM D5185(m) ASTM D5185(m)	limit/base	0 0 0 <1 18 386 420 994 <1	    	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm 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) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		0 0 0 <1 18 386 420 994 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm 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) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 0 0 <1 18 386 420 994 <1 current	      history1	      history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm 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) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	0 0 0 <1 18 386 420 994 <1 current <1	      history1	       history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm 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) ASTM D5185(m) ASTM D5185(m) <b>method</b> ASTM D5185(m) ASTM D5185(m)	limit/base >15	0 0 0 <1 18 386 420 994 <1 <1 current <1 <1 2	      history1	      history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	limit/base >15 >20	0 0 0 <1 18 386 420 994 <1 <1 current <1 <1 2	      history1  	      history2  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	limit/base >15 >20 limit/base	0 0 0 <1 18 386 420 994 <1 <1 current 2 current	      history1   history1	     history2   history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	limit/base >15 >20 limit/base >5000	0 0 0 1 1 1 8 386 420 994 <1 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	      history1  history1  history1	     history2  history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160	0 0 0 10 <1 18 386 420 994 <1 <1 <1 2 2 current 2 2 current 2 2 0 0 9 9 4 2 1 2 0 0 9 9 4 2 0 9 9 4 2 0 9 9 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	       history1  history1	      history2   history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160	0 0 0 (0 <1 18 386 420 994 <1 <1 <1 <1 2 (urrent 2 urrent 8243 2009 98	      history1  history1	       history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	0 0 0 2 3 1 18 386 420 994 3 1 2 0 994 3 1 2 0 0 0 1 2 0 0 994 3 1 2 0 0 994 3 1 2 0 0 9 9 4 3 1 2 0 0 9 9 4 1 1 1 1 8 2 1 1 1 1 8 1 1 1 1 8 1 1 1 1	history1 history1 history1	       history2  history2  history2

Contact/Location: Brian Edwards - WALOLD



## **OIL ANALYSIS REPORT**

Particle Trend	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
4μm 4μm	Acid Number (AN)	mg KOH/g	ASTM D974*		0.57		
μ	VISUAL		method	limit/base	current	history1	history2
Abnormal	White Metal	ocoler			NONE		lotory2
	Vollow Motal	scalar	Visual* Visual*	NONE NONE	NONE		
	Precipitate	scalar scalar	Visual*	NONE	NONE		
	<u>ц</u>	scalar	Visual*	NONE	NONE		
Mar1 2/24	Silt Debris	scalar	Visual*	NONE	NONE		
2	Sand/Dirt	scalar	Visual*	NONE	NONE		
Particle Trend	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
••••••••••••••••••••••••••••••••••••••	Emulsified Water	scalar	Visual*	>0.05	NEG		
Abnormal	Free Water	scalar	Visual*		NEG		
	FLUID PROPER	TIES	method	limit/base	current	history1	history
	Visc @ 40°C	cSt	ASTM D7279(m)		44.4		
++		S	method	limit/base	current	history1	history
Acid Number	Color					no image	no image
	Bottom					no image	no image
Viscosity @ 40°C Abnormal	E 5 - For a chromium iron iron iron iron iron iron iron iron	*****	*****	122,880 30,720 (m 1,20,680 1,920 1,920 1,920 1,920 480		•	
Mar12/24	Non-ferrous Meta	ls		120 120 30 8			-1
~	• ملب <sup>+</sup> Viscosity @ 40°C			Mar12/24	<sup>µ 6µ</sup> Acid Number	14µ 21µ	38µ 71
	(3.0 + 6 + 7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 + 7			Mari 2/24 05:0 Aumber (mg K0H(g) 00:0 Acid Number (mg K0H(g)	Mari 2/24		
	y : WearCheck - C8-117 o. : WC0916459	Recei	i <b>ved</b> :15				<b>ydraulic Sa</b> 5 Walker Ro Oldcastle, 1

Contact/Location: Brian Edwards - WALOLD