

# **OIL ANALYSIS REPORT**

Sample Rating Trend

# WEAR

{UNASSIGNED} [Tote #2] N/A Matsu S-ORD194499 T2

Hydraulic System

AW HYDRAULIC OIL ISO 46 (900 GAL)

# DIAGNOSIS

## A Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### 🔺 Wear

Area

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

# Contamination

There is a high 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		KFS0004958		
Sample Date		Client Info		21 Jun 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
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 D5185m	>20	<b>4</b> 37		
Chromium	ppm	ASTM D5185m	>20	0		
Nickel	ppm	ASTM D5185m	>20	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>20	0		
Lead	ppm	ASTM D5185m	>20	0		
Copper	ppm	ASTM D5185m	>20	11		
Tin	ppm	ASTM D5185m	>20	0		
Vanadium	ppm	ASTM D5185m	-	0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0		
Barium	ppm	ASTM D5185m	5	0		
Molybdenum	ppm	ASTM D5185m	5	0		
Manganese	ppm	ASTM D5185m	0	<1		
Magnesium	ppm	ASTM D5185m	25	<1		
Calcium	ppm	ASTM D5185m	200	89		
Phosphorus		ASTM D5185m	300	216		
Zinc	ppm ppm	ASTM D5185m	370	206		
Sulfur		ASTM D5185m	2500	974		
	ppm			974		
CONTAMINANTS	5	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	2		
Sodium	ppm	ASTM D5185m		2		
Potassium	ppm	ASTM D5185m	>20	2		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>人</b> 15785		
Particles >6µm		ASTM D7647	>1300	876		
Particles >14µm		ASTM D7647	>160	15		
Particles >21µm		ASTM D7647	>40	5		
Particles >38µm		ASTM D7647	>10	0		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>A</b> 21/17/11		
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.50		
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# **OIL ANALYSIS REPORT**

Particle Trend		VISUAL		method	limit/base	current	history1	history
4μm 		White Metal	scalar	*Visual	NONE	NONE		
		Yellow Metal	scalar	*Visual	NONE	NONE		
		Precipitate	scalar	*Visual	NONE	NONE		
Abnormal		Silt	scalar	*Visual	NONE	NONE		
4		Debris	scalar	*Visual	NONE	NONE		
		Sand/Dirt	scalar	*Visual	NONE	NONE		
/24	124	Appearance	scalar	*Visual	NORML	NORML		
Jun21/24	Jun21/24	Odor	scalar	*Visual	NORML	NORML		
-	-	Emulsified Water	scalar	*Visual	>0.05	NEG		
Particle Trend		Free Water	scalar	*Visual	- 0.00	NEG		
4μm 6μm				VISUAI		NEG		
•••••••••••••••••••••••••••••••••••••		FLUID PROPER	TIES	method	limit/base	current	history1	history2
		Visc @ 40°C	cSt	ASTM D445	46	47.2		
Abnormal			0	mathad	limit/bass	ourroat	biotorud	biotom
<b>6</b>		SAMPLE IMAGE	5	method	limit/base	current	history1	history2
/24	/24	Color				KESSO AND	no image	no image
Jun21/24	Jun21/24							
	~							
Ferrous Alloys								
iron		Bottom					no image	no image
		CDADUC						
		GRAPHS						
		Ferrous Alloys			491,52	Particle Count		т2
		iron			431,52			T <sup>2</sup>
z.	5	30 - acconting chromium			122,88	0-		-2
Jun 21/24	, I C	톱 20 -			30,72	Severe		
		10			30,72			+2
Acid Number		0			7,68	Abriermal		-2
Abnormal		Jun21/24			Jun21/24. s (per 1 ml)			
1		Juní			Jun2] ss (per		•	<sup>†1</sup>
Base		Non-ferrous Meta	ls		Jun21/24 particles (per 1 ml) 86 76'1			
<u>.</u>		15 copper			ar of p			-1
· · · · · · · · · · · · · · · · · · ·		10 -			12 numper			Į į
Abnormal		E d.			- 3	0-		-1
		5				8		
Jun 21/24	1 C 1 C	0					1	+1
μη		u +22/			1/24	2-		-8
Viscosity @ 40°C		Jun21/24			Jun21/24	0		
		Viscosity @ 40°C				4μ 6μ	14µ 21µ	38µ 71µ
Abnormal		55 T			_10	Acid Number		
		50 - Abnormal			(B/HO) 0.8 (B/HO) 0.6	0		
Base					<u> </u>	Base		
		(0,0) 45 45			a 0.4			
Abnormal		40 - Abnormal			4.0 Page 10.4 Pa	Abaramat		
		35				ol		
24 +	Υ.C.	Jun21/24			Jun21/24	Jun21/24		
Jun21/24	156	nul			որ	Jun		
-	Laboratory	: WearCheck USA - 50	)1 Madisc	on Ave., Cary	v, NC 27513		KIMBRO (	DIL COMPAN
9 : 19: 4 <del>0</del> 4 (2)	•	: KFS0004958	Rece	ived : 25	5 Jun 2024			CLIFTON AV
	Lab Number	: 06219628	Teste		3 Jun 2024		N	ASHVILLE, 1
	Lab Number Unique Number	: <mark>06219628</mark> : 11097825			3 Jun 2024 Jun 2024 - Dor	n Baldridge		US 372
	Lab Number Unique Number Test Package	: <mark>06219628</mark> : 11097825	Diagr	nosed : 26	Jun 2024 - Dor	n Baldridge	Contact: Cl	

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