

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

Matsu T-3 194999

Component **3 Hydraulic System** Fluid **{not provided} (--- GAL)**

DIAGNOSIS

A Recommendation

We advise that you check for the source of water entry. We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

A Wear

The iron level is abnormal. All other component wear rates are normal.

Contamination

Appearance is hazy. There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris 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	/IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KFS0005004		
Sample Date		Client Info		17 Jun 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	4 8		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>20	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m		<1		
Aluminum	ppm	ASTM D5185m	>20	2		
Lead	ppm	ASTM D5185m	>20	<1		
Copper	ppm	ASTM D5185m	>20	14		
Tin	ppm	ASTM D5185m	>20	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1	history2
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	0		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	0 <1		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 <1		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 <1 1		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 <1 1 2		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 <1 1 2 67	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 <1 2 67 160	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 <1 2 67 160 265	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 <1 <1 2 67 160 265 728		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 <1 2 67 160 265 728 current	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base	0 <1 <1 2 67 160 265 728 <u>current</u> 5 3 3	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base	0 <1 <1 2 67 160 265 728 current 5 3	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >15 >20	0 <1 <1 2 67 160 265 728 <u>current</u> 5 3 3	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >15 >20 >0.05	0 <1 <1 2 67 160 265 728 current 5 3 3 3 } 0.269	 history1	 history2



OIL ANALYSIS REPORT

D _T			VISUAL		method	limit/base	current	history1	history2
Severe			White Metal	scalar	*Visual	NONE	NONE		
J			Yellow Metal	scalar	*Visual	NONE	NONE		
)+			Precipitate	scalar	*Visual	NONE	NONE		
			Silt	scalar	*Visual	NONE	NONE		
Abaamal			Debris	scalar	*Visual	NONE	A MODER		
Abnormal			Sand/Dirt	scalar	*Visual	NONE	NONE		
Jun17/24		Jun17/24	Appearance	scalar	*Visual	NORML	🛑 HAZY		
un r		Jun	Odor	scalar	*Visual	NORML	NORML		
Ferrous Alloys			Emulsified Water	scalar	*Visual	>0.05	0.2%		
			Free Water	scalar	*Visual		NEG		
iron chromium nickel			FLUID PROPER	TIES	method	limit/base	current	history1	history2
			Visc @ 40°C	cSt	ASTM D445		51.7		
			SAMPLE IMAGE	S	method	limit/base	current	history1	history2
		42/11nL	Color					no image	no image
cid Number			Bottom					no image	no image
			GRAPHS						
			Ferrous Alloys						
			40 - iron						
47// Lun		Y CI EL	E 30						
5		1							
iscosity @ 40/	°C		10-						
						7/24			
Abnormal			Jun17/24			Jun17/24			
			Non-ferrous Meta	ls					
			15 copper						
			10 -						
Abnormal			E di li						
- + +7// Tuno			5						
		10 E F	0		****	*****			
		1	17/24			Jun17/24			
			unp			Jun			
			Viscosity @ 40°C				Acid Number		
			55 Abnormal			(^{0.3} (⁰ /H0) 0.2	D T		
			50			HOX 0.2	4		
			(J2-0 1) 45-			ຍັ 0.1			
			资 40 - Abnormal			Number			
			35				1		
			Jun17/24				-		Jun17/24 -
			Jun1			Jun17/24	Jun 17/24		Junt
	4	Laboratory Sample No.	: WearCheck USA - 50 : KFS0005004)1 Madiso Rece i		v, NC 27513 3 Jun 2024		KIMBRO (2200	

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