

OIL ANALYSIS REPORT







Machine Id 50155 Component

Hoİst Fluid HITACHI SUPER EH56HBW (--- GAL)

DIAGNOSIS

Recommendation

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

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 INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0876939		
Sample Date		Client Info		11 Mar 2024		
Machine Age	hrs	Client Info		2		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATION	١	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	<1		
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	<1		
Copper	ppm	ASTM D5185(m)		<1		
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)		<1		
Barium	ppm	ASTM D5185(m)		0		
Molybdenum	ppm	ASTM D5185(m)		0		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)		21		
Calcium	ppm	ASTM D5185(m)		3491		
Phosphorus	ppm	ASTM D5185(m)		897		
Zinc	mag	()				
Zinc Sulfur	ppm ppm	ASTM D5185(m)		1038		
Zinc Sulfur Lithium	ppm ppm ppm	()				
Sulfur	ppm	ASTM D5185(m) ASTM D5185(m)	limit/base	1038 2789	 history1	
Sulfur Lithium	ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	1038 2789 <1		
Sulfur Lithium CONTAMINANTS	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method		1038 2789 <1 current		 history2
Sulfur Lithium CONTAMINANTS Silicon	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m)		1038 2789 <1 current 13	 history1	 history2
Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>15	1038 2789 <1 current 13 <1	 history1	 history2
Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>15 >20	1038 2789 <1 <u>current</u> 13 <1 2	 history1 	 history2
Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	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)	>15 >20 limit/base	1038 2789 <1 current 13 <1 2 current	 history1 history1	 history2 history2
Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	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)	>15 >20 limit/base >40000 >10000	1038 2789 <1 current 13 <1 2 2 current 19326	 history1 history1 	 history2 history2
Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	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 D7647 ASTM D7647	>15 >20 limit/base >40000 >10000 >80	1038 2789 <1 current 13 <1 2 current 19326 2464	 history1 history1 history1	 history2 history2 history2
Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >40000 >10000 >80	1038 2789 <1 13 <1 2 current 19326 2464 24	 history1 history1 	 history2 history2
Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >40000 >10000 >80 >20	1038 2789 <1 current 13 <1 2 current 19326 2464 24 24 7	 history1 history1 	 history2 history2 history2
Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >40000 >10000 >80 >20 >4	1038 2789 <1 current 13 <1 2 current 19326 2464 24 24 7 6	 history1 history1 	 history2 history2



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cSt (100°C)

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12 1 Abnorma

cSt (100°C) Ba 9

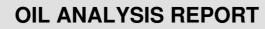
64 62. Abnormal

60 (J_00+) 1S3 54 Base

52 Abnormal 50-48 Mar11/24

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Viscosity @ 100°C	FLUID DEGRADA		method	limit/base	current	history1	history2
Abnormal	Acid Number (AN)	mg KOH/g	ASTM D974*	2.6	1.83		
	VISUAL		method	limit/base	current	history1	history2
Base	White Metal	scalar	Visual*	NONE	NONE		
Abnormal	Yellow Metal	scalar	Visual*	NONE	NONE		
	Precipitate	scalar	Visual*	NONE	NONE		
Mar11/24	Silt	scalar	Visual*	NONE	NONE		
Mar	Debris	scalar	Visual*	NONE	NONE		
Particle Trend	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
Abnormal 6/2m	Odor Emulsified Water	scalar	Visual* Visual*	NORML	NORML NEG		
	Free Water	scalar scalar	Visual*	>0.05	NEG		
			_	limit/booo			
	FLUID PROPERT		method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D7279(m)	55.8	54.7		
Mar11/24 -	Visc @ 100°C	cSt	ASTM D7279(m)	9.05	8.8		
Mari	Viscosity Index (VI)	Scale	ASTM D2270*	142	138		
Viscosity @ 100°C	SAMPLE IMAGES	6	method	limit/base	current	history1	history2
Abnormal	Color					no imaga	no imago
	Color					no image	no image
Base							
Abnormal							
	Bottom					no image	no image
/24 -							
Mar11/24 Mar11/24	GRAPHS						
Viscosity @ 40°C	Ferrous Alloys				Particle Count		
· -	10iron1			491,520			1 ²⁶
Abnormal	E 5-			122,880	Abnormal		-24
							-22
Base	Mar11/24						-20 406:1999 Clear -16 Clear
	Mar1			Mar11/24- 1761 (per 1 m)) 89	· \\\		-18 -18
Abnormal	Non-ferrous Metal	s					-16 Clear
1/24	copper			b 120 aquine 30			+14 Iness
Mari 1/24	E 5-			- E 30	-		-12 Code
Particle Trend	0				-		-10
	11/24			Mar11/24			-8
Abnormal. 6μm	Marl			W (4μ 6μ	14µ 21µ	38µ 71µ
14μm	Viscosity @ 40°C			(B/H	and the second sec		1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -
				() Hoy 3.0 Bu 2.0	Base		
	8 55 - Base 중 50 - Abnormal			e 2.0			
	45			724	J.		
24	11/24			Mar11/24 Aci			Mar11/24
Aar11/	Mar11,			Mar	Marl 1		Mar
Laboratory Sample No. Lab Number Unique Number Test Package To discuss this sample report Test denoted (*) outside scop	: WearCheck - C8-1175 : WC0876939 : 02623045 : 5748164 : IND 2 (Additional Tes contact Customer Servi	Recei Teste Diagn ts: KV10 ce at 1-8	ved : 19 d : 20 losed : 20 0, VI) 00-268-213	gton, ON L71 9 Mar 2024 9 Mar 2024 9 Mar 2024 - W 1.	- 5H9 HITACH 20 Ves Davis	cbanman@h	UFACTURING

Contact/Location: Cal Banman - VMEGUE